



Report 5

Informal Economy Retirement and Risk Benefits

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ABBREVIATIONS AND ACRONYMS

ACmHPR	African Commission on Human and Peoples' Rights
ARO	African Reclaimers' Organisation
ASSA	Actuarial Society of South Africa
AU	African Union
BSA	Bilateral Social Security Agreements
DC	Defined Contribution
DSD	Department of Social Development
DOSD	Department of Social Development
EET	Exempt contribution - Exempt interest earned - Taxed benefits income tax structure for the scheme
GHS	General Household Survey
ICESCR	International Covenant on Economic, Social and Cultural Rights
IDTT	Inter-Departmental Task Team
IESS	Instituto Ecuatoriano de Seguridad Social
ILO	International Labour Organization
ISSA	International Social Security Agency
JITP	Joburg Informal Traders' Platform
LFS	Labour Force Surveys
MSA	Multilateral Social Security Agreements
NCEUS	National Commission for Enterprises in the Unorganised Sector
NSSF	National Social Security Fund
NTHC	National Trust Holding Company
OHS	Occupational Health and Safety
PAYG	Pay-As-You-Go
RSSB	Rwanda Social Security Board
SADC	Southern African Development Community
SAITA	South African Informal Traders Association
SAPO	South African Post Office
SASEWA	South African Self-Employed Women's Association
SASSA	South African Social Security Agency
SATWO	South African Taxi Workers
SAWPA	South African Waste Pickers Association
UN	United Nations

WIEGO	Women in Informal Employment: Globalizing & Organizing
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BACKGROUND

The text that follows describes the scope of the work included in this paper, the intended use of the report and the reliances and limitations to which this paper is subject.

Scope

This report represents the completed output of the project by True South for the Department of Social Development (“the DOSD”) to prepare technical inputs into the draft policy paper on the inclusion of informal sector workers into the mandatory retirement system.

The report provides not only a complete set of recommendations, but also the supporting material that assists readers to understand the path to these recommendations. It provides a thorough description of the conceptual framework within which the proposed scheme falls, including a discussion of:

- Constitutional, policy and regulatory considerations;
- International norms and standards concerning design and governance; and
- Lessons that may be learned from developments in other countries in this arena.

The record of the considerations leading to the recommendations set out in the paper also includes:

- Summaries of data analysis;
- Qualitative assessment of working conditions in the informal economy;
- The criteria for evaluating the alternative designs; and
- The process of evaluating alternative benefit designs is set out in the appendices to this paper, along with supporting detail on the modelling and its outputs.

Intended use of this report

This is not a public document. It is intended solely for the use of the intended recipients, those members of the team at the Department of Social Development (DOSD) responsible for developing the policy and recommendations regarding the system of retirement for informal-economy workers.

Reliances and limitations

The analysis described in this report has been undertaken over an extended period, approaching one year in length. While efforts have been made to update descriptions to take into account the most recent developments, this has not always been possible.

- Labour Force Surveys (LFS) are published on a quarterly basis. Surveys up to and including the publication of the first quarter of 2019 have been taken into consideration.
- General Household Surveys (GHS) are published annually. The survey covering the year 2017 has been utilised in preparation of this report.
- Recent international and regional standards, comparative best practice developments and South African legal precedent have been taken into account as far as possible, but some of these are unfolding and the interpretation of emerging evidence may be incomplete.

While errors or contradictions have been avoided as far as possible, such errors may exist. Notwithstanding inputs received from the DOSD or any other parties, the authors retain responsibility for any such errors.

EXECUTIVE SUMMARY

The text that follows provides an outline of the key messages contained in this paper.

Context

South Africa has a highly-regarded framework of social grants and a large private and occupational based pension system covering millions of workers. These workers are not currently required to preserve their savings and many of them cash in their pension accumulation when they change jobs, undermining the security of their provision for old age. Contributing to a pension fund, furthermore, is not mandatory for all workers, so many of them are not covered at all. Policymakers have been giving consideration to the options for a system, including the establishment of a national/public retirement scheme, that more effectively provides for the old age of South Africa's workers. Much of the attention, however, has been on the needs of workers with jobs in the formal economy.

This paper considers the needs of the millions of workers employed or self-employed in the informal economy. A mandatory arrangement, typically with contributions that must be paid every month that are expressed as a percentage of a fixed income, is unlikely to work for this group of workers. Prior research shows that these workers are interested in saving for their old age but that they need an arrangement that recognises the uncertainty of their tenuous present circumstances.

This paper works through a number of options for achieving this and recommends a framework best suited to needs of informal-economy workers. [Section 1](#) provides the context for this work. It explains the policy gap that needs filling, sets out a statement of the problem that is being addressed and defines a number of challenges with the process. The most significant of these challenges is the inadequacy of the available information on this group of workers.

Conceptual framework and guiding principles

There is no single, consistent definition of what the informal economy comprises or, for that matter, who are indicated as informal employees. The absence of a clear and consistent definition is also evident from domestic surveys (such as the GHS and the LFS) and the range of qualitative and quantitative sources in South Africa, reflecting on this matter. Nevertheless, as indicated in [Section 2.1](#) of this paper, the following conclusions can be drawn:

- Some evolution in conceptual understanding is discernible e.g., from "informal sector" to "informal economy".
- It is clear that the informal economy, also in the South African case, would most often include workers who do not work for an identifiable employer in the context of an existing employment relationship, implying therefore that there is no employer who could contribute towards retirement or other social security provisioning for these workers.
- The focus is on workers not covered by current legal protection, neither legally nor factually, especially in social security terms.
- Informal employment is now understood with reference to the employment characteristics of the individual, and not with reference to the size, or nature, of the enterprise.
- Recent conceptual approaches make it clear that informal work/employment is effectively mainstreamed in the notion of "work".
- "Informal employment" and "informal workers" are defined in wide terms, to capture the range of those involved in the informal economy.
- The noticeable conceptual widening is also informed by labour law developments.

Constitutional considerations

Imperatives flowing from the South African Constitution, 1996, have a decisive impact on the design of a contributory arrangement for informal economy workers. It is in particular necessary to appreciate the implications flowing from constitutional values and the fundamental rights most relevant to both contributory and non-contributory social security provisioning for informal economy workers, i.e. the right to access to social security, the right to equality, the right to human dignity and the right to fair labour practices. Given the vulnerable status of informal economy workers, in particular as a result of the insufficient social security support available to them, it could – in the light of the relevant constitutional provisions and developing jurisprudence – be constitutionally expected of government to roll out some kind of comprehensive programme to deal effectively with their plight.

The absence of social security protection and proper policies in this regard would certainly leave the state exposed to major constitutional challenges. Particular care should be taken to ensure that any form of government support (i.e. in the form of a government subsidy) available to formal economy workers in the context of a to-be-established national pension scheme does not discriminate unfairly against informal economy workers, as unequal treatment in this regard would, also in the light of the particularly vulnerable status of informal economy workers, be subject to serious constitutional challenge. These and related matters are discussed in Section 2.2.

International and regional standards

The South African Constitution affirms the importance of heeding international and regional standards (such as those emanating from the International Labour Organization (ILO), United Nations (UN), African Union (AU) and Southern African Development Community (SADC) instruments), both in terms of the binding nature of instruments that have been ratified by South Africa (such as the UN *International Covenant on Economic, Social and Cultural Rights*) and the obligation to consider even those standards that have not (yet) been ratified by South Africa. International and regional standards confirm the right of all persons and all workers, including informal economy workers, to social security protection, also in relation to retirement.

The primary and overall responsibility to ensure that such protection is available rests on the State. Various modalities for providing social security protection to informal economy workers are indicated in these instruments, including contributory arrangements that are sensitive to the particular context and contributory capacity of informal economy workers. In terms of these standards, when devising appropriate (social security) coverage frameworks for informal economy workers, Governments are required also to consult with representatives of institutions representing the interests of informal economy workers. International and regional standards advise the adoption of an appropriate policy and legal foundation to inform, support and mandate the extension of (contributory) social security to informal workers. Refer for more details to the discussion in Section 2.3.

Comparative experiences

The experiences of countries that have focused on successfully extending social security coverage to informal economy workers on a contributory basis, indicate the need for a conceptual understanding and an operational framework of social security which transcend traditional approaches and boundaries. It is apparent that such coverage extension modalities are informed by:

- An overall purpose-driven orientation;
- The adoption of a non-standard mix of public and private, contributory and tax-financed interventions;
- Innovative reconceptualisation, in an attempt to widen the conceptual basis of covering informal economy workers;
- Progressive institutional arrangements, comprising among others extension of current contributory arrangements, the development of universal frameworks, and coverage extension on a sector-by-sector basis;
- Flexible design modalities, in relation to contributions and benefits, and criteria for entitlement; and
- Supporting arrangements, with particular reference to communication, consultation and an enabling framework.

As indicated in a recent ILO report, "The extension of social insurance to categories of workers with contributory capacity who were previously not covered, including through entirely or partially subsidizing contributions, is increasingly being used as a means of ensuring protection and fostering formalization." The ILO report highlights, with reference to comparative experiences, that various measures can be considered with a view to achieving basic income security, including the reduction of the cost of affiliation to contributory schemes, the provision of state support in the form of social contribution subsidies, measures to cover all those with contributory capacity, and measures to strengthen labour inspection and law enforcement.⁶¹

Of particular importance when devising appropriate coverage modalities in the South African context, is the need to consult properly with institutions representative of workers in the informal economy (refer to the list of institutions in Appendix 10). Finally, most of the comparative schemes provide coverage on the basis of defined contribution

⁶¹ ILO (2019c), *Universal social protection for human dignity, social justice and sustainable development* (General Survey concerning the Social Protection Floors Recommendation, 2012 (202), Report of the Committee of Experts on the Application of Conventions and Recommendations) paras 412 & 593.

arrangements, on the assumption that for several reasons defined benefit arrangements entail too much risk to the scheme itself.

Features of targeted membership

Designing and operating a scheme for workers in the informal economy is rendered more challenging by the absence of a systematically-developed data set describing these workers. Information has been gathered from a combination of quantitative sources, notably the quarterly LFSs and annual GHSs, both published by Statistics South Africa (StatsSA), to put together a profile of the workers intended for the scheme. Even less information is available concerning the earnings characteristics of the group. A number of qualitative sources have been utilised for this purpose.

Section 4 describes the process of aggregating data from a number of sources. It is supported by the more detailed descriptions in three appendices, which describe the analysis of LFSs (Appendix 1), GHS information (Appendix 2) and a variety of sources combining qualitative and quantitative insights (Appendix 3). Section 4.3 summarises by proposing a profile of the workers that form the targeted membership of the scheme. That table is repeated at the top of the next page.

Benefit design, operations and financial modelling

Designing a national pension arrangement from scratch is an intrinsically complex process. The variations available in the fundamental benefit structure, combined with a myriad of possibilities in the parameters utilised, renders the problem of optimisation fundamentally intractable. The uncertainty that characterises the demographic attributes of the targeted workers and the extraordinary volatility of their earnings from month to month only adds to the complexity.

Table i:

	Numbers			Percentages			Average income		
	Male	Female	Total	Male	Female	Total	Male	Female	Overall
Agriculture	263 050	13 853	276 904	12.2%	0.8%	7.1%	1 808	1 352	1 785
Community	73 017	219 188	292 205	3.4%	12.6%	7.5%	4 445	3 325	3 605
Construction	394 077	57 335	451 413	18.2%	3.3%	11.6%	2 486	1 860	2 407
Finance	81 551	81 603	163 154	3.8%	4.7%	4.2%	3 892	2 911	3 401
Manufacturing	269 688	29 984	299 672	12.5%	1.7%	7.7%	3 308	2 474	3 224
Mining	116 034	1 173	117 207	5.4%	0.1%	3.0%	4 271	3 195	4 260
Households	409 653	614 866	1 024 519	18.9%	35.4%	26.3%	1 390	1 040	1 180
Transport	211 881	4 327	216 208	9.8%	0.2%	5.5%	3 937	2 945	3 917
Trade	344 996	713 723	1 058 719	15.9%	41.1%	27.1%	2 713	2 030	2 252
	2 163 947	1 736 053	3 900 000	100.0%	100.0%	100.0%	2 691	1 884	2 332

Sources: Essop & Yu (2008), Altman (2008), Blaauw (2011), BHS (2017) and author calculations.

Notes: Allocations to categories completed using Essop & Yu (2008) and Blaauw (2011). Income figures inferred from Altman (2008), scaled to match total income from BHS (2017)

Three sections of this paper describe the process of developing a benefit design and recommending the supporting operational and governance infrastructure. The benefit design itself is developed in Section 5 but its development is supported by the financial modelling that is described in Section 7. The proposed operational and governance framework is set out in Section 6.

A multi-phase approach has been taken to the problem of designing the scheme considered appropriate to the needs of the workers in South Africa's informal economy. The first part of this process establishes the broad attributes appropriate to the scheme. It does so by:

- Listing the elements of the design that need to be resolved;
- Identifying the alternatives available under each of these elements;
- Establishing a set of criteria for evaluating these alternatives;
- Defining and assessing four prototype designs; and
- Identifying the attributes of each of these designs that might best meet the needs of informal-economy workers.

The prototypes are not considered alternative designs, one of which must be put into place for these workers; they are instead selected in order to assess the attributes of each that might be appropriate.

The second phase of the process utilises the attributes identified in the first phase to put together an appropriate mix of elements. With the use of financial modelling, this is refined into a recommended benefit structure.

The second phase of the process utilises the attributes identified in the first phase to put together an appropriate mix of elements. With the use of financial modelling, this is refined into a recommended benefit structure.

The uncertainty of the demographic and earnings attributes of informal-economy workers is substantial but it is nevertheless outweighed by the corresponding uncertainty of their response to the scheme made available to them under the proposals set out in this paper. For this reason, a simulation approach is taken to the modelling that describes the variability of the possible outcomes rather than attempting to forecast an unknown outcome. All key metrics are available as a median outcome and a spread of possibilities around that median. This helps in the evaluation of possibilities but it assists also in the communication of uncertainty.

Concerns are expressed regarding the limitations of financial modelling as a tool to evaluate the advantages and disadvantages of all of the prototypes considered as part of the initial phase of assessment. The reason for this is that the complexity of trade-offs is not easily evaluated with the use of financial modelling, which can potentially confuse issues as much as it might illuminate them. Instead, a careful qualitative approach has been taken to identifying both the advantages and disadvantages of these approaches with a view to establishing those features of a scheme that would best meet the needs of informal-economy workers. High-level results of the modelling describing the alternatives considered in the first part of the assessment are provided in Appendix 9.

The process of developing and refining the benefit structure, summarised immediately below, is described in Section 5. The preliminary stages of identifying the criteria for assessment and analysing the four prototypes are described in the supporting material in Appendix 4 and Appendix 5. The fundamentals of the financial modelling appear in Section 7.

This is also supported by two further descriptions. Appendix 6 describes the methodology and assumptions utilised in the financial modelling, Appendix 7 provides supporting detail and Appendix 8 shows the sensitivity of results to changes in the key scheme parameters.

The table that follows summarises the recommended structure of the scheme.

Table ii:

DESIGN FEATURE	RECOMMENDATIONS
Benefits	
Main categories	
Retirement benefits	The scheme is structured as a DC scheme with smoothed annual performance. The retirement age is the age of eligibility for social old age grants and changes with any changes to that age. Annual returns, net of investment fees, are smoothed over time, using a model that is subject to review from time to time to avoid insolvency risks or an undue build-up of reserves. Annuity rates are guaranteed for one year with notice of change of at least six months. The annuity increases at the rate of price inflation. It includes a five-year guarantee and contingent spouse's benefit, unless waived at the option of the member, who must confirm that they are not married at the time of waiver.

DESIGN FEATURE	RECOMMENDATIONS
Survivor & disability benefits	Survivor benefits on death prior to retirement are payable to surviving spouse(s) and children, for a maximum of two years and age 18 for children, or to age 23 for children that are financially dependent. The income payable to the spouse is one-eighteenth of the total contributions (plus government incentives) received in the three years prior to death. The income to each minor dependent is payable at half of this rate and limited to four recipients. Income received increases by inflation after one year. All contributions paid by the member, plus investment returns, are returned to dependents in the form of a funeral benefit. Disability benefits are payable on total and permanent disability until the scheme retirement age at a rate of one-eighteenth of the total contributions (plus incentives) received over the three years prior to disability plus 10% of this amount payable as a retirement contribution, also attracting government incentives as if it were a normal contribution.
Early access to saving	Contributions paid by members are allocated to a member account, split evenly between an <i>accessible member account</i> and a <i>frozen member account</i> . The balance of the <i>accessible member account</i> is available to the member for up to two withdrawals a year, before, at or after retirement. Incentives received from government are directed to a <i>subsidy account</i> , which, together with the balance in the <i>frozen member account</i> , is not accessible to members but converts to an income on retirement. The member may direct the scheme to allocate more than half of the member's contribution to the <i>frozen member account</i> should they wish to. Notice, once given, may only be altered after one year.
Form of retirement benefit	
Income	All accumulated benefits except those in the <i>accessible member account</i> are converted to an annuity on the terms described above. Where the starting monthly income available from retirement is below 25 percent of the social old age grant, the full amount is transferred to the <i>accessible member account</i> , where it may be taken as cash at the option of the member.
Cash lump sum	The available lump sum is limited to that portion still left, at the time of retirement, in the <i>accessible member account</i> . It may be taken both at and after retirement and it may also be converted to a lifetime annuity on the terms then available to members.
Combination of options	Benefits must be taken primarily as an income, with cash available to the extent that the member account ear-marked for early access still has a positive balance at the time of retirement.
Portability	A legal framework needs to be developed to allow and stipulate conditions for the portability of benefits to other countries, when a member resides in another country. This can also, in addition, be regulated by appropriate bilateral agreements concluded by South Africa. It is recommended that a regulatory framework be developed to inform, facilitate and streamline inter-(public) scheme portability.
Membership and contribution arrangements	Reflecting the flexible nature of the scheme in response to the needs of its members, membership is voluntary and contributions not subject to any rules. Discussion with representative organisations is strongly recommended (see Appendix 10) in order to develop ways to encourage active participation in the scheme.
Contributions	
Formula for contribution level and regularity of contribution payment	Contributions are entirely voluntary, though subject to an administrative minimum of R50. In the absence of any mandate, engagement with representative organisations encouraging and facilitating participation and active contributions is critical. It is not required that regular contributions be made.
Incentives & vesting	
Incentive arrangements and withdrawals	Incentives are considered in four areas: 1) Contribution subsidies provide 100% matching up to a Tier I ceiling, subject to a minimum contribution, of R50 and a 50% match thereafter up to the Tier II ceiling, giving a maximum subsidy of 25% of the social old age grant. 2) Early access to accumulated saving in the <i>accessible member account</i> should be permitted, at or before or after retirement. 3) Other membership incentives should be considered and evaluated with representative organisations (see Appendix 10). These could include access to labour offices and skills-development opportunities. 4) Member contributions are not applied to fund administration costs. Benefit incentives are not provided.
Delivery mechanisms	

DESIGN FEATURE	RECOMMENDATIONS
Administrative backbone	Governance standards must be consistent with best practice in social security arrangements and equivalent to the corresponding norms set by private pension arrangements and corporate governance standards more generally. The scheme is not recommended to fall under the jurisdiction of the Pension Funds Act, but to form part of the social-security regulatory framework. The scheme is recommended as a ring-fenced extension of the NSSF, sharing its operational infrastructure and resources but separately managed and accounted for. The investment of assets may not be conducted directly by the fund, managing conflicts of interest, but could be outsourced either to the Public Investment Corporation, a range of private-sector counterparts, or a combination of the two along the lines of explicit mandates that take into account the specific interests of the members of the scheme. The cost of risk benefits is to be funded from the contributions paid by members. For purposes of good governance, notice of three months must be given of any changes to the share of the contribution payable towards risk benefits. Administration costs are covered directly by government, directly incentivising the provision of an efficient service.
Contribution receipt and benefit payment	The administrative function must facilitate the collection of contributions from members and payments of benefits to members or their beneficiaries in ways that are convenient to their needs. Mobile-money payments and other electronic transaction channels should also be available for payment of contributions and receipt of benefits. Progress updates should be provided to members, in a manner convenient to them, on pertinent features of their accounts such as: • Contributions paid in total; • The allocation of contributions to insurance and saving; • Government contributions received; • Funds available for withdrawal; and • Pension income due if received immediately or projected conservatively to retirement.

Key financial metrics

With limited resources available, it is not easy to provide appropriately for retirement benefits, regarded as the key objective of the scheme, in addition to the corresponding benefits payable on death and disability. The financial modelling preceded on the basis that it would be appropriate to devote 80% of all contributions (including government subsidy) to saving for retirement. Sensitivity tests to changes in the 80% allocation to retirement (see Section 5.2.2 and Appendix 8) describe the significance of the expected impact on the projected retirement benefit of reducing this allocation to funding the retirement benefit.

A key metric for evaluation of the scheme is the starting income in retirement expressed as a percentage of earnings immediately prior to retirement, often referred to as the replacement rate. The table below shows the average replacement ratios projected for women and men at different retirement ages, on the basis of the assumed 80% allocation, together with the spread of values around these. It also shows the corresponding projected ratios were a distinction between male and female mortality regarded as inappropriate under the scheme.

Table iii:

Showing rounded percentages		Unisex	Female	Male
Retirement @ 60	Average expected replacement rate	39%	37%	41%
	90% of observed replacement rates	Between 26% and 54%	Between 24% and 51%	Between 27% and 56%
Retirement @ 65	Average expected replacement rate	54%	51%	55%
	90% of observed replacement rates	Between 34% and 75%	Between 32% and 71%	Between 35% and 78%

Underlying the calculations behind these figures is the assumption that members do not withdraw their accumulated savings prior to retirement. The numbers would be proportionally reduced to the extent that members take advantage of such access.

The benefits available on death and disability are relatively low but considered adequate for the purposes of the scheme, as described in [Sections 7.2 and 7.3](#) (refer to Section 5.2.2 and Appendix 8 for disclosure of the financial impacts of extending these benefits).

The costs of administration are recommended to be borne by government and are summarised, for the first few years of the scheme, as follows (longer-term projections of all of these figures are provided in Appendix 6 and sensitivities to changes in assumptions in Appendix 7).

Table iv:

	2020	2021	2022	2023	2024
Number of pre-retirement member records	92 735	192 464	295 703	402 347	512 054
Number of post-retirement member records	-	3 685	9 245	16 639	25 793
Total number of member records administered	92 735	196 149	304 948	418 987	537 847
Cost to administer a single member record (R)	300	318	337	357	379
Cost to administer the entire scheme (R'm)	R28m	R62m	R103m	R150m	R204m

These costs are nevertheless expected to be lower than the corresponding cost of providing financial support to members.

It is recommended that this cost is met by addressing the regressive system of tax incentives currently available to formally employed South Africans with high incomes. If a wholesale restructure of the system of tax incentives is not considered feasible at present, then parametric changes could be considered to address the skewed system of government incentives and direct sufficient resources to supporting the system proposed in this study (refer to in Section 5.5).

Table v:

	2020	2021	2022	2023	2024
Number of pre-retirement member records	92 735	192 464	295 703	402 347	512 054
Number of post-retirement member records	-	3 685	9 245	16 639	25 793
Total number of member records administered	92 735	196 149	304 948	418 987	537 847
Cost to administer a single member record (R)	300	318	337	357	379
Cost to administer the entire scheme (R'm)	R28m	R62m	R103m	R150m	R204m

Assets under management are not expected to be particularly large relative to existing retirement funds or the NSSF, but are nevertheless projected to grow rapidly from relatively humble beginnings:

Table vi:

<i>Amounts in R'm</i>	2020	2021	2022	2023	2024
Total contributions (participants + subsidy)	439	944	1 523	2 182	2 931
Less portion going to the risk pool	-88	-189	-305	-436	-586
Amount available for investment	351	755	1 218	1 746	2 345
Return of contribution to deaths	-2	-11	-29	-66	-110
Capitalised outflow to those who retire	-	-8	-27	-58	-104
Smoothed investment return	13	55	130	245	406
Accumulated assets under management	R362m	R1 153m	R2 445m	R4 312m	R6 848m

A key metric of the appropriateness of the benefits available on death and disability is the sustainability of the risk pool established for the purposes of providing for these benefits. This pool is funded by 20% of the contributions paid by members and the same proportion of the subsidy provided by government. The probability that this pool remains solvent through the period of the financial projection, 2020-2065, is calculated as 68%. A system of automatic adjusters is recommended in the event that this pool proves inadequate for the benefits ear-marked or if the assets in the pool grow inordinately large.

An analysis of the costs and benefits associated with the scheme is rendered challenging by uncertainty regarding the number of workers in the informal economy, scheme take-up rates and the extent to which these workers already have saving in other arrangements, believed to be very low. Considerable support for this scheme nevertheless exists in the constitutional imperative that support for workers of all types needs to be established on a basis that is fundamentally equitable.

Operational and governance recommendations

Section 6 describes the process of consideration the operational alternatives. A number of alternatives are considered. It is recommended that the scheme under consideration in this study be designed and operated as an extension of the National Social Security Fund (NSSF). There are a number of reasons for this but the most compelling of these are the economies of scale across two arrangements and the large number of workers likely to participate in and contribute to both parts of the intended holistic approach to pension provision. The principles of governance of social security entities that are described in [Section 2.4](#) are reframed in the form of a concrete set of recommendations. These are set out in [Section 6.2](#).

Care should be taken to ensure the independence of the governance framework. As a minimum, and assuming that the Scheme shares a governance platform with the NSSF, this should be guaranteed by supervisory and directory powers granted to an autonomous Board, whose mandate, powers, functions, rights and obligations are derived from the legislation specifically designed for the NSSF context. The composition of the Board should be tripartite in nature, and with representation of informal economy workers specifically guaranteed, in addition to key experts representing core required professional skills.

It is also recommended that the Board be supervised by and report to an appropriate institution with regulatory powers to direct the Scheme/NSSF on an ongoing basis. Reporting should also be done to Government and the relevant Parliamentary portfolio committees. The Board should delegate key functions to properly mandated and staffed sub-committees that have the required mandate to manage key functions on behalf of the Board (such as in relation to investments) and guided by well-designed policy frameworks.

The Board should also have the power to outsource certain key functions to outside professional service providers where these functions cannot otherwise be adequately provided, for example, managing the assets and investments of the Scheme/NSSF. Furthermore, the Chief Executive Officer and key senior officials of the Scheme/NSSF should be appointed and supervised by the Board. Operations of the Board, its sub-committees as well as the management of the Scheme/NSSF should be underpinned by ongoing monitoring and evaluation and informed by a state-of-the-art underlying information technology platform. Attention should, in particular, be paid to client service, communication, education and training, specifically with a view to ensure that informal economy workers are adequately sensitised and provided with ongoing communication, also in the form of regular member statements.

Next Steps

This is a draft paper for discussion with the DOSD. Once it has been finalised, it needs to be discussed with a wide range of commentators, most importantly with representatives of the workers intended to benefit from this arrangement, who must be carefully consulted.

1. CONTEXT

The discussion that follows provides the background and context to the study described in this report. It covers the following:

- South Africa's social security and retirement funding system
- A brief description of existing studies and policy proposals,
- A summary of the dynamics of the market for informal-economy labour,
- A statement of the problem addressed by the scheme under consideration,
- A set of objectives for the scheme; and
- The key caveats regarding this study and its recommendations.

1.1. Social Security and Retirement Funding in South Africa

As part of a comprehensive social assistance system, South Africa provides a social pension from age 60 on a means-tested basis.⁶² The level of the pension is currently R1 700,⁶³ equivalent to more than three times the food poverty line and twice the lower-bound poverty line.⁶⁴

South Africa does not, however, have a mandatory national pension system and does not require workers to contribute to a private-sector vehicle. Many workers do in fact make contributions to an occupational retirement fund along with their employers. In some instances, these contributions are paid under statutory mandate, for example for employees of government, and in others are a contractual requirement, extending to many workers in the private sector. Participation levels are low, however. Overall, some 28 percent of the labour force (World Bank, 2012)⁶⁵ or approximately 16.5 percent of working age employees (World Bank 2012,⁶⁶ with StatsSA, 2014)⁶⁷ contribute to private-sector retirement vehicles. Coverage of the formally employed work force is particularly low in certain demographic and labour-market segments. Furthermore, informal-economy workers are largely excluded because they do not have access to an occupational scheme and do not find existing alternative arrangements attractive (Genesis, 2008).⁶⁸

Saving in individual arrangements contributes significantly to the long-term assets of mainly middle- and upper-income South Africans, but household saving overall is low, at less than 2% of GDP (South African Reserve Bank, 2018).⁶⁹ The effectiveness of the system of retirement savings is undermined by high fees (National Treasury, 2013)⁷⁰ and inadequate take up of lifetime annuities at retirement [National Treasury, 2012a].⁷¹ Probably the most important detracting factor, however, apart from the absence of the contribution mandate, is that preservation of accumulated savings until retirement is not compulsory [National Treasury, 2012b].⁷² In addition, no provision is made for compulsory transfer of retirement savings if a worker changes employment. Evidence from surveys across the retirement industry suggest that a high proportion of employees resigning from their occupations, where retirement saving is available, access this saving when they leave employment rather than preserving it in their retirement account.

⁶² Means testing is applied both to income and assets. An individual failing either of these tests is ineligible for a grant. Source: <https://www.gov.za/services/social-benefits-retirement-and-old-age/old-age-pension>, accessed 17 January 2019).

⁶³ Source: South African government, <https://www.gov.za/services/social-benefits-retirement-and-old-age/old-age-pension>, accessed 17 January 2019.

⁶⁴ Calculated from poverty line data in StatsSA (2018).

⁶⁵ World Bank (2012), *South Africa: Policy Note on South Africa's Plan to Introduce a New Pension System*, Human Development Department, Social Protection Unit, Africa Region, June

⁶⁶ *Ibid*

⁶⁷ Stats SA (2014), *Quarterly Labour Force Survey: Historical Revisions of the QLFS 2008 to 2013*, Statistics South Africa, February

⁶⁸ Genesis (2008), *Old-age Saving by Low-income South Africans*, research supported by FinMark Trust and the South African Savings Institute, March

⁶⁹ South African Reserve Bank (2018), *Quarterly Bulletin: March 2018*, No. 287

⁷⁰ National Treasury (2013), *Charges in South African Retirement Funds, Technical Discussion Paper A for public comment*, July

⁷¹ National Treasury (2012a), *Enabling a Better Income in Retirement, Technical Discussion Paper B for public comment*, September

⁷² National Treasury (2012b), *Preservation, Portability and Governance for Retirement Funds, Technical Discussion Paper C for public comment*, September

Broad rates of financial inclusion are relatively high. FinMark Trust (2018)⁷³ reports that, in 2017, some 77% of South Adults used formal banking products and a further 8% a formal financial product outside of banking. These figures are part of an upward trend. The corresponding take up of long-term saving products by low-income individuals is low. Research into the motives of members of this group not to save in formal products suggests a high dependence on state provision, a preference for expenditure on children's education or incremental housing materials and a mismatch of product design to need (Genesis, 2008).⁷⁴ In short, South Africa's low-income sector has very low propensity to save in financial products for long-term needs.

In an effort to address the shortcomings in South Africa's policy framework policymakers have been evaluating alternatives for providing sustainable contributory retirement funding vehicles to meet the needs of workers. Though studies exist well back into the twentieth century, the key publication in this regard is the output of the so-called Taylor Committee of Inquiry (Committee of Inquiry, 2002),⁷⁵ which aimed to define the key features of a comprehensive system of social security for all.

Many of the studies published since then have focused on the needs of employees working in the formal economy. This process culminated in the release of a discussion document and set of recommendations prepared by the Inter-Departmental Task Team (IDTT) responsible for designing a contributory retirement system for all workers (IDTT, 2012).⁷⁶ The recommendations of this paper are also focused rather heavily on the needs of formal-economy employees. While the framework proposed for these employees is a comprehensive career-average defined benefit arrangement, the corresponding scheme recommended for those workers employed in the informal economy is a defined contribution arrangement structured on a voluntary basis without incentives to participate.

The DOSD undertook the initiative to propose a framework for a contributory arrangement focused on the needs of workers in the informal economy (DSD, 2014).⁷⁷ That paper set out the proposed design and operational framework for such a scheme. This paper assesses and builds on those recommendations.

1.2. Informal-economy Labour Markets

One of the key impediments to the development of policy for the workers operating in South Africa's informal economy is the poor understanding of the size, demographic attributes, working conditions, geographical distribution and income characteristics of this group. It is not an exaggeration to state that no systematic studies of a representative nature of South Africa's informal-economy workers have been undertaken. Some insights are available regarding the size of the group from studies such as the quarterly LFSs and annual GHSs, but even these surveys suffer from inadequate sub-division of workers into those falling into the formal and informal economies and shifts to the definitions used for this purpose. These statistics are supported by a handful of studies that consider various quantitative and qualitative attributes of the many millions of workers falling into this category.

The analysis described in this paper aims to bring together the available information from a range of sources in order to describe, with a degree of hesitancy it may be stated, the group of workers to whom the scheme proposed herein is aimed.

It is nevertheless very important for policymakers to recognise that the information available regarding this group of workers is poor. This means that the uncertainty regarding the potential take-up of the scheme is significant, in turn contributing to uncertain evaluation of the impact and costs of this scheme.

For this reason, one of the key recommendations of the study is that engagement with the workers targeted by this initiative, and with any organisations representing the interests of these workers, be considered a high priority. This too is difficult: since we do not know a great deal about these workers, where they operate or how they survive, engagement with representative organisations is challenging. This paper and its recommendations are

⁷³ FinMark Trust (2018), *Financial Inclusion in the SADC Region*

⁷⁴ *Ibid.*

⁷⁵ Committee of Inquiry (2002), *Transforming the Present – Protecting the Future*, Consolidated Report of the Committee of Inquiry into a Comprehensive System of Social Security for South Africa, chaired by Prof Vivienne Taylor, March 2002, with reports of the sub-committees, available at www.sarpn.org/CountryPovertyPapers/SouthAfrica/taylor/

⁷⁶ IDTT (2012), *Comprehensive Social Security in South Africa: Discussion Document*, version 11.9, Inter-departmental Task Team in Social Security and Retirement Reform, South African Government, March

⁷⁷ DSD (2014), *Department of Social Development: Inclusion of informal workers in the reform of retirement provision in South Africa*, Consolidated Report, prepared by Oxford Policy Management in partnership with Callund Consulting, Government of South Africa

nevertheless hoped to form the bedrock of discussion regarding the needs and aspirations of many millions of workers operating in the informal economy.

1.3. Problem Statement, Objectives and Concerns

The problem statement underpinning this study is proposed as follows:

A large proportion of South Africa's informally employed have little or no realistic access to effective retirement-saving vehicles. These workers have little reason to be confident in existing options for saving or in those alternatives proposed in existing policy frameworks for mandatory participation, as these arrangements are not designed with the needs of these workers in mind. Focused on the corresponding needs of formal-sector workers, they are not well suited to workers with highly uncertain income who may need access to accumulated saving in the short-term. In this way, millions of workers have been systematically excluded from the retirement-provision infrastructure, both existing and planned, notwithstanding the established fact that such discrimination is inconsistent with South Africa's constitutional framework and imperatives.

The retirement scheme for workers in the informal economy aims to provide a soundly managed alternative to existing arrangements that would incentivise workers to save for old age. The proposed objectives of this initiative are:

- The establishment and management of a scheme targeted at meeting the long-term saving needs of workers operating in the informal economy;
- Complementing the system of old age grants, the proposed National Social Security Fund, other elements of South Africa's social protection framework and the corresponding framework of retirement saving for formally-employed workers; and
- Providing sound administration, value for money, useful communication to members and appropriate incentives for participation.

Proposed markers of success for this scheme are as follows:

- A stipulated minimum number of registered members within 1, 3 and 5 years of launch;
- A stipulated minimum number of members within 1, 3 and 5 years of launch who have contributed at least six times a year in each year since enrollment;
- Strong public enthusiasm for the scheme, as determined by independent polling;
- The support of a stipulated proportion of organisations that represent the interests of informal-economy workers; and
- Streamlined governance and operational arrangements.

The critical caveat regarding the development of the scheme described in this paper is that it rests on an inadequate understanding of the characteristics of the group that it is intended to benefit. This inadequacy is both quantitative and qualitative. First, it is not known with certainty how many workers fall into this category and how many of these work in both the formal and informal economies, over time or simultaneously. Second, it is not known what the most important needs and aspirations of this group might be, and how these needs and aspirations may vary across the members of this heterogeneous group of workers.

Both of these points intensify the importance of intensive, systematic and open-minded consultation with those individuals for which this scheme is design.

2. CONCEPTUAL FRAMEWORK AND GUIDING PRINCIPLES

This chapter starts with a discussion of the conceptual framework underpinning an arrangement focused on the needs of workers in the informal economy. It then builds a normative framework in four stages, covering constitutional considerations, international and regional standards, good governance arrangements and, finally, policy and regulatory considerations, which also considerations of portability.

2.1. Conceptual Framework

The discussion that follows sets out the conceptual background to considerations of definition, discusses the use of definitions by international organisations, identifies differences in legal definitions of countries and sets out a number of points by way of conclusion along with further considerations.

2.1.1. Challenges of definition: Conceptual background

The concept "informal sector" has its origins in a research paper by the ILO conducted in Kenya in 1972. However, this term is fraught with conceptual challenges; it has been suggested by Reynaud (2002: 2) that the term "informal economy" is more appropriate. Reynaud emphasises the difficulties in using the word "sector". He states that it (i.e. the informal economy) can no longer be called a sector "since it covers all sectors and all categories of workers: wage earners, the self-employed, home workers and unpaid family workers, etc."

Both these phrases fail to fully encapsulate the nature of what they are explaining. Activities within the "informal sector" fall into a variety of sectors, often with no similarities, whilst "informal economy" fails to illustrate the significant grey areas between the informal and formal economy.

The more or less general consensus appears to emphasise that, from a legal perspective, informality encapsulates those activities falling de facto or de jure out of the reach of law:

*"By definition, activities by informal economy workers and units are not covered or insufficiently covered – in law or in practice – by formal arrangements. This means notably that informal economy workers have no access to formal social security associated with employment (social insurance in particular) and to the protection provided by labour laws on working conditions (wages, leaves, working hours, occupational health and safety, etc.)"*⁷⁸

A recent ILO instrument, the ILO Recommendation Concerning the Transition from the Informal to the Formal Economy, 2015 (No. 204), states that, for the purposes of this Recommendation, the term "informal economy":⁷⁹

"(a) refers to all economic activities by workers and economic units that are – in law or in practice – not covered or insufficiently covered by formal arrangements; and

(b) does not cover illicit activities, in particular the provision of services or the production, sale, possession or use of goods forbidden by law, including the illicit production and trafficking of drugs, the illicit manufacturing of and trafficking in firearms, trafficking in persons, and money laundering, as defined in the relevant international treaties".

It has therefore been suggested that the informal economy is not "an individual condition but a process of income-generation characterised by one central feature: *it is unregulated by the institutions of society, in a legal and social environment in which similar activities are regulated.*"⁸⁰

Particularly influential is the definition adopted by the (ILO-linked) International Conference of Labour Statisticians (ICLS). In 2003 the 17th ICLS moved from an *enterprise-based* to an *employment-based* definition:⁸¹

⁷⁸ ILO (2008), International Labour Organisation, *Strategies to promote transition to formality in Africa*, Contribution to the joint AU/ILO workshop on the informal economy in Africa, Dakar, 12.

⁷⁹ ILO Recommendation Concerning the Transition from the Informal to the Formal Economy, 2015 (No. 204) par I.2

⁸⁰ Castells, M & A Portes (1989), "The world underneath: The origins, dynamics, and effects of the informal economy", in Portes, A, M Castells & LA Benton (eds), *The informal economy: Studies in advanced and less developed countries*, Baltimore: John Hopkins University Press 12. Emphasis in the original. See also ILO, 2008: 12.

⁸¹ The ILO-ICLS *Guidelines concerning a statistical definition of informal employment* (17th ICLS, 2003) suggest that the definition of informal employment should be understood to include the following job types:

"(i) own-account workers employed in their own informal sector enterprises;
(ii) employers employed in their own informal sector enterprises;
(iii) contributing family workers, irrespective of whether they work in formal or informal sector enterprises;
(iv) members of informal producers' cooperatives;
(v) employees holding informal jobs (as defined in formal sector enterprises, informal sector enterprises, or as paid domestic workers employed by households;
(vi) own-account workers engaged in the production of goods exclusively for own final use by their household."

*"Instead of focusing on the formality of the enterprise, an employment-based definition defines informality in relation to the **employment characteristics of the individual**.*

According to this approach, individuals are considered to be in informal employment if their employment relationship is, in law or in practice, not subject to national labour legislation income taxation, social protection or entitlement to certain employment benefits (advance notice of dismissal, severance pay, paid annual or sick leave, etc.).⁸²

According to the 19th ICLS, 2013, work is defined irrespective of its formal or informal character or the legality of the activity. Informal work/employment has effectively been mainstreamed in the notion of "work". Note should also be taken of the current international debate on the nature and scope of labour law, and the quest for redefinition, prompted by the ever-increasing forms of work. Also, the extensive "work"/"worker"/"workplace" concepts being used in modern occupational health and safety (OHS) laws need to be noted – OHS liability essentially extends to any form of work and invariably no longer requires a specific physical workplace.

Informal employment, which is not restricted to the informal economy, has been described as:

*"The two main categories of informal employment, **wage employment in jobs without social protection and self-employment in unincorporated enterprises**, can be further disaggregated into different categories of employment relationships. Self-employment consists of own-account workers and employers of informal enterprises who hire other workers. The conditions of these two categories are often very different. Wage-employment includes informal employees of both formal and informal firms, subcontracted workers, wage workers for households (domestic workers), and wage workers with no fixed employer (casual day workers)".⁸³*

However, there is a vast and growing range of other forms of work that cannot be regarded as either self- or wage-employment. Much of this (informal) work takes place in supply chain contexts, and may not have a relationship with an employer, but at best with a "provider" or "user" of work. Others may be working in the care economy.⁸⁴

It is obvious that the significant variety of informal economy participation and informal work modalities has important policy and design implications for those social security frameworks that are tailor-made to cover and serve those in the informal economy. As noted in a recent contribution on social security for informal economy workers in Latin America: "Their heterogeneity calls for innovative solutions."⁸⁵

2.1.2. Challenges of Definition: Domestic legal systems

The manner in which the informal sector/economy is defined differs. Examples emanating from Tanzania and India can be mentioned:

- Tanzania: The *Social Security (Regulatory Authority) Act* defines "informal sector" as the sector that includes workers who work informally and who do not work in terms of an employment contract or another contract contemplated in the definition of employee.⁸⁶
- India: A broad concept of "worker" is suggested, including both an "employee" (wages required) and a "non-employee" (comprising an "owner-cum worker" or "self-employed worker") (*Draft Labour Code on Social Security & Welfare, 2018*). Also, this draft Code defines "unorganised sector" as "establishments which

⁸² DSD (2014), *Inclusion of informal workers in the reform of retirement provision in South Africa*, Consolidated Report, prepared by Oxford Policy Management in partnership with Callund Consulting, 32.

⁸³ EC (2012), European Commission, *Empowering people for inclusive growth: The perspective of the working poor in the informal economy*, EC Concept Note – High Level Panel, Brussels, 1-2 (emphasis added). For more information, see Lund, F (2012), 'Work-related social protection for informal workers', *International Social Security Review*, 65 (4), 12-15 and Olivier, M, F Andrianarison & M McLaughlin (2013), *Study on social protection in sub-Saharan Africa: An assessment of existing programmes*, Final report of a study commissioned by the European Commission, 74.

⁸⁴ Lund, F & S Srinivas (2000), *Learning from experience: A gendered approach to social protection for workers in the informal economy*, Geneva: ILO, 3.

⁸⁵ Ortiz, P A (2019), "Informal and self-employed workers in Latin America: from an excluded category to an example of innovative inclusive measures" in M Westerfeld & M Olivier (eds) *Social Security Outside the Realm of the Employment Contract – Informal Work and Employee-like Workers* (Edward Elgar Publishing Ltd) 158.

⁸⁶ *Social Security (Regulatory Authority) Act*, Act 8 of 2008: Section 3.

employ workers, and the number of such workers is less than the threshold; (b) self-employed units; (c) Households that employ domestic workers for carrying out the activities of the household".

In South Africa, the LFS makes use of the following definitions of "informal employment" and "informal sector":⁸⁷

- **"Informal employment"** identifies persons who are in precarious employment situations, irrespective of whether or not the entity for which they work is in the formal or informal sector. Persons in informal employment therefore comprise all persons in the informal sector, employees in the formal sector, and persons working in private households who are not entitled to basic benefits such as pension or medical aid contributions from their employer, and who do not have a written contract of employment."
- **"Informal sector":** The informal sector has the following two components: i) Employees working in establishments that employ fewer than five employees, who do not deduct income tax from their salaries/wages; and ii) Employers, own-account workers and persons helping unpaid in their household business who are not registered for either income tax or value-added tax."

In a range of developing countries, labour laws (often with social security consequences) achieve extended protection through a deliberate widening of the employee concept. In Southern Africa, this is true of the labour laws of, among others, South Africa and Swaziland.

2.1.3. Challenges of Definition: Concluding comment

The discussion on the challenges of definition may be summarised as follows:

- Some evolution in conceptual understanding is discernible e.g., from "informal sector" to "informal economy".
- It is clear that the informal economy, also in the South African case, would most often include workers who do work for an identifiable employer in the context of an existing employment relationship, implying therefore that there is no employer who could contribute towards retirement or other social security provisioning for these workers.
- The focus is on workers not covered by current legal protection, neither legally nor factually, especially in social security terms.
- Informal employment is now understood with reference to the employment characteristics of the individual, and not with reference to the size, or nature, of the enterprise.
- Recent conceptual approaches make it clear that informal work/employment is effectively mainstreamed in the notion of "work".
- "Informal employment" and "informal workers" are defined in wide terms, to capture the range of those involved in the informal economy.
- The noticeable conceptual widening is also informed by labour law developments.
- Yet, despite the developments indicated above, there is little consistency, especially at national level, in how these terms are defined.

The absence of clear definition runs like a thread through this study, also in the context of the range of qualitative and quantitative sources indicated below.⁸⁸ The absence of reliable information regarding this set of workers that it suggests is reflected in reality. No systematic assessments of the working conditions and income characteristics of the group covered by the scheme set out in this study are available. The analysis described herein rests on the information gleaned from a range of qualitative and quantitative sources.

2.1.4. Challenges of Definitions: Other Considerations

One should be careful to rely on standard classifications in this area; as has been noted: "Informal sector heterogeneity continues to defy easy generalizations." In their 2012 contribution, based on a representative sample from seven capital cities in francophone West Africa, Grimm, Knorringa and Lay commented on the needs experienced by a sizeable group of informal economy entrepreneurs, who generally lack access to capital, insurance and productive infrastructure. Appropriate social protection policy interventions would therefore require

⁸⁷ See, e.g., Stats SA (July 2019) *Quarterly Labour Force Survey – Quarter 2: 2019* (Statistical Release P0211) 17.

⁸⁸ See paras 4.1 and 4.2 below.

addressing these shortcomings, including the provision of insurance to cover important household-related risks, such as health shocks and death.⁸⁹

Also, the borderlines between formal and informal have increasingly become fluid and blurred as formal employment has decreased world-wide, and as people tend to move out of formal into informal and non-traditional employment, and vice versa, more readily than in the past. There is, therefore, both a continuum and a fluidity or mobility between the formal and informal economy.⁹⁰ This may make the development of suitable social security responses exceptionally complex.

Different from what the position might be in the so-called developed economies, informal employment is not generally regarded as illegal or irregular in the developing world, but as a standard way of life and income-generation.⁹¹ In fact, as recently noted by a specialist in this area, formality is a survival strategy for many, and its nexus with poverty needs to be appropriately addressed.⁹²

2.2. Normative Framework and Guiding Principles: Constitutional Considerations⁹³

2.2.1. Constitutional framework supporting social security

Human rights abuses under the previous political dispensation in South Africa necessitated the adoption of a Constitution that would avoid repetition of past injustices, and forge a new culture of accommodation, mutual respect, equality and freedom in South Africa. In one of its first judgments, the Constitutional Court remarked that "the Constitution introduces democracy and equality for the first time in South Africa. It acknowledges a past of intense suffering and injustice, and promises a future of reconciliation and reconstruction . . ."⁹⁴

One of the hallmarks of the 1996 Constitution is therefore constitutionalism. Supreme status has been granted to the Constitution: it is the supreme law of the Republic. Any law or conduct inconsistent with it is invalid and the obligations imposed by it must be fulfilled (Constitution (1996), Section 2). Constitutional supremacy has effectively replaced the notion of parliamentary sovereignty, in terms of which Parliament could enact social security laws which discriminated against various people or groups of people on the basis of race or gender.

Alongside this, and supported by constitutional values such as human dignity and equality, a Bill of Rights has been enacted as part of the Constitution. The significance of the rights contained in the Bill of Rights has been enhanced by a special protection, which has been given to the Bill of Rights in the case of any attempted change to these rights.⁹⁵ The state has been given a specific mandate to give effect to these rights. Section 7(2) stipulates of the Constitution provides: "The state must respect, protect, promote and fulfil the rights in the Bill of Rights." Also, an obligation has been imposed upon the courts, tribunals and forums, entrusted with the interpretation of any legislation, to promote the spirit, purport and objects of the Bill of Rights (Constitution, Section 39(2).

For the first time in South Africa's history, the Constitution compels the state to ensure the "progressive realisation" of social security. Section 27 of the Constitution clearly and unambiguously obliges the state to develop a

⁸⁹ Grimm, M, P Knorrington & J Lay (2012), *Constrained Gazelles: High potentials in West Africa's informal economy*, Working Paper, no 53, International Institute for Social Studies, 27-28.

⁹⁰ Barrientos, A & S Barrientos (2002), *Extending social protection to informal workers in the horticulture global value chain* (Social Protection Discussion Paper Series No 0126) World Bank report, Washington DC, 18-19; Fudge, J (2012), "Blurring legal boundaries: Regulating for decent work" in J Fudge, S McCrystal and K Sankaran (eds) *Challenging the legal boundaries of work regulation* (Oxford and Portland, Oregon: Hart Publishing, 7-8.

⁹¹ Lund (2012) 13-14.

⁹² Gomes, A (2019), *Labour law, informality and poverty* (Presentation: Fourth Labour Law Research Network Conference (LLRN), Valparaíso, Chile, 23-25 June 2019).

⁹³ This paragraph relies in part on (an adjusted version) of Olivier, M (2012), "Social security: Framework" in *LAWSA (The Law of South Africa) - Labour Law and Social Security Law Vol 13, Part 2* (LexisNexis, Durban) paras 42, 44, 45, 88 and Olivier, M (2019a), *Selected constitutional and legal perspectives on social security in South Africa* (included in a Department of Social Development-supported publication, HSRC)(forthcoming).

⁹⁴ *S v Mhlungu* 1995 3 SA 867 (CC); 1995 7 BCLR 793 (CC) par 111.

⁹⁵ Section 74(2) signifies enhanced protection accorded to the Bill of Rights, by requiring comprehensive support for its amendment: the amending Bill must be passed by the National Assembly, with a supporting vote of at least two thirds of its members, while at least 6 provinces in the National Council of Provinces must cast a supporting vote.

comprehensive social security system. It affirms the universal right to access to social security, including appropriate social assistance for those unable to support themselves and their dependents (Constitution, Section 27(1)(c) and orders the state to take reasonable legislative and other measures, within its available resources, to achieve the progressive realisation of these rights (Constitution, Section 27(2)). Other fundamental rights are also important to support the realisation and implementation of this constitutionally protected right to access to social security, as is discussed below. While these rights are not absolute, and are subject to "reasonable and justifiable limitations",⁹⁶ the cumulative effect of these rights is the imperative to extend significant protection in particular to those who are currently largely excluded from the purview of both contributory and non-contributory forms of social security, including in particular informal economy workers and most often their dependents, while imposing stringent requirements on public and private providers of social security.

Furthermore, it should also be noted that these rights are capable of enforcement. As has happened in several constitutional cases, the legislature or executive can be ordered to take action or be required to consider and arrange for a more equal distribution of resources. For example, in *Khosa v Minister of Social Development; Mahlaule v Minister of Social Development*⁹⁷ government was ordered to make available certain social assistance grants to permanent residents, despite the fact that the legislation required (as a rule) that a person had to be a South African citizen in order to be eligible for these grants. The Constitutional Court is specifically empowered to decide that Parliament, or the President, has failed to comply with a constitutional duty.⁹⁸ In addition, the remedies at the disposal of the courts, when they decide upon these issues, are extensive.

How far will the court go? It may require the state to review programmes and policies. In certifying the draft text of the 1996 Constitution the Constitutional Court stressed that the socio-economic rights contained in the Constitution are justiciable, even though the inclusion of the rights may have direct financial and budgetary implications.⁹⁹

The Court remarked (par 77):

*"It is true that the inclusion of socio-economic rights may result in the courts making orders **which have direct implications for budgetary matters**. However, even when a court enforces civil and political rights such as equality, freedom of speech and the right to a fair trial, the order it makes will often have such implications. A court may require the provision of legal aid, **or the extension of state benefits to a class of people who formerly were not beneficiaries of such benefits**. In our view it cannot be said that by including socio-economic rights within a bill of rights, a task is conferred upon the courts so different from that ordinarily conferred upon them by a bill of rights that it results in a breach of the separation of powers"* (own emphasis).

The Constitutional Court has subsequently affirmed this position.¹⁰⁰ It is clear, therefore, that the courts *can* enforce social security rights and *can* order state organs to act in a particular way (eg., to extend social security protection to categories of persons who are excluded contrary to the requirements of the Constitution).

Where necessary, the court will also allow a class action to be brought before it, in order to protect the interests of the poor and vulnerable, in particular.¹⁰¹

2.2.2. Constitutional pointers for extending contributory social security protection to informal economy workers

⁹⁶ According to section 36(1) of the Constitution, a fundamental right can be limited only in terms of law of general application to the extent that the limitation is reasonable and justifiable in an open and democratic society based on human dignity, equality and freedom, taking into account all relevant factors, including those specifically indicated in section 36.

⁹⁷ 2004 6 BCLR 569 (CC).

⁹⁸ Section 167(4)(e). See also *Economic Freedom Fighters v Speaker of the National Assembly; Democratic Alliance v Speaker of the National Assembly* 2016 (5) BCLR 618 (CC); 2016 (3) SA 580 (CC).

⁹⁹ *Ex parte Chairperson of the Constitutional Assembly: In re Certification of the Constitution of the RSA*, 1996 10 BCLR 1253 (CC); 1996 4 SA 744 (CC) paras 76-78.

¹⁰⁰ *Government of the RSA v Grootboom* 2000 11 BCLR 1169 (CC); 2001 1 SA 46 (CC) par 20.

¹⁰¹ See section 38 of the Constitution; *Permanent Secretary, Department of Welfare, Eastern Cape Provincial Government v Ngxuzza* 2001 10 BCLR 1039 (A); 2001 4 SA 1184 (SCA); and *Mashavha v President of the RSA* 2004 12 BCLR 1243 (CC); *Nkala and Others v Harmony Gold Mining Company Limited and Others* [2016] 3 All SA 233 (GJ); 2016 (7) BCLR 881 (GJ); 2016 (5) SA 240 (GJ).

2.2.2.1. Access to social security, in the light of the right to equality, to human dignity and to fair labour practices

Section 9(1) of the Constitution stipulates that everyone is equal before the law and has the right to equal protection and benefit of the law. Section 9(2) elaborates on this individual entitlement to equality, by providing, firstly, that equality includes the full and equal enjoyment of all rights and freedoms and, secondly, that (in order) to promote the achievement of equality, legislative and other measures designed to protect or advance persons, or categories of persons, disadvantaged by unfair discrimination may be taken. The state, as is the case with any other person, is prohibited from unfairly discriminating directly or indirectly against anyone on one or more grounds; in addition, the Constitution instructs the enactment of national legislation to prevent or prohibit unfair discrimination (Section 9(3) and (4)).

What does this imply for extending retirement and other forms of social security protection to informal economy workers, who have historically been excluded from coverage in South Africa? In the seminal judgment of the Constitutional Court (concerning differentiated employer pension contributions in respect of members of Parliament and other office-bearers, favouring those elected since 1994), in *Minister of Finance v Van Heerden*,¹⁰² the court stressed the need to adopt measures that do away with unequal treatment of historically disadvantaged categories of persons. The court held:¹⁰³

*"However, what is clear is that our Constitution and in particular Section 9 thereof, read as a whole, embraces for good reason a substantive conception of equality inclusive of measures to redress existing inequality. Absent a positive commitment progressively to eradicate socially constructed barriers to equality and to root out systematic or institutionalised under-privilege, the constitutional promise of equality before the law and its equal protection and benefit must, in the context of our country, ring hollow."*¹⁰⁴

And in a case concerning the need for equality in access to and delivery of social assistance grants, but with obvious implications for State support in relation to contributory social security arrangements for those operating in the informal economy, the Constitutional Court held: "Equality is not only recognized as a fundamental right in both the interim and 1996 Constitutions, but is also a foundational value. To pay, for example, higher old age pensions in Johannesburg in Gauteng than in Bochum in Limpopo, or lower child benefits in Butterworth than in Cape Town, would offend the dignity of people, create different classes of citizenship and divide South Africa into favoured and disfavoured areas."¹⁰⁵

Also, in *Khosa v Minister of Social Development; Mahlaule v Minister of Social Development*¹⁰⁶ the Constitutional Court held that a purposive approach is required to give meaning to the entitlement of "everyone" to the right to access to social security enshrined in Section 27(1)(c) of the Constitution. It found that this notion includes "all people in our country".¹⁰⁷ The court remarked that, where the state argues that resources are not available to pay benefits to everyone entitled under Section 27(1)(c), the criteria for excluding a specific group (in this case permanent residents) must be consistent with the Bill of Rights as a whole.¹⁰⁸ Whatever differentiation is made must be constitutionally valid and cannot be arbitrary, irrational or manifest a naked preference.¹⁰⁹

¹⁰² [2004] 12 BLLR 1181 (CC); 2004 11 BCLR 1125 (CC); 2004 6 SA 121 (CC).

¹⁰³ Par 31.

¹⁰⁴ See also par 27: "This substantive notion of equality recognises that besides uneven race, class and gender attributes of our society, there are other levels and forms of social differentiation and systematic under-privilege, which still persist. The Constitution enjoins us to dismantle them and to prevent the creation of new patterns of disadvantage. It is therefore incumbent on Courts to scrutinise in each equality claim the situation of the complainants in society; their history and vulnerability; the history, nature and purpose of the discriminatory practice and whether it ameliorates or adds to group disadvantage in real life context, in order to determine its fairness or otherwise in the light of the values of our Constitution. In the assessment of fairness or otherwise a flexible but 'situation sensitive' approach is indispensable because of shifting patterns of hurtful discrimination and stereotypical response in our evolving democratic society."

¹⁰⁵ *Mashavha v President of the Republic of South Africa* 2005 2 SA 476 (CC); 2004 12 BCLR 1243 (CC) par 51.

¹⁰⁶ 2004 6 BCLR 569 (CC).

¹⁰⁷ Paras 46-47.

¹⁰⁸ Par 53.

¹⁰⁹ Par 45.

Human dignity as a fundamental constitutional value¹¹⁰ as well as a fundamental right¹¹¹ contained in the Bill of Rights is closely linked to the right to equality,¹¹² and plays a very important role with regard to social rights pertaining to the alleviation of poverty, and the equal treatment of those who are historically deprived. As noted by the Constitutional Court in *S v Makwanyane*:¹¹³

"The importance of human dignity as founding value of the new Constitution cannot be overemphasized. Recognising a right to dignity is an acknowledgement of the intrinsic worth of human beings: human beings are entitled to be treated as worthy of respect and concern. The right therefore is the foundation of many other rights that are specifically entrenched in the [Bill of Rights]."

The Constitutional Court remarked, when considering the purpose of providing access to social security to those in need, that: "A society had to attempt to ensure that the basic necessities of life were accessible to all if it was to be a society in which human dignity, freedom and equality were foundational. The right of access to social security, including social assistance, for those unable to support themselves and their dependents was entrenched because society in the RSA valued human beings and wanted to ensure that people were afforded their basic needs."¹¹⁴

The Constitution also stipulates that "Everyone has the right to *fair labour practices*" (Constitution, Section 23(1)). The non-restrictive scope of the "fair labour practices" notion would clearly include contributory arrangements associated with the social security context of work arrangements. In a recent Constitutional Court judgment, the court opined that this right accrues also to *informal* work arrangements:

*"Contemporary labour trends highlight the need to take a broad view of fair labour practice rights in Section 23(1). Fewer and fewer people are in formal employment; fewer of those in formal employment have union backing and protection. More and more people find themselves in the 'twilight zone' of employment as supposed 'independent contractors' in time-based employment subject to faceless multinational companies who may operate from a web presence. In short, the LRA tabulated the fair labour practice rights of only those enjoying the benefit of *formal employment* – but not otherwise. Though the facts of this case do not involve these considerations, they provide a compelling basis not to restrict the protection of Section 23 to only those who have contracts of employment."*¹¹⁵

2.2.2.2. Constitutional emphasis on addressing vulnerability

The vulnerability of informal economy workers due to a lack of appropriate social security protection is self-evident. In view of this, note should be taken of the specific constitutional focus on addressing the plight of the most vulnerable and desperate in society. In particular, where categories of people belonging to deprived and impoverished communities are marginalised or excluded, and the right infringed is fundamental to their well-being, the Constitutional Court appears to be willing to intervene. This is, in particular, the case where the said communities have been historically marginalised and/or excluded or appear to be particularly vulnerable.

In *Government of the Republic of South Africa v Grootboom*¹¹⁶ the Constitutional Court emphasised that regard must be had to the extent and impact of historical disadvantage, the need to ensure that basic necessities of life are available to all, and the importance of not neglecting particularly vulnerable groups. In *Minister of Health v Treatment Action Campaign* the court emphasised again that "[t]o be reasonable, measures cannot leave out of account the degree and extent of the denial of the right they endeavour to realise. Those whose needs are the most urgent and whose ability to enjoy all rights therefore is most in peril, must not be ignored by the measures aimed at achieving realisation of the right".¹¹⁷ As was said in yet another judgment of the Constitutional Court,

¹¹⁰ Constitution of the RSA, Sections 1 and 7(1).

¹¹¹ Section 10 reads as follows: "Everyone has inherent dignity and the right to have their dignity respected and protected."

¹¹² See *Jafta v Schoeman; Van Rooyen v Stolz* 2005 (2) SA 140 (CC), confirming the approach in this regard adopted by the court in *Grootboom* and *Khosa*.

¹¹³ 1995 3 SA 391 (CC) par 328. See also *Daniels v Scribante* 2017 4 SA 341 (CC) par 2.

¹¹⁴ *Khosa v Minister of Social Development; Mahlaule v Minister of Social Development* 2004 (6) SA 505 (CC); 2004 (6) BCLR 569 (CC) 573A (case headnote summary).

¹¹⁵ *Pretorius and Another v Transport Pension Fund and Another* [2018] 7 BLLR 633 (CC); 2018 (7) BCLR 838 (CC); (2018) 39 ILJ 1937 (CC); 2019 (2) SA 37 (CC) par 48 (authority omitted; second emphasis added).

¹¹⁶ *Grootboom* par 44; see also par 42.

¹¹⁷ *Treatment Action Campaign* par 68.

in the context of the protection of labour rights, the "Constitution protects the weak, the marginalised, the socially outcast, and the victims of prejudice and stereotyping."¹¹⁸

2.2.3. Implications for designing a contributory arrangement for informal economy workers

The implications of the preceding discussion may be summarised as follows:

- In keeping with the Constitutional Court's approach to consider the impact of fundamental rights in a given context from the perspective of the interrelated and interdependent nature of the fundamental rights protected in the Bill of Rights,¹¹⁹ and in view of the guarantee of important constitutional values, it is necessary to appreciate the implications flowing from in particular the fundamental rights most relevant to both contributory and non-contributory social security provisioning for informal economy workers i.e. the right to access to social security, the right to equality, the right to human dignity and the right to fair labour practices.
- The vulnerability in social security coverage terms of large numbers of informal economy workers flows from several factors. For the most part, contributory retirement provision as well as other existing contributory social security arrangements effectively remain inaccessible to them, legally and factually, because they are not "employees" operating under a "contract of service", and appropriate tailor-made contributory arrangements to address their specific context have not been established. Also, given the strict category-based approach of South African social assistance, whereby protection in the form of social assistance is restricted to certain categories (in particular old-age, disability and childcare grants), and is made subject to an income and assets test,¹²⁰ the position is that these workers, as a rule, do not enjoy social security protection.
- Given the vulnerable status of informal economy workers, in particular as a result of the insufficient social security support available to them, it could – in the light of the relevant constitutional provisions and developing jurisprudence – be constitutionally expected of government to roll out some kind of comprehensive programme to deal effectively with their plight. The absence of social security protection and proper policies in this regard would certainly leave the state exposed to major constitutional challenges.¹²¹
- Particular care should be taken to ensure that any form of government support (i.e. in the form of a government subsidy) available to formal economy workers in the context of a to-be-established national pension scheme does not discriminate unfairly against informal economy workers, as unequal treatment in this regard would, also in the light of the particularly vulnerable status of informal economy workers, be subject to serious constitutional challenge.

2.3. International and Regional Standards

The next part of the discussion considers the implications of international and regional standards on social security provision for workers in the informal economy.

2.3.1. Constitutional reflections on the role and place of international (and regional) social security law

Social security standards have been entrenched in several international and regional instruments. At the international level this rights-based approach is embedded in standards stipulated in instruments of the International Labour Organization (ILO) (in the form of binding Conventions, supplemented by non-binding Recommendations) and the United Nations (UN). In the regional sphere these standards are reflected in

¹¹⁸ *Hoffmann v South African Airways* 2001 1 SA 1 (CC) para 34.

¹¹⁹ See, among others, *Grootboom* par 53; *Khosa* par 40.

¹²⁰ Cf the pertinent provisions of the *Social Assistance Act* 13 of 2004, and the attendant regulations.

¹²¹ As remarked by the court in *Government of the RSA v Grootboom* 2000 11 BCLR 1169 (CC); 2001 1 SA 46 (CC) par 36: "The poor are particularly vulnerable and their needs require special attention. It is in this context that the relationship between sections 26 and 27 and the other socio-economic rights is most apparent. If under section 27 the state has in place programmes to provide adequate social assistance to those who are otherwise unable to support themselves and their dependents, that would be relevant to the state's obligations in respect of other socio-economic rights."

instruments emanating from among others the African Union (AU) and the Southern African Development Community (SADC). South Africa is a member of all four these organisations.

The South African Constitution contains important provisions regarding the role and importance of international law. The Constitution generally supports an international law-friendly approach. It stipulates that to the extent that South Africa has *ratified* international instruments, it is bound by their standards and provisions (Section 231(1)). However, as a rule, any international agreement becomes law in the Republic only when it is enacted into law (i.e. incorporated) by national legislation (Section 231(4)). According to the Constitutional Court, incorporation transforms relevant provisions of international agreements into statutory rights and obligations, to be enforced on par with national legislation.¹²²

Furthermore, when *interpreting* fundamental rights contained in the Bill of Rights, courts, tribunals and forums have to consider international law. According to the Constitutional Court, the international law referred to includes both binding and non-binding international law i.e. also international instruments not binding on South Africa.¹²³ This has major implications when courts and other adjudicators consider the interpretation and application of the constitutional rights discussed above as well as other fundamental rights referred to above. Also, there is a constitutional preference for statutory interpretation which is aligned to international law. Section 233 stipulates: "When interpreting any legislation, every court must prefer any reasonable interpretation of the legislation that is consistent with international law over any alternative interpretation that is inconsistent with international law."

South Africa has ratified only a limited number of (older) employment-related social security Conventions of the ILO, including in the areas of unemployment insurance and employment injury benefits.¹²⁴ In 2015 South Africa ratified the UN *International Covenant on Economic, Social and Cultural Rights* of 1966. Fundamental rights enshrined in this instrument include the right to social security. South Africa has not yet ratified any of the AU or SADC instruments, which guarantee social security rights – with the exception of the *African Charter on Human and People's Rights*, in respect of which the right to social security, also for informal economy workers, has been indicated as a derivative right.¹²⁵

South African courts, including the Constitutional Court, have often referred to and, where appropriate, relied on international standards embedded in the instruments indicated above, in particular ILO Conventions and UN instruments.

2.3.2. International standards

Older ILO and other international standards paid scant attention to the social security position of informal economy workers. To some extent, lately,¹²⁶ this has been changing. In 2012, *ILO Recommendation 202 (National Floors of Social Protection)* made specific reference to the social security plight of these workers. It mentions, as one of the principles to be applied, 'social inclusion including of persons in the informal economy' (paragraph 1(e)). Paragraph 15 in turn suggests that '[S]ocial security extension strategies should apply to persons both in the formal and informal economy'.

ILO Recommendation 204 (2015) (The transition from the informal to the formal economy) went further, by affirming that the transition from the informal to the formal economy is essential to achieve inclusive development and to realise decent work for all. Paragraph 18 suggests that ILO members should progressively extend, in law and practice, to all workers in the informal economy, social security, maternity protection, decent working conditions and a minimum wage that takes into account the needs of workers and considers relevant factors, including but not limited to the cost of living and the general level of wages in their country. With particular reference to employment policies, the Recommendation confirms that countries should pay special attention to the needs and circumstances of those in the informal economy and their families (paragraph 19). Coverage of social insurance should progressively be extended to those in the informal economy, and administrative procedures, benefits and

¹²² *Glenister v President of the RSA* 2011 3 SA 347 (CC); 2011 7 BCLR 651 (CC) pars 99, 100, 102, 181. See also *Azanian Peoples Organisation (AZAPO) v President of the RSA* 1996 8 BCLR 1015 (CC); 1996 4 SA 671 (CC) par 26.

¹²³ 39(1)(b). See *S v Makwanyane* 1995 (3) SA 391 (CC); 1995 (6) BCLR 665 (CC); *Government of RSA v Grootboom* 2000 (11) BCLR 1169 (CC). See also *Glenister v President of the RSA* 2011 3 SA 347 (CC); 2011 7 BCLR 651 (CC) par 96.

¹²⁴ See www.ilo.org.

¹²⁵ See par 2.3.3 below.

¹²⁶ But note that not even *ILO Convention 189 (2011) (Decent Work for Domestic Workers)* includes self-employed domestic workers, as Article 1(b) of the Convention defines a "domestic worker" to mean any person engaged in domestic work within an employment relationship.

contributions should be adapted in accordance with the contributory capacity of those in the informal economy (paragraph 20). In relation to the need to consult appropriately with institutions representing the interests of informal economy workers, the Recommendation requires "Consultation with the most representative employers' and workers' organizations, which should include in their rank, according to national practice, representatives of membership-based representative organizations of workers and economic units in the informal economy" (emphasis added) (see in particular paragraphs 6, 34, 38 and 39 of the Recommendation).

Specifically within the context of global supply chains, which tend to increasingly rely on informal economy workers, the 2016 ILO *Resolution concerning decent work in global supply chains* highlights the importance of an intervention such as "legislation on responsibility down the chain, sometimes providing for cross-border regulation of supply chains."¹²⁷ Even more recently, ILO *Convention 190 (2019) concerning the elimination of violence and harassment in the world of work* indicates that the Convention applies to all sectors, whether private or public, "both in the formal and informal economy, and whether in urban or rural areas" and protects "persons working irrespective of their contractual status"¹²⁸ Article 6 requires, as one of the core principles of the Convention, that "Each Member shall adopt laws, regulations and policies ensuring the right to equality and non-discrimination in employment and occupation, including for women workers, as well as for workers and other persons belonging to one or more vulnerable groups or groups in situations of vulnerability that are disproportionately affected by violence and harassment in the world of work." Article 8(a) in turn expects of ratifying ILO Member States to take appropriate measures to prevent violence and harassment in the world of work, including: "(a) recognizing the important role of public authorities in the case of informal economy workers."

The recent ILO *Centenary Declaration for the Future of Work* (2019) calls upon all ILO Member States to further develop its human-centred approach to the future of work by –

"Strengthening the institutions of work to ensure adequate protection of all workers, and reaffirming the continued relevance of the employment relationship as a means of providing certainty and legal protection to workers, while recognizing the extent of informality and the need to ensure effective action to achieve transition to formality. All workers should enjoy adequate protection in accordance with the Decent Work Agenda, taking into account:

- (i) respect for their fundamental rights;*
- (ii) an adequate minimum wage, statutory or negotiated;*
- (iii) maximum limits on working time; and*
- (iv) safety and health at work."*¹²⁹

Finally, in yet another recent ILO publication, containing a *General Survey concerning Recommendation 202*, the ILO's Committee of Experts on the Application of Conventions and Recommendations emphasised that "while relief and anti-poverty measures provide some form of protection and constitute an essential component of social protection floors in many countries, *securing a life in health and decency for all people requires the establishment of other types of social security measures, such as tax-funded social assistance and adapted social insurance mechanisms enshrined in law which are sustainable, rights-based and provide adequate levels of protection*".¹³⁰

UN standards also cover those who work in the informal economy. The UN *International Covenant on Economic, Social and Cultural Rights* (ICESCR 1966) in particular, article 9, is important for informal economy workers for two reasons. Firstly, by far the majority of developing (including African countries, and South Africa as well) have ratified this instrument. Secondly, General Comment No. 19 (on article 9 ICESCR) requires a ratifying country to cover informal economy workers, and expects governments to respect and support social security schemes developed within the informal economy, such as micro-insurance schemes. Despite limited financial capacity, countries should consider lower-cost and alternative schemes to provide for marginalised groups, and they should ensure the progressive inclusion of informal economy workers in social security arrangements.¹³¹

¹²⁷ ILO (2019a), *Convention concerning the elimination of violence and harassment in the world of work* (Convention 190 of 2019) Article 2(1) and (2) respectively).

¹²⁸ ILO (2019b), *Centenary Declaration for the Future of Work* par III (emphasis added).

¹²⁹ ILO (2019b), *Centenary Declaration for the Future of Work* par III (emphasis added).

¹³⁰ ILO (2019c), *Universal social protection for human dignity, social justice and sustainable development* (General Survey concerning the Social Protection Floors Recommendation, 2012 (202), Report of the Committee of Experts on the Application of Conventions and Recommendations) 89.

¹³¹ UN Committee on Economic, Social and Cultural Rights (CESCR) (2008), *General Comment No. 19: The right to social security* (Art. 9 of the Covenant), 4 February 2008, E/C.12/GC/19.

In addition to the above, mention should be made of two other foundational UN documents – one older and one more recent – supporting the right of informal economy workers to appropriate social security. The 1948 UN *Declaration of Human Rights* stipulates in Article 22 that –

"Everyone, as a member of society, has the right to social security and is entitled to realization, through national effort and international co-operation and in accordance with the organization and resources of each State, of the economic, social and cultural rights indispensable for his dignity and the free development of his personality." (emphasis added)

Article 25(1) in turn emphasises that "Everyone has the right to a standard of living adequate for the health and well-being of himself and of his family, including ... *the right to security in the event of unemployment, sickness, disability, widowhood, old age or other lack of livelihood in circumstances beyond his control.*" (emphasis added) The (2015) UN *Sustainable Development Goals 2030*, building on the premise of ending poverty in all its forms everywhere, and that no one should be left behind, stipulates that countries should "implement nationally appropriate social protection systems and measures for all, including floors, and by 2030 achieve substantial coverage of the poor and the vulnerable."¹³²

2.3.3. Regional (AU and SADC) standards

The foundational human rights instrument of the African Union is the *African Charter on Human and People's Rights* (1982) (also known as the Banjul Charter; ratified by all 55 AU Member States). While the right to social security is not specifically protected in the Charter, nevertheless, as noted by the African Commission on Human and Peoples' Rights (ACmHPR) in its *Principles and Guidelines on the Implementation of Economic, Social and Cultural Rights in the African Charter on Human and Peoples' Rights*, this right can be derived from a joint reading of a number of rights guaranteed under the Charter including (but not limited to) the rights to life, dignity, liberty, work, health, food, protection of the family and the right to the protection of the aged and the disabled, in addition to be strongly affirmed in international law.¹³³ The ACmHPR stresses that the right to social security imposes, amongst others, the obligation on States parties to take steps to ensure that the social security systems cover those persons working in the informal economy.¹³⁴ In fact, in relation to the right to work, it states that it is incumbent upon States parties to "establish a system of social protection and insurance for workers in both the formal and informal sector, including those performing home-based work"¹³⁵ The premise for pursuing these interpretive approaches seems to be influenced by the fact that the ACmHPR regards workers in the informal sector and in subsistence agriculture as a vulnerable and disadvantaged group.¹³⁶

The 2007 *Code on Social Security in the SADC* acknowledges the right of every person in SADC to social security (article 4.1). SADC Member States are required to provide compulsory coverage, either through public or private mechanisms or through a combination of both. In particular, article 6.5 stipulates that Member States should provide and regulate social insurance mechanisms for the informal sector. Similarly, article 20(e) of the 2014 *SADC Protocol on Employment and Labour* requires of State Parties to adopt a regulatory framework promoting appropriate and adequate social security protection of informal and rural workers, through the provision or recognition of amongst others formal and informal social insurance and micro-insurance mechanisms, universal schemes, social assistance measures, and dedicated savings instruments.

2.3.4. Implications

The implications of these instruments and their accompanying standards, and the responses of South Africa's courts to them, may be summarised as follows:

¹³² UN (2015), *Sustainable Development Goals 2030* Target 1.3.

¹³³ African Commission on Human and Peoples' Rights (2010), *Principles and guidelines on the implementation of economic, social and cultural rights in the African Charter on Human and Peoples' Rights*, par 81.

¹³⁴ *Ibid*, par 82(l). It is noteworthy that per the African Union Executive Council decision a mandate was given for the development of an additional protocol to the African Charter of Human and People's Rights on the Rights of Citizens to Social Protection and Social Security. The accompanying text of the decision endorses the pursuit of a rights-based approach to social protection and social security for all citizens, aiming at inclusive development that leaves no one behind, through appropriate legal and policy frameworks, complementing the African Charter. See below.

¹³⁵ *Ibid*, par 59(o). The ACmHPR further indicates that States Parties are expected to adopt and implement a national employment strategy and plan of action based on and addressing the concerns of all workers (in both the formal and informal sectors) and the unemployed: par 59(d).

¹³⁶ *Ibid*, par 1(e).

- International and regional standards confirm the right of all persons and all workers, including informal economy workers, to social security protection, also in relation to retirement. The primary and overall responsibility to ensure that such protection is available rests on the State.
- Various modalities for providing social security protection to informal economy workers are indicated in these instruments, including contributory arrangements that are sensitive to the particular context and contributory capacity of informal economy workers.
- The South African Constitution affirms the importance of heeding these standards, both in terms of the binding nature of instruments that have been ratified by South Africa (such as the UN *International Covenant on Economic, Social and Cultural Rights*) and the obligation to consider even those standards that have not (yet) been ratified by South Africa.
- In terms of these standards, when devising appropriate (social security) coverage frameworks for informal economy workers, Governments are required to also consult with representatives of institutions representing the interests of informal economy workers.
- International and regional standards advise the adoption of an appropriate policy and legal foundation to inform, support and mandate the extension of (contributory) social security to informal workers.

2.4. Good Governance Arrangements

In the discussion that follows, international and local guidance pertinent to the governance of social security instruments is considered.

2.4.1. Location within the broader South African comprehensive social security framework

The governance arrangements applicable to the scheme for informal economy workers discussed in this document are closely connected to and dependent on two decisions:

- The eventual institutional and governance arrangements decided on for the to-be-established National Social Security Fund (NSSF); and
- The location of the informal economy workers scheme vis-à-vis the NSSF.

The *Comprehensive Social Security in South Africa Discussion Document* (2012) describes the NSSF as being "created in law, providing for mandatory contributions and pension, disability and survivor benefits, as well as administration arrangements, investment of funds, independent actuarial oversight and governance by a board of trustees." (emphasis added)¹³⁷ The *Discussion Document* raises the possibility of establishing a low-cost pension fund running alongside the NSSF and what it refers to as approved funds, and describes this as an administratively simple, low-cost arrangement benefiting self-employed or informal sector workers (at 28). In this section of the report emphasis is placed on highlighting universally applicable governance standards and guidelines applicable to social security fund arrangements.

2.4.2. A principled framework

While there is no uniform precedent, a 2012 IDTT on Social Security Reform institutional framework discussion document remarks that in most countries an autonomous public entity is responsible for the administration of social security, although with widely varying levels of autonomy, and that best-practice governance structures tend to represent key stakeholders affected by social security:¹³⁸

2.4.3. Regional (AU and SADC) standards

The foundational human rights instrument of the African Union is the African Charter on Human and People's Rights (1982) (also known as the Banjul Charter; ratified by all 55 AU Member States). While the right to social security is not specifically protected in the Charter, nevertheless, as noted by the African Commission on Human and Peoples'

¹³⁷ Inter-departmental Task Team in Social Security and Retirement Reform (IDTT) (2012), *Comprehensive Social Security in South Africa Discussion Document* (Version 11.9) (March 2012) 33.

¹³⁸ Inter-Departmental Task Team on Social Security and Retirement Reform (IDTT) (2012), *Institutional framework to underpin comprehensive social security in South Africa* (Discussion document prepared for the IDTT (March 2012) 7.

Rights (ACmHPR) in its Principles and Guidelines on the Implementation of Economic, Social and Cultural Rights in the African Charter on Human and Peoples' Rights, this right can be derived from a joint reading of a number of rights guaranteed under the Charter including (but not limited to) the rights to life, dignity, liberty, work, health, food, protection of the family and the right to the protection of the aged and the disabled, in addition to be strongly

*"The autonomy and representation of public entities are diluted when governments try to retain a strong administrative role and enhanced when those entities are overseen by an independent ... Board with an incentive to perform its functions."*¹³⁹

It has further been suggested that lower-income countries tend to have more government control than higher-income countries.¹⁴⁰ The IDTT document indicates that political interference and poor accountability often lead to the inefficient use of resources and overstaffing within social security institutions, noting:

*"It is imperative that the executive of social security organisations is held accountable for achieving goals rather than responding to political or private interests and that this is done in the execution of a benchmarked governance model."*¹⁴¹

This, the IDTT document suggests, is by all indications best achieved through autonomous organisations overseen by boards that consist of representatives most affected by the relevant social security programme. In this way, the respective roles of Government and the relevant entity are clearly carved out: Government retains its role in developing and implementing policy, while the entity (e.g. via its board of governance) takes on the operational role.¹⁴²

Traditionally, in sub-Saharan African countries, as remarked by Barbonne and Sanchez (1999), "... the key problem has been the interference of the government in the management of the funds. This interference has been encouraged by institutional designs that give government control of governing boards and the social security administrations."¹⁴³ Therefore, in many African countries there are clear indications of excessive state intervention or interference, as also indicated in a seminal ILO publication (2000).¹⁴⁴ Governments often control the composition and appointment of governing boards, as well as social security administrations, the management of funds and investment decisions. Frequently the relevant Minister is empowered by statute to give directions of a general or specific character to the Board. This increases the possibility of political interference and may compromise the independence of the Board.¹⁴⁵ Consequently, as indicated by Barbonne and Sanchez, there is a need to¹⁴⁶—

- Limit state involvement or direction in among others the management of funds and investment decisions;
- Redefine the role and composition of the managing boards providing administrative and legal autonomy, define clear responsibilities, and introducing oversight and control mechanisms;
- Introduce proper regulatory frameworks to guarantee that resources are well-managed and that the state is kept at arm's length;
- Set up mechanisms to monitor performance;
- Enforce financial controls;

¹³⁹ *Ibid.*

¹⁴⁰ *Ibid.*

¹⁴¹ *Ibid.*, 9.

¹⁴² *Ibid.*

¹⁴³ Barbonne, L & L B Sanchez (1999), "Pensions and social security in sub-Saharan Africa – Issues and options", in *Social Security in Africa: New realities, Thirteenth African Regional Conference*, Accra, 6-9 July 1999 (ISSA (International Social Security Association), Social security documentation, African Series No. 21 p 15 et seq (ISSA, Abidjan); also published as *Africa Region Working Paper Series No. 4*, World Bank, 1999.

¹⁴⁴ See Gillion, C et al (eds) (2000), *Social security pensions: development and reform* (ILO) 234: "In most African countries where there are social insurance schemes, responsibility for their administration is entrusted by statute to a social security institution, generally a board constituted on a tripartite basis and under the supervision of a general government department. The objective was to separate the financing of social security from the government budget, but the practice has not always corresponded with the intention of the legislation. It has often happened that government, as the political authority, controls the appointment of the board and its chief executive, and also determines a whole range of administrative issues including the flow of funds, which one would ordinarily expect to be delegated to the board or its administrators. This continuing direct involvement is fostered in some countries by the legislation, which fails to create a truly tripartite structure for the board, neglects to define roles and responsibilities and limits the power of appointments to the minister."

¹⁴⁵ See also Olivier, M (2006), "Acceptance of Social Security in Africa" in *Proceedings of 15th African International Social Security Association Regional Conference (ISSA)* (Social Security in Africa Series No. 27 Social Security Documentation) (p 39-72).

¹⁴⁶ Barbonne & Sanchez.

- Obtain professional and specialised management; and
- Ensure that tailor-made training programmes (induction) for Board members are in place.

2.4.4. Relevant standards

Governance needs to be given top priority by system designers, aimed to provide for and support independent oversight by a Board or similar body. Barbonne and Sanchez provide a number of helpful thoughts in this regard:¹⁴⁷

"On-going social security reform activity all over the world, especially in the pension area, is seeking to grapple with these issues. To do so, reforms have sought to radically overhaul the governance structures. Key elements have been:

- *redefinition of the role of the state, focusing priorities on the provision of adequate social security frameworks and limiting direct management and financial exposure,*
- *unbundling the provision of social security services, to facilitate management, increase transparency and facilitate clear assignment of responsibilities,*
- *redefinition of the role and composition of the managing boards providing administrative and legal autonomy, defining clear responsibilities, and introducing oversight and control mechanisms, ...*
- *introduction of competition, in particular by third party investment managers, into the management of social security reserves, ...*
- *introduction of regulatory frameworks to guarantee that resources are well managed, that the state is kept at arm's length, and that beneficiaries are well informed on funds' performance, [and]*
- *taking account of the consequences of social security reform on other sectors, like labour and financial markets."*

World-wide, principles of good governance have now been introduced in social security schemes and programmes, and are supported by institutions such as the ILO, the World Bank and ISSA (International Social Security Agency). Good governance principles can be gleaned from several sources. The overall standard is laid down by Article 72(2) of *ILO Convention 102 of 1952 on Minimum Standards (Social Security)*, which stipulates that a member country "[s]hall accept general responsibility for the proper administration of the institutions and services concerned in the application of the Convention." (emphasis added)

Four further sources are of particular assistance with regards to more detailed principles of good governance. The first source is the ISSA *Guidelines on Good Governance* of 2013,¹⁴⁸ which contains guidelines on (A) Good Governance Guidelines for the Board and Management; and (B) Nine Specific Areas in Social Security Administration. The detailed list of comprehensive guidelines provides helpful guidance for embedding good governance principles into social security governance and administration. The second source is an ILO document providing guidance to social security board members regarding governance of social security systems in Africa.¹⁴⁹ The third source concerns the benchmark set by the *Code on Social Security in the SADC* (2007) in this regard. Article 21.1(f) of the Code requires that,

"Member States should endeavour to establish proper administrative and regulatory frameworks in order to ensure effective and efficient delivery of social security benefits, in particular – (f) improved monitoring and sound governance structures independent of social security providers to ensure the protection of members, autonomous decision-making and sound investment, among other requirements."

Of particular interest, fourthly, should be the principles of corporate governance as set out by the King Committee on Corporate Governance, which could also be applied to the governance and management of a social security system. The Corporate Governance Code issued by the committee under the leadership of Mervyn King, now in its fourth iteration, is regarded as the gold standard of corporate governance standards regionally, and also enjoys strong credibility internationally.¹⁵⁰

¹⁴⁷ Barbonne and Sanchez, p 22 (formatting modified).

¹⁴⁸ ISSA (2013), *Guidelines on Good Governance*.

¹⁴⁹ ILO (2010), *Governance of Social Security Systems: A Guide for Board Members in Africa*.

¹⁵⁰ Institute of Directors in Southern Africa NPC (2016), *King IV Report on Corporate Governance for South Africa*.

The Code defines a set of principles and supporting best practice on corporate governance and management. It applies not only to private profit-making firms, but public-sector and non-profit entities as well, all of whom are expected to apply the principles rigorously or explain any deviation from them. Despite the Code being labelled a Corporate Governance Code, the principles expressed in the King Code are sufficiently general in expression that they can be applied in a wide range of contexts, including the public (and private) social security domain. Also, the range of initiatives to improve governance across the full range of civil and commercial society are converging around a common set of principles.¹⁵¹

The following high-level core guidelines embedded in the newly endorsed King IV Code set of principles should in particular be highlighted and may be of direct relevance to the to-be-established informal economy workers scheme. In particular, the to-be-adopted apex governing structure is enjoined to:

- Lead ethically and effectively;
- Govern the ethics of the organisation in a way that supports the establishment of an ethical culture;
- Ensure that the organisation is and is seen to be a responsible corporate citizen;
- Appreciate that the organisation's core purpose, its risks and opportunities, strategy, business model, performance and sustainable development are all inseparable elements of the value creation process;
- Ensure that reports issued by the organisation enable stakeholders to make informed assessments of the organisation's performance and its short, medium and long-term prospects;
- Serve as the focal point and custodian of corporate governance in the organisation;
- Comprise the appropriate balance of knowledge, skills, experience, diversity and independence for it to discharge its governance role and responsibilities objectively and effectively;
- Ensure that its arrangements for delegation within its own structures promote independent judgement, and assist with balance of power and the effective discharge of its duties;
- Ensure that the evaluation of its own performance and that of its committees, its chair and its individual members, support continued improvement in its performance and effectiveness;
- Ensure that the appointment of, and delegation to, management contribute to role clarity and the effective exercise of authority and responsibilities;
- Govern risk in a way that supports the organisation in setting and achieving its strategic objectives;
- Govern technology and information in a way that supports the organisation setting and achieving its strategic objectives;
- Govern compliance with applicable laws and adopted, non-binding rules, codes and standards in a way that supports the organisation being ethical and a good corporate citizen;
- Ensure that the organisation remunerates fairly, responsibly and transparently so as to promote the achievement of strategic objectives and positive outcomes in the short, medium and long-term;
- Ensure that assurance services and functions enable an effective control environment, and that these support the integrity of information for internal decision-making and of the organisation's external reports;
- In the execution of its governance role and responsibilities, adopt a stakeholder-inclusive approach that balances the needs, interests and expectations of material stakeholders in the best interests of the organisation over time; and
- Ensure that responsible investment is practised by the organisation to promote the good governance and the creation of value by the companies in which it invests.

The principles underpinning governance of the proposed scheme are briefly set out in [Section 6.2](#), in the context of operational alternatives, but any design must pay due regard to the details set out in this discussion.

2.5. Policy and Regulatory Considerations, including Portability Arrangements

The discussion turns now to questions of policy and regulation, with specific reference to provisions to ensure portability of accrued pension rights.

¹⁵¹ Two examples of these initiatives not yet mentioned are the guidelines for pension fund governance published by the Organisation for Economic Cooperation and Development and the corresponding South African standard expected of pension fund trustees referred to as PF130.

2.5.1. Policy and regulatory considerations¹⁵²

As indicated above, international law strongly supports the adoption of an appropriate policy framework, underpinned by a legal framework, for the adoption of interventions aimed at extending social security coverage to informal economy workers.¹⁵³

The need for a *policy-based programme and legislative implementation* also appears to be required from a South African constitutional perspective.¹⁵⁴ The Constitution requires, within the resources available, the devising, formulation, funding and implementing, as well as the constant review, of a comprehensive and co-ordinated programme with well-targeted policies. These policies have to be reasonable both in their conception and their implementation, and must indeed be implemented by the executive and through legislative intervention.¹⁵⁵ There is, generally speaking, no prescribed policy formula, as a range of reasonable measures is at the disposal of government and the legislature: As long as the measures aimed at developing the social security system are reasonable in their conception and implementation, the courts will not consider whether other more desirable or favourable measures could have been adopted or whether public money could have been better spent.¹⁵⁶ A wide range of available options may, therefore, be considered and adopted by the state. The measures adopted may differentiate on the basis of past exclusion and disadvantage, and on the basis of socio-economic status and social realities, as long as they do not infringe the right to equality.

However, constitutionally speaking, it is also evident that sufficient budgetary support is required: While courts will be hesitant to interfere in budgetary provision in the area of social security, the Constitutional Court indicated in its certification judgment, as noted above, that courts may grant orders which may have budgetary implications. In *Government of the Republic of South Africa v Grootboom* the court stressed that – within the context of the right to access to housing – effective implementation requires at least *adequate budgetary support by national government*.¹⁵⁷ The court emphasised that it is essential that a *reasonable part of the national (housing) budget* be devoted to granting relief to those in desperate need, but that the precise allocation is for national government to decide in the first instance.¹⁵⁸ The Constitutional Court also emphasised that guidelines drawn up against the backdrop of budget constraints have to be *reasonable*.¹⁵⁹ The Constitutional Court has stressed that Section 27(2) of the Constitution imposes a positive obligation upon the state "to devise a comprehensive and workable plan to meet its obligations in terms of the subsection."¹⁶⁰ However, according to the formulation of the provision, this is a qualified obligation, namely to "(a) take reasonable legislative and other measures; (b) to achieve the progressive realisation of the right; and (c) *within available resources*." And yet, as stressed by the Constitutional Court in the *Khosa* judgment (a case concerning the extension of social assistance grants to permanent residents), the availability of financial resources must be weighed up against the very fundamental rights affected by the exclusion of non-citizens, including the issue of discriminatory treatment. The Court remarked:¹⁶¹

"[44] When the rights to life, dignity and equality are implicated in cases dealing with socio-economic rights, they have to be taken into account along with the availability of human and financial resources in determining whether the state has complied with the constitutional standard of reasonableness. This is, however, not a closed list and all relevant factors have to be taken into account in this exercise. What is relevant may vary from case to case depending on the particular facts and circumstances. What makes this case different to other cases that have previously been considered by this Court is that, in addition to the rights to life and dignity, the social-security scheme put in place by the state to

¹⁵² This paragraph relies in part on (an adjusted version) of Olivier, M (2012), "Social security: Framework" in *LAWSA (The Law of South Africa) - Labour Law and Social Security Law* Vol 13, Part 2 (LexisNexis, Durban) and Olivier, M (2019a), *Selected constitutional and legal perspectives on social security in South Africa* (included in a Department of Social Development-supported publication, HSRC)(forthcoming).

¹⁵³ See paras 2.3.2, 2.3.3 and 2.3.4 above.

¹⁵⁴ See also Section 27(2) of the Constitution, which requires the adoption of reasonable legislative and other measures by the state, within its available resources, to achieve the progressive realisation of the right to access to social security.

¹⁵⁵ *Government of the RSA v Grootboom* 2000 11 BCLR 1169 (CC); 2001 1 SA 46 (CC) par 42.

¹⁵⁶ *Ibid*, par 41.

¹⁵⁷ *Ibid*, par 68.

¹⁵⁸ *Ibid*, par 66.

¹⁵⁹ *Soobramoney v Minister of Health, KwaZulu-Natal* [1998] 1 All SA 268 (CC); 1997 12 BCLR 1696 (CC); 1998 1 SA 765 (CC) par 25.

¹⁶⁰ *Grootboom*, par 38.

¹⁶¹ *Khosa v Minister of Social Development; Mahlaule v Minister of Social Development* 2004 (6) SA 505 (CC); 2004 (6) BCLR 569 (CC) paras 44 and 45.

meet its obligations under Section 27 of the Constitution raises the question of the prohibition of unfair discrimination."

"[45] It is also important to realise that even where the state may be able to justify not paying benefits to everyone who is entitled to those benefits under Section 27 on the grounds that to do so would be unaffordable, the criteria upon which they choose to limit the payment of those benefits (in this case citizenship) must be consistent with the Bill of Rights as a whole. Thus if the means chosen by the legislature to give effect to the state's positive obligation under Section 27 unreasonably limits other constitutional rights, that too must be taken into account."

Regarding the adoption of a suitable legal framework for introducing an informal economy-specific contributory social security arrangement, it is submitted that the current key regulatory framework for retirement fund arrangements in South Africa, i.e. the *Pension Funds Act 24 of 1956*, does not suffice for this purpose. The main reason is that the intended arrangement is essentially a public or national scheme that would have to operate on the basis of specific design, institutional, operational and entitlement modalities that need to be prescribed in appropriate detail in a regulatory instrument. For this reason, it is recommended that the legal framework for this arrangement be collapsed into the relevant framework to be created for the envisaged NSSF, especially if the intended arrangement is meant to be integrated into the NSSF framework. Should this not be the case, it is recommended that separate legislation, supported by implementing regulations, be developed to provide the legal framework for the informal economy-specific contributory social security arrangement.

2.5.2. Portability arrangements

For purposes of this report, portability of retirement savings/benefits need to be addressed in relation to two domains, portability between schemes/retirement arrangements in South Africa; and portability across borders.

2.5.2.1. Inter-scheme portability

Of relevance here is the possibility that an informal economy worker who has contributed to the dedicated scheme/arrangement envisaged by this report, has moved to the formal economy, and may therefore have to participate in the specific scheme/arrangement set up for formal economy workers, or vice versa. Portability under these circumstances would imply portability *between two public or national schemes/arrangements*. This is, at least in principle, feasible, in particular if a shared administrative platform is employed for both schemes/arrangements. Portability involving a private retirement arrangement would be more problematic to provide for, and should be addressed with caution, as far as portability from the informal economy-dedicated national/public scheme/arrangement to a private scheme/arrangement is concerned, as this may impact on the overall viability of the public arrangement. Also, constructing an inter-public scheme portability modality should be mindful of the fact that many workers often move between the formal and informal economy and could, at times, even participate in both over the same period.

It is recommended that a regulatory framework be developed to inform, facilitate and streamline inter-(public) scheme portability. Ideally this framework should be informed by a clear policy statement. The current provision regulating aspects of inter-scheme portability in the private and occupational environment, i.e. Section 14 of the *Pension Funds Act 24 of 1956*, is for a variety of reasons not sufficient. Firstly, it is not premised on the specialised arrangements that would be applicable to public scheme environments. Secondly, it covers only a limited range of substantive matters that would be relevant to a public scheme environment, and focuses for most part on the procedure to be followed in the event of inter-scheme transfers.

2.5.2.2. Cross-border portability¹⁶²

Cross-border portability of social security savings/benefits is associated with cross-border movement of workers. This can be arranged for on either a bilateral/multilateral or a unilateral basis. Therefore, *portability* of social security savings/benefits must be distinguished from *exportability*. Exportability requires no bilateral/multilateral

¹⁶² See, for a more elaborate treatment of this issue, Olivier, M (2019d), "Portability of Social Security for Migrant Workers in Asia" in ABDI-ILO-OECD *Building Partnerships for Effectively Managing Labor Migration – Lessons from Asian Countries* (Asian Development Bank Institute, Organisation for Economic Co-operation and Development, and International Labour Organization) 38-69 – <https://www.adb.org/publications/building-partnerships-effectively-managing-labor-migration>, accessed on 2 August 2019.

cooperation, as the social security institution (supported by the legal framework) of one country alone determines eligibility and the level of benefit, and whether the benefit is payable (i.e. exportable) to other countries.¹⁶³

In its simplest form, cross-border portability could be restricted to the mere transfer of social security savings/benefits. Often, however, portability is accompanied by several other arrangements, aimed to benefit the affected individual. These arrangements, known as social security coordination principles, are ideally contained in bilateral social security agreements (BSAs), and at times also informed/supported by overarching multilateral social security agreements (MSAs). These principles entail:

- The choice of law principle, identifying the legal system that is applicable;
- Equal treatment (in the sense that discrimination based on nationality is prohibited);
- Aggregation/totalization of insurance periods (in that all periods taken into account by the various national laws are aggregated for the purposes of acquiring and maintaining an entitlement to benefits, and of calculating such benefits);
- Maintenance of acquired benefits (benefits built up by the person are retained);
- Payment of benefits, irrespective of the country in which the beneficiary resides (the "portability" principle);
- Administrative cooperation (between the social security institutions of the parties to the agreement); and
- Sharing of liability to pay for the benefit (i.e., pro-rata liability of the respective institutions).

BSAs constitute universal worldwide best practice, especially if supported by an overarching multilateral agreement.¹⁶⁴ In fact, in the absence of an agreement, a person may not be covered under the social security system of either the host country or country of origin, or may be doubly covered. Coordination arrangements help to resolve this problem.

BSAs are strongly advocated for in *international* instruments. The first global Convention, which calls upon countries to enter into BSAs, is an ILO Convention widely ratified by African countries (including South Africa), i.e. *ILO Equality of Treatment (Accident Compensation) Convention*, 1925 (No. 19).¹⁶⁵ *ILO Equality of Treatment (Social Security) Convention*, 1962 (No. 118) covers the equality of treatment and portability of benefits principles indicated above, while *ILO Maintenance of Social Security Rights Convention*, 1982 (No. 157) provides for totalisation of insurance periods and the pro-rated sharing of benefit payments by the countries concerned, based on the ratio of insurance periods. Of particular importance – and assistance – are the ILO model provisions for the conclusion of social security agreements, contained in the relevant annexes to the *ILO Maintenance of Social Security Rights Recommendation*, 1983 (No. 167).

Several African regional (AU and SADC) instruments also support portability of social security benefits, ideally to be provided for in bilateral and multilateral arrangements. Some of the key instruments are:

- *AU Protocol on Free Movement of Persons, the Right to Residence and the Right of Establishment* (2018) – Article 19
- *AU Draft Protocol to the African Charter on Human and Peoples' Rights on the Rights of Citizens to Social Protection and Social Security* (2019) – Article 3
- *SADC Protocol on Employment and Labour* (2014) – Article 19(f)
- *SADC Portability of Accrued Social Security Benefits within the Region* (2016) – Article 3

There are not currently many examples in the world where BSAs or MSAs provide for portability of retirement benefits of informal economy workers. It would appear that a 2002 BSA between Chile and Peru has been formulated in a way that captures a wide notion of the term "pension", covers both employed and self-employed workers, defines "protected people" quite widely, and includes both compulsory and voluntary contributions.¹⁶⁶

¹⁶³ Sabates-Wheeler, R and J Koettl (2010), "Social protection for migrants: The challenges of delivery in the context of changing migration flows". *International Social Security Review*, Vol. 63, Nos. 3-4, pp. 115-44.

¹⁶⁴ See Holzmann, R, J Koettl & T Chernetsky (2005), *Portability regimes of pension and health care benefits for international migrants: An analysis of issues and good practices*, Social Protection Discussion Paper No. 0519. Washington DC: World Bank, p. 32), who remark: "The administrative approach to achieve the portability for both pension and health care benefits seems to be reasonable cost-effective after a bilateral or multilateral agreement has been successfully concluded."

¹⁶⁵ Article 2. See also Article 4(1) of *ILO Maintenance of Social Security Rights Convention*, 1982 (No. 157) and 2011, Resolution 33(g), para. 35(d).

¹⁶⁶ *Convenio De Seguridad Social Entre La Republica De Chile Y La Republica Del Peru* (2002). The assistance of Rob Rusconi is specifically acknowledged.

In view of the above, it is recommended that –

- The detailed modalities for cross-border portability of retirement savings/benefits of participating informal economy workers be carefully considered;
- Specific provision be made in legislation informing the establishment of the dedicated informal economy worker scheme/arrangement for the cross-border portability of worker retirement contributions and benefits. This would require a statutory provision, which authorises and/or confirms the power to conclude appropriate social security agreements with other countries; and
- More particularly, provision should further be made for the overriding effect of these agreements, taxation arrangements (for example the avoidance of double taxation) and social security coordination principles.

3. COMPARATIVE EXPERIENCES

This chapter summarises the lessons that may be learned from developments in other countries, particularly those in the developing world. The first part of the discussion considers initiatives at conceptual or regulatory level, a consideration of the different modalities employed to achieve social security coverage for informal economy workers, and the need to heed flexibility concerns and arrangements that are supportive of coverage extension. This is followed by a reflection on measures taken by a number of individual countries in Africa, Asia and Latin America to enhance coverage extension. The chapter closes with a conclusion.

3.1. Conceptual and Regulatory Developments¹⁶⁷

Comparative developments indicate that several innovative attempts have been made, especially in recent years, to extend coverage to informal workers in developing countries.¹⁶⁸ The attempts embrace both conceptual and regulatory developments, institutional initiatives, as well as tailor-made design options. In addition, supportive arrangements, including a focus on stakeholder consultation, communication and an informal sector-friendly enabling framework, are important. These developments discussed below cover employment-related protection, i.e. that part of the system mainly captured by contributory arrangements, as well as social assistance provisions.

Some countries have addressed exclusion by redefining the concept of employee/worker in legislation governing social security coverage.¹⁶⁹ Developing countries are increasingly seeking innovative conceptualisation to widen the application of social security beyond the traditionally envisaged groups. In India, for example, in an attempt to ensure social security provision for the huge informal economy, the *Unorganised Workers' Social Security Act* (Act 33 of 2008) adopted a deliberately extensive notion of what is comprehended by the term 'unorganised sector', and of who is intended to be an employer and a worker for the purposes of covering those embedded in a relationship of work in the informal economy.¹⁷⁰ Corresponding innovations are also found in some countries. In Tanzania, the *Social Security (Regulatory Authority) Act* defines the 'informal sector' as the sector that includes workers who work informally and who do not work in terms of an employment contract or another contract contemplated in the definition of employee.¹⁷¹ The definitional extension could also occur on an industry basis. For example, in the beedi industry (hand-rolled cigarettes), the *Beedi and Cigar Workers (Conditions of Employment) Act* in India¹⁷² covers a person employed directly or through any agency who is given raw materials by an employer or a contractor: in this way, outworkers and home workers are included.¹⁷³

¹⁶⁷ Part of the rest of the text in this part (par 3) is largely dependent on a presentation made by Olivier (2017) entitled *Expanding the boundaries of social security protection for informal economy workers in developing countries* (paper presented at the Labour Law Research Network Conference, Toronto, Canada), and subsequently adjusted and incorporated as Olivier, M (2019), "Social security protection for informal economy workers: Developing world perspectives" in M Westerfeld & M Olivier (2019), *Social Security Outside the Realm of the Employment Contract: Informal Work and Employee-like Workers* (Elgar) 2-29.

¹⁶⁸ See also Olivier, M (2014), "Work at the margins of social security: Expanding the boundaries of social protection in the developing world" in W van Oorschot, H Peeters & K Boos (eds) *Invisible Social Security Revisited: Essays in Honour of Jos Berghman* (Lannoo Publishers) 215-230.

¹⁶⁹ See Olivier (2014) 220, on which the rest of this sub-paragraph is based.

¹⁷⁰ *Unorganised Workers' Social Security Act* (Act 33 of 2008), section 2(k).

¹⁷¹ *Social Security (Regulatory Authority) Act* 8 of 2008, section 3.

¹⁷² Act 32 of 1996.

¹⁷³ Sankaran, K (2012), "Flexibility and informalisation of employment relationships", in Fudge, McCrystal & Sankaran (eds), *Challenging the legal boundaries of work regulation* (Oxford and Portland, Oregon: Hart Publishing 29-47 at 44.

Innovative conceptualisation is an area that lends itself to significant further development. For example, adopting appropriate regulatory techniques to comprehensively cover supply chain scenarios would support extension of protection.¹⁷⁴ In fact, as indicated above, the 2016 ILO *Resolution concerning decent work in global supply chains* highlights the importance of an intervention such as "legislation on responsibility down the chain, sometimes providing for cross-border regulation of supply chains."¹⁷⁵

3.1.1. Extension of existing schemes to the informal economy and making participation compulsory

In some cases, existing contributory schemes have been extended to include at least some informal worker categories. Beyond retirement provision, for example, unemployment insurance and labour law arrangements (impacting on social security as well) have been extended to domestic workers in South Africa.¹⁷⁶ Of particular importance is extension of coverage on a compulsory basis to the self-employed, in particular in several Latin American countries, but also in the Philippines.¹⁷⁷ Traditionally, in developing countries, there was little incentive for the self- and informally employed to join existing contributory schemes, which were accessible to them on a voluntary basis. In an attempt to increase coverage, certain Latin American countries have commenced making participation in these schemes compulsory, supported by incentives such as eligibility for/access to other social security benefits (for example, family allowances) and lowering the contribution rate for low-income self-employed persons.¹⁷⁸ As remarked by Mesa-Lago,¹⁷⁹ the few Latin American countries that require compulsory membership have better and more effective coverage.

3.1.2. Embracing the whole informal economy

Some governments have extended existing arrangements to the entire informal market. India¹⁸⁰ and Indonesia¹⁸¹ are examples of countries that adopted overarching framework legislation aimed at extending social protection to the whole of the informal economy and to informal workers generally. Also, establishing universal schemes has become the hallmark of achieving extended coverage. Risk-category schemes based on a dedicated legal mandate and/or policy framework have been introduced, including universal health insurance schemes in Ghana, Rwanda and Thailand¹⁸² among others and, as indicated later in this contribution, comprehensive pension schemes have

¹⁷⁴ Lund, F (2012), "Work-related social protection for informal workers" *International Social Security Review* Vol 5 (4), 23-24, 26. Important developments in this area have occurred in developed countries' jurisdictions, such as Australia, although even here the developments are still piecemeal and sector-focused: see M Rawling (2006), "A generic model of regulating supply chain outsourcing", in C Arup, P Gahan, J Howe, R Johnstone, R Mitchell & A O'Donnell (eds) *Labour law and labour market regulation* (Sydney: Federation Press).

¹⁷⁵ Par 2.3.2 above: ILO *Resolution concerning decent work in global supply chains* (2016) paragraph 9.

¹⁷⁶ Lund, F "Work-related social protection for informal workers" 26; Olivier, M (2009), *Informality, employment contracts and extension of social insurance coverage* (ISSA Project on 'Examining the existing knowledge of social security coverage', Working Paper, no 9, Geneva: International Social Security Association (ISSA)) at 23-27.

¹⁷⁷ Regarding the Philippines, see MacKellar, L (2009), *Pension systems for the informal sector in Asia* (Social Protection Discussion Paper, no 0903) (World Bank) 26-28. MacKellar remarked (on p 27):

"The new social security law enacted in 1997 mandated compulsory social security coverage of self-employed persons, regardless of their trade, business or occupation, with an income of at least 20.1 USD a month and not over 60 years old. As a result, the coverage of informal sector workers has tripled over the last 10 years, from 1.7 million in 1997 to 5.6 million as of September 2006. As of June 2006, out of the 26.5 million individuals that were registered with the social security system in the Philippines, around 21% were informal sector workers, up from 8.8 % in 1997."

¹⁷⁸ For example, in Chile the self-employed were meant to be fully mandatorily included in the national pension system by 2015, and in the health system as from 2016: see Mesa-Lago, C (2008), "Social protection in Chile: Reforms to improve equity" *International Labour Review*, vol 147 (4), 377-402 at 394; see also Calvo, E, F Bertranou & E Bertranou (2010), "Are Old-age Pension System Reforms Moving Away from Individual Retirement Accounts in Latin America?" *Journal of Social Policy*, vol 39(2) 223-234 on 230.

¹⁷⁹ Mesa-Lago (2008) 389.

¹⁸⁰ *Unorganised Workers' Social Security Act*, Act 33 of 2008. See also below.

¹⁸¹ *National Social Security Law of Indonesia*, Act 40 of 2004.

¹⁸² Regarding Thailand, see Damrongplasit, K & G Melnick (2009), "Early results from Thailand's 30-baht health reform: Something to smile about" *Health Affairs*, vol 28 (3) 457. Other African countries that have decided to go this route (although implementation may still be absent, or not fully realised) include Benin, Côte D'Ivoire, Gabon and Nigeria.

been introduced for rural and urban workers in China.¹⁸³ All of these schemes have achieved remarkable coverage in a short space of time.

Another example of this approach concerns the creation of targeted schemes for informal workers. The Ghana Informal Sector Fund¹⁸⁴ and the Kenya Mbao Pension Scheme¹⁸⁵ serve as useful examples, having attracted (also as the result of informal workers-sensitive design features) sizeable members in the few years since they were established.

3.1.3. Adopting a sector-by-sector approach

In some countries informal workers have been included sector by sector, usually on the basis of separate or dedicated schemes. Rather than attempting to solve the problem on an informal economy-wide basis, policymakers have chosen key sectors to increase coverage. One example is the welfare funds established in India. They are financed through levies collected from selected employers and manufacturers,¹⁸⁶ and provide a range of benefits, including social security-related benefits such as medical care and maternity assistance. Also at a state level, a tax (cess) is imposed by state governments on the aggregate output of selected industries (for example, the Beedi Welfare Fund is financed by a tax on beedis).¹⁸⁷

Another prominent example is the establishment of gradualist sector-by-sector schemes embedding tailor-made solutions, provisions and prescriptions for particular groups of workers in the informal economy in Tunisia. This latter approach is among others based on the introduction of realistic income scales which determine the lowest income bracket (for purposes of contributions) relevant to the occupation of the insured person (physician, architect, shopkeeper, and so on) and the size of the firm or farm, supported by educational and promotional programmes regarding the value of income protection.¹⁸⁸ Sector-based approaches have also been used in South Africa's domestic worker environment.

3.1.4. Comparative experiences: Tailor-made design modalities

Design characteristics, in the form of specialised contribution modalities, relaxed entitlement criteria and context-sensitive benefit packages, for the informal economy as a whole, or for particular sectors, have assisted in addressing the challenge as to why informal workers were unwilling, if not unable to participate in the past.¹⁸⁹ Contribution modalities include:

- Allowing informal workers to contribute to the extent of their ability at a frequency that suits their particular context and contributory capacity, for example, in Ghana and the Philippines;¹⁹⁰

¹⁸³ The voluntary rural and urban pension schemes were introduced in 2009 and 2011 respectively, and are (co-)funded by government via matching contributions. By the end of the first quarter of 2012, 376 million people were already participating in the two schemes, despite weak incentives to contribute above the minimum (see Dorfman, M, M Wang, P O'Keefe & J Cheng (2012), "China's pension schemes for rural and urban residents" in R Hinz, R Holzman D Tuesta & N Takayaka (eds) *Matching contributions for pensions* (Washington, DC, The World Bank, 217-241; Servais, J (2012), "The new ILO Recommendation on social security" *E-Journal of International and Comparative Labour Studies* 2012, vol 1 (3- 4), 1-26 at 14. See also par 2.6.7 below.

¹⁸⁴ Informed by an extensive consultative process initiated by a presidential commission, the Fund provides for flexible contribution modalities and a two-tier tailor-made benefit arrangement, which ensures both long-term benefits and the opportunity to utilise funds for a range of core needs; in a short space of time 90,000 informal workers have initially joined the Fund. See par 3.2.4 below.

¹⁸⁵ Njuguna, A (2012), "Critical success factors for a micro-pension plan: An exploratory study" *International Journal of Financial Research*, vol 3 (4), 82-97 at 86-88.

¹⁸⁶ Lund (2012) 23.

¹⁸⁷ Olivier, M (2009), *Informality, Employment Contracts and Extension of Social Insurance Coverage* (Report prepared for the International Social Security Association (ISSA)) 15.

¹⁸⁸ Chaabane, M (2002), *Towards the universalization of social security: The experience of Tunisia* (Extension of Social Security, ESS Paper, no 4, Geneva: ILO). See par 3.2.4 below.

¹⁸⁹ See Olivier (2009) 15-17; Servais (2012) 4.

¹⁹⁰ Regarding Ghana, this is provided for within the framework of the Ghana Informal Sector Fund, referred to above and below. In the Philippines, in addition to compulsory arrangements, the Philippines Social Security System has adopted several flexible approaches to meet the requirements of informal sector workers who do not have access to formal banking arrangements and who are only able to contribute irregularly, by introducing the following programmes and (in the process) partnering with organised informal sector groups (ISGs) and Local Government Units (LGUs) (see Mines, J (2015), *Moving towards inclusive growth: The Philippine Social Security System* (Philippine Social Security System), accessed at https://www.sss.gov.ph/sss/DownloadContent?fileName=2015_Updated_ISSA_Report_on_ISCoverage_FINAL.pdf on 2 December 2016):

1) AlkanSSSy Program for the self-employed in the services sector;

- adopting realistic income baselines for the calculation of contributions, for example, in Tunisia,¹⁹¹ and
- topping up small contributions of poor workers by way of government subsidies, for example in India¹⁹² and Tanzania.

3.1.5. **Supporting arrangements: consultation, communication and an enabling framework**

Extending coverage to and enhancing social security-related protection of the informally employed cannot be achieved in isolation. It is suggested that there are at least three areas of intervention that are required to ensure that a suitable context of coverage and protection is in place.

- **Stakeholder consultation:** Firstly, there is need to ensure that appropriate stakeholder consultation takes place, to determine concrete options – and consider challenges and solutions – in relation to extending coverage to the informally employed and developing suitable protection modalities for them.

Relevant options, dealing among others with appropriate contribution rates and payment modalities, eligibility criteria, and dedicated benefit regimes, have to be considered and, once revised and adopted, submitted for implementation. World-wide experience has shown that successful coverage extension and suitable forms of protection in social security terms for those who work informally have been preceded by thorough consultation with stakeholder groups and institutions. In fact, as indicated above, this appears to be called for also by prevailing international standards.¹⁹³

Also, while consultation would have to involve the targeted groups themselves, at times even at grass-roots level, the consultative team itself has to have a high-level status, and preferably reflect stakeholder group representation. In some countries the introduction of suitable arrangements for covering the informally employed was preceded by a thorough consultative process conducted by a presidential¹⁹⁴ or government-appointed¹⁹⁵ commission.

- **Communication:** Secondly, as supported by evidence emanating from other countries where the self- and informally employed have been included in social security schemes, there has to be thorough communication of envisaged new arrangements. In particular, those who are affected by the new arrangements, including informally employed workers and, where relevant, their providers of work, have to be properly informed. Given the national relevance of such arrangements, awareness-raising interventions targeting the general public also have to be introduced.
- **Enabling framework:** Thirdly, extending coverage and enhancing protection would require that a proper enabling framework has been established and is operational. The meaningful participation of the informally employed implies that they should be supported to do so – from both a broader policy and operational perspective they have to be strengthened and enabled. Among others, steps that would enhance the ability, of those operating and working in the informal economy, to contribute to and access the new system have to be considered and introduced. Fixing the minimum wage at a level that would enable them to contribute would be one such matter to be considered.

In addition, those operating in the informal sector need access to credit, tailored banking services, transport, training and skills development packages, mentoring and appropriate business opportunities. Some of these matters are currently being addressed in, for example, the Indian context – among others through the linking of the so-called Aadhaar biometric identification card facility to bank accounts in order to enhance financial inclusion. Also, overcoming supply- and demand-side constraints, and access to markets are some of the core priorities to be addressed.

-
- 2) Servicing and/or Collecting Partner Agent Agreement for cooperatives and microfinance institutions;
 - 3) Contribution Subsidy Program for farmers and workers in the agricultural sector;
 - 4) Coverage Program for government job order and contractual (JO/C) workers; and
 - 5) MuniSSSipyo-Collect Program for unbanked areas or provinces.

¹⁹¹ See par 3.2.3 below.

¹⁹² Both the Union Government and State Governments in India contribute comprehensively to top up small informal worker contributions in relation to social security schemes which focus on including informal workers: see among others Dorfman, J *et al* (2013), *China's Pension System: A Vision* (World Bank) 99, 125. See also par 2.6.8

¹⁹³ See par 2.3.4 above.

¹⁹⁴ E.g., Ghana.

¹⁹⁵ E.g., India.

In essence then, government and other stakeholders would have to play a crucial promotional and development role to support those involved in the informal economy and enhance their capacity to participate meaningfully in the reformed social security framework. Of course, it is necessary to consider and weigh up costs and benefits. A government must prioritise actions and spending and ask where the attention should most crucially be focused.

3.2. Country-specific Developments

In the discussions that follow, developments in a number of countries are summarised.

3.2.1. Extension of social protection to informal workers in China¹⁹⁶

The informal sector in China is considered as one of the main driving forces beyond economic growth in China. This heterogeneous sector is highly mobile, dynamic and competitive, and has close links with internal migration. Its growth in China has been associated with several factors, including economic restructuring, rural-urban migration, labour market segmentation, weak formal safety nets and a social protection system which incentivises informal sector growth.¹⁹⁷

In 2007, an OECD study noted that, depending on the definition used, even in urban areas in China informal work constitutes 50% of all urban employment, fuelled in particular by internal migration.¹⁹⁸ However, more recent data indicate that the share of informal employment has been decreasing rapidly, from a high of 65.2% in 2001 to 40.3% in 2010, largely attributable to China's economic growth, market-oriented reform and labour market regulation, which effectively extended labour (law) protection to more informal workers.¹⁹⁹ Migrants account for more than one-third of urban workers,²⁰⁰ thereby contributing to the shared fate of internal migrants (also migrant workers) and informal urban workers for social security coverage purposes. In fact, these categories remain poorly covered in terms of retirement-related social insurance provisioning. Poor coverage is the result of several overlapping factors, in particular –²⁰¹

- The occupation-oriented nature of public pension scheme coverage;
- Lack of enforcement of labour regulations;
- The voluntary nature of membership of urban (and also rural) pension schemes for urban and rural *residents* respectively (as opposed to *workers*, who are compelled to enrol);
- Self-selection, as a result of the fact that: (i) even those who opt out of social insurance coverage remain covered under the basic social assistance programme (e.g., the Minimum Livelihood Guarantee Scheme (Di Bao)); and (ii) employers are more likely to opt out, as they think that the social insurance programmes emphasise redistributive functions and provide unattractive benefits.

In addition, the inability of migrant workers who are not registered to work in cities due to the operation of the Hukou system, further contributes to the absence of formal social protection.²⁰²

Informal workers are therefore served by old age-related social insurance schemes only to a limited extent, particularly in rural areas, and as they do not generally participate in urban old-age insurance systems.²⁰³ In fact,

¹⁹⁶ See M Olivier (2017), "Social protection innovation and challenges in China and Africa: Selected comparative perspectives" *Frontiers of Law in China* (Vol 12, No 3, September) 429-472, from where this has been taken.

¹⁹⁷ See Jütting, J & T Xenogiani (2007), *Informal Employment and Internal Migration: The Case of China* (OECD, Beijing, Nov), accessed at <https://slideplayer.com/slide/8361611/> on 2 November 2018.

¹⁹⁸ *Ibid.*

¹⁹⁹ See Gao, W (2015), *Informal Employment and its Effect on the Income Distribution in Urban China* (presentation, Brussels), accessed at [file:///C:/Users/Olivi/Downloads/Session%204%20-%20Gao%20Wenshu%20\(2\).pdf](file:///C:/Users/Olivi/Downloads/Session%204%20-%20Gao%20Wenshu%20(2).pdf) on 2 November 2018; Yang, D (2010), *Improving Social Protection System in China: Key Trends and Policies* (OECD), accessed at <https://www.oecd.org/els/emp/45276885.pdf> on 2 November 2018.

²⁰⁰ Gao (2015).

²⁰¹ Jiang, J, J Qian Z & Wen *Social Protection for Workers in the Urban Informal Sector in China: Institutional Constraints and Self-selection*, accessed at https://www.researchgate.net/publication/318831285_Social_Protection_for_the_Informal_Sector_in_Urban_China_Institutional_Constraints_and_Self-selection_Behaviour on 2 November 2018.

²⁰² Jütting & Xenogiani (2007).

²⁰³ Dorfman (2013) 3-4, 26, 35; see also Jütting & Xenogiani (2007).

as has been indicated, the weak social protection position of informal workers, in particular migrant workers, also extends to their family members, many of whom remain in rural areas.²⁰⁴

Nevertheless, important changes to this scenario are discernible, mainly as a result of two reasons. Firstly, the Chinese government has strengthened labour market regulations, as is apparent from the range of new labour-related laws that have been enacted: it seems that stricter regulations have positive effects on increasing coverage rates. Secondly, the changes in main labour market outcomes (e.g., increased formal employment and increased earnings for unskilled workers) facilitate the improvement in coverage modalities.²⁰⁵ Despite this, a considerable wage gap still exists between informal and formal workers, which enhances labour income inequality in urban areas: a recent study indicated that informal employees' earnings were 67% of those of formal employees, and this large earnings gap raised the Gini coefficient to 0.42 in 2005.²⁰⁶

One of the critical tasks ahead is to take steps to reduce and overcome the inherited inequality. From a social protection perspective, also as far as social insurance-based retirement provisioning is concerned, it appears necessary to take steps to integrate different components of the system.²⁰⁷ The envisaged unification of public urban and rural pension systems, and the granting of urban residence permits to an increasing number of permanent urban residents are important steps towards integration, equal treatment and extended coverage.²⁰⁸

3.2.2. Comprehensive and innovative arrangements in India

A few years ago an eminent Indian economist referred to the estimates of the National Commission for Enterprises in the Unorganised Sector (NCEUS) regarding social security coverage of workers in the unorganised sector (essentially referring to the informal economy), indicating that the Commission's estimates showed that the existing models covered only a small proportion – around 8 per cent – of the country's vast army of informal workers.²⁰⁹ He concluded as follows:²¹⁰

"Our brief review shows that governmental and non-governmental initiatives to address the social security needs of the working poor in India are woefully inadequate. In the organized sector, the proportion of workers covered has fallen due to informalization of the workforce. The poor, who eke out an existence through various types of informal employment in the unorganized sector, are among the most vulnerable in any society. A shock that has a relatively small impact on the non-poor can be a cause for great concern for the poor, since even marginal downward fluctuations in income can push them to destitution levels. Social security measures which address the contingent risks faced by them are woefully inadequate, except in certain parts of the country."

The recently published 2018 *Draft Labour Code on Social Security*²¹¹ (hereafter referred to as the Draft Code), prepared by the Ministry of Labour and Employment, Government of India, aims specifically at extending coverage of social security to informal economy workers. This follows an earlier largely unsuccessful legislative attempt to achieve such coverage extension. The Draft Code evidently foresees extensive coverage of those who work in the informal economy. This appears from the following:

- **Comprehensive sphere of application:** The Draft Code is said to apply among others to all "entities" as well as to "workers that are employed by any entity" as well as a worker "who may also be the owner or the proprietor of an entity or a self-employed unit" (see clauses 1.4 and 1.5).
- The extensive categories of persons covered by the "worker" concept is then used, at least partly, as a basis for formulating registration and contribution paying obligations. Registration of workers will be affected in any of different categories; there is a general obligation on every worker to register/to be registered.²¹²

²⁰⁴ Jütting & Xenogiani (2007).

²⁰⁵ Yang, D *Improving Social Protection System in China: Key Trends and Policies*.

²⁰⁶ Gao, W *Informal Employment and its Effect on the Income Distribution in Urban China*.

²⁰⁷ Yang *Improving Social Protection System in China: Key Trends and Policies*.

²⁰⁸ See Olivier (2017) for further details.

²⁰⁹ Srivastava, R S (2013), *A Social Protection Floor for India* (ILO) 25.

²¹⁰ *Ibid*, 25-26.

²¹¹ See the Draft Code of March 2018, published on the website of the Government of India's Ministry of Labour and Employment – see <https://labour.gov.in/sites/default/files/SS%20Code%202018-03-28.pdf>, accessed on 2 November 2018.

²¹² Clause 11.

- Contribution payment reflects and builds on the distinctions indicated above. Contributions are payable by employers and workers;²¹³ provision is also made for government contributions,²¹⁴ although not specified.
- Differentiated contribution payment obligations are imposed on workers depending on, in particular, the socio-economic category to which the worker belongs. No contribution is required by a worker who falls within the lowest socio-economic category.²¹⁵

Other specialised arrangements to achieve informal economy worker inclusion have also been adopted, also at the State level. In serving the overarching goal that a transformed social security system should address the underlying structural and material basis of social exclusion, as well as multi-dimensional poverty, social security policy and system design should be sensitive to the fact that for informal economy workers, meeting immediate needs, and not merely future contingencies, is a priority.²¹⁶ Apart from the needed emphasis on sufficient health protection, there is evidently a need to provide for, and protect, the *means by which informal workers earn a livelihood*. It is significant to note that several Indian state governments (e.g., Karnataka and Odisha) make provision in their social security schemes for among others assistance for the purchase of working tools, which (at least in the case of Karnataka) has resulted in considerable take-up.²¹⁷

3.2.3. Tunisia: Social security for informal economy workers²¹⁸

Tunisia has two statutory social insurance schemes, one for the public and one for the private sector, i.e. the CNRPS and CNSS respectively. Both these schemes are administered by the National Social Security Fund and are operated on a pay-as-you-go (PAYG) basis. In addition, Tunisia has a contributory social health insurance scheme (CNAM) – i.e., a national health insurance fund for both public and private sectors. All of three schemes are subject to oversight by the Ministry of Social Affairs. Each scheme has an administrative board whose members are appointed on a tripartite basis, namely, State representatives, employers and employees.²¹⁹

Tunisia has employed an innovative gradualist approach that has achieved high levels of social security coverage, especially within the informal economy. In 1996, Tunisia implemented a social security system which combined proper enforcement with the creation of a more accurate income estimation system for the self-employed. These two aspects, combined with education programmes, have seen high levels of growth in coverage, with 80% of Tunisia's employed population covered by some form of social security in 1999, in comparison to just 60% some 10 years earlier. Coverage has been extended for health care, old age pensions, maternity and employment injury. The expansion of social security in Tunisia has been successful at targeting large portions of the informal economy, including: craftspeople, petty traders, and small farmers, although levels of coverage still remain low in these industries in comparison to other industries.

The first part of the approach saw changes to the social security system, with new legislation enacted in 1995 which unified the two existing social security schemes – one for self-employed agricultural workers and one for self-employed non-agricultural workers – into one scheme for the private sector (i.e. the CNSS). Under the CNSS fund, a number of schemes exist that vary in terms of contributions and benefits according to the individual's occupation (see the discussion below). Differences exist both between schemes and within individual schemes. The main CNSS social insurance schemes, introduced over time via separate legal instruments, cover the following occupational groups:²²⁰

- Private-sector employees, excluding agriculture;
- Employees in agriculture;
- Members of agricultural cooperatives;
- Self-employed, including in agriculture;
- Tunisians working abroad;
- Students;
- Low-income earners (including construction labourers, domestic workers, independent fishermen and small farmers, amongst others); and

²¹³ Clause 20.

²¹⁴ See in particular clause 25.1

²¹⁵ Clause 20.3 & 20.4.

²¹⁶ Ahmad, E, J Drezé, J Hill & A Sen (1991), *Social security in developing countries* (Oxford: Clarendon Press) 43.

²¹⁷ In the case of Odisha, one of the schemes also provides for the purchase of a bicycle.

²¹⁸ See also Chaabane (2002); Olivier (2009).

²¹⁹ Economic and Social Commission for Western Asia (ESCWA) (2016), *Social Protection Country Profile: Tunisia* (UN, Beirut) 1.

²²⁰ *Ibid*, 4. See also ISSA and SSA (2017), *Social security programs throughout the world – Africa* 234.

h) Artists.

The two private sector schemes referred to above had been differentiated by the scope and the amounts of benefits, the level of contribution rate and the basis taken for calculating contributions. The unification of the two schemes led to an increase in the amount of agricultural self-employed and an increase in the scope and benefits of the scheme.

The variations in terms of contributions and benefits between these schemes are explained in the figure below.

Figure 1: Overview of NSSF (CNSS) social insurance schemes in Tunisia²²¹

Category of worker	Mandatory/ optional	Social insurance contributions	Old-age pension benefits	Disability benefits	Survivorship benefits	Child benefits	Death benefit
Private-sector employees, excluding agriculture	Mandatory	27.75% (employer 16.57%, employee 9.18%)	40% of reference salary + 0.5% increase for extra contributions capped at 80%	50% of reference salary + 0.5% increase for extra contributions capped at 80%	75-100% of deceased's pension, between spouse and children	For up to three children	For spouse or one child
Employees in agriculture	Mandatory	12.29% (employer 7.72%, employee 4.57%)	As above	40% of reference salary + 0.5% increase for extra contributions capped at 80%	50% of the deceased's pension for the spouse; 20-30% for one or two children		As above
Members of agricultural cooperatives	Mandatory	19.47% (employer 12.48%, employee 6.99%)	As above	As above	As above	For up to three children	For spouse or one child and to dependents on death of worker
Self-employed, including in agriculture	Mandatory	14.71% by self-employed	40% of reference salary + 0.5% increase for extra contributions capped at 80%	30% of reference salary + 0.5% increase for extra contributions capped at 80%. Additionally, one year of contributions is paid by the State for persons with disabilities	Up to 75% of the deceased's pension depending on number of children		For spouse or one child
Tunisians working abroad	Optional	13.3%	40% of reference salary + 0.5% increase for extra contributions capped at 80%	30% of reference salary + 0.5% increase for extra contributions capped at 80%	75-100% of deceased's pension, between spouse and children		For spouse or one child
Students	Optional	Symbolic payment of TND5				For up to three children	

²²¹ Economic and Social Commission for Western Asia (ESCWA) (2016), *Social Protection Country Profile: Tunisia* (UN, Beirut) 6.

Category of worker	Mandatory/ optional	Social insurance contributions	Old-age pension benefits	Disability benefits	Survivorship benefits	Child benefits	Death benefit
Low-income earners	Mandatory		30% of reference salary + 0.5% increase for extra contributions capped at 80%	30% of reference salary + 0.5% increase for extra contributions capped at 80%	50% of the deceased's pension for the spouse, 30% for one child		
Artists	Mandatory	14.71%	As above	As above	75-100% of deceased's pension, between spouse and children		For spouse or one child

Contributions are paid quarterly. Not all categories of informal economy beneficiaries have access to the same range of benefits. For example, as regards sickness and maternity benefits, the self-employed, artists, fishermen are entitled to cash and medical benefits; household workers, on the contrary, have access to medical benefits only.²²² Also, as regards family allowance, these are payable to private-sector employees, including casual and temporary workers; fishermen; members of agricultural cooperatives; employees of farms with 30 or more workers; students younger than age 28; and trainees of working age. However, self-employed persons, household workers, and employees of farms with less than 30 workers are excluded.²²³ Maternity leave is paid to female wage workers, not to self-employed women, as income replacement during the time off from work due to pregnancy and maternity.²²⁴ Compensation for industrial injury and occupational diseases, payable via CNAM, is available to salaried employees, including casual, temporary, and household workers; members of cooperatives; fisherman; apprentices; and students. However, voluntary coverage exists for self-employed persons and artists.²²⁵ Unemployment insurance benefits are not provided for. Non-contributory unemployment assistance benefits are funded by the NSSF from available funds. However, excluded from unemployment benefits are self-employed persons, agricultural workers, and household workers.²²⁶

The second change to the system was the extension of the bracket on which the flat-rate income on contributions was calculated. To coincide with this, efforts were made to avoid minimal contributions by the self-employed based on the lowest income brackets. A realistic income scale which determines the lowest income bracket relevant to the occupation of the insured person (physician, architect, shopkeeper etc.) and the size of the firm or farm was introduced. Through the application of this scale, each insured person must contribute equal to the bracket employed on the scale, unless they can prove that their real income is lower, while they are free to contribute on a higher scale. These changes to the social security system had a positive influence which resulted in coverage extension.

Educational and promotional programmes have also coincided with a change in attitude by many Tunisians which has seen them embrace income protection for old age, and protection against illness as a priority. This change in attitude is borne out of rising medical costs, an educational role played by trade unions, employers and the government, and positive experiences of the benefits of social security. These aspects have combined to legitimise social security. The new measures combined with the awareness and education campaigns had led to almost 70,000 new affiliations in 1996 and 1997 alone.

²²² ISSA and SSA (2017), *Social security programs throughout the world – Africa* 235 – free or highly subsidised health care to low-income households. This social health provision is reserved for those not covered by contributory social insurance schemes. This non-contributory scheme was first established by Law 1-63 of 29 July 1991; it is funded by central government transfers to the Ministry of Health to cover the cost of granted health care: Economic and Social Commission for Western Asia (ESCWA) (2016), *Social Protection Country Profile: Tunisia* (UN, Beirut) 22.

²²³ ISSA and SSA (2017), *Social security programs throughout the world – Africa* 238.

²²⁴ Economic and Social Commission for Western Asia (ESCWA) (2016), *Social Protection Country Profile: Tunisia* (UN, Beirut) 21.

²²⁵ ISSA and SSA (2017), *Social security programs throughout the world – Africa* 237.

²²⁶ *Ibid*, 238; Economic and Social Commission for Western Asia (ESCWA) (2016), *Social Protection Country Profile: Tunisia* (UN, Beirut) 10-11.

The reforms to the social security system have not been successful in extending coverage to everyone in the informal sector. There are several challenges of extending coverage to certain excluded groups, despite attempts by Tunisia to extend social security coverage to the entire working population. These challenges include –

- The dispersal and marginal nature of the sectors concerned;
- The limited capacity of the people concerned to pay contributions, given low wages in certain sectors and the irregularity of employment and low skills; and
- The fact that coverage by a contributory social security scheme may not be felt to be an urgent need by the people concerned, in view of among others the existence of additional forms of social protection (such as social assistance provision).

Further, an adapted system was also not successful at achieving high levels of coverage of fishermen. There have also been lower levels of social security extension in rural areas due to the difficulties of administering the system in rural zones and fishing ports.²²⁷

In conclusion, it is certainly possible to apply the innovative approach of the Tunisian experience to other social security institutions. The employment of a realistic income scale can be implemented elsewhere; however, a strong education and consultation programme would also be needed. It has been noted that in the past, certain quarters of the Tunisian workforce had been reluctant to fully embrace social security for a variety of reasons,²²⁸ but the education programmes and societal changes in the perceptions towards social security meant that changes to the system were more readily embraced. It therefore appears that the Tunisian experience suggests that the application of social security can only be successful if accompanied by programmes which educate workers about the new system and also encourage them to embrace it. This should take place alongside a consultative approach.

Social security in Tunisia has traditionally been the sphere of the government. Pressure for this initiative was not placed on the Tunisian government by the Tunisian population, but rather it was encouraged by the Tunisian government, and implemented along with strong education programmes which encouraged previously reluctant workers to accept it.²²⁹ The size of the contributory payments is also important as these were small enough to be affordable, and also flexible if it could be shown that the contributor was earning lower than the base income for the particular type of job. The consolidation of the two insurance schemes for the self-employed into one and the subsequent positive results illustrates that groups within the same sector should not be too small as this can restrict the scope and level of benefits available, as well as appearing unattractive for potential members.

The Tunisian example illustrates the complexities of extending coverage to the informal sector suggesting that it is necessary to try to implement systems which are specific to the needs of the targeted group. The viability of this extension approach to other lower-income developing countries may be less apparent. It is important to note that Tunisia is a middle-income developing country and thus had the capacity to manage this type of extension.

3.2.4. Ghana Informal Sector Fund²³⁰ and other arrangements

Ghana provides an illustration of an initially less than successful attempt to use an existing public fund to extend social security coverage to the informally employed. Informal economy workers who did not have an employer could voluntarily join the national pension scheme (SSNIT) by paying a double contribution and could, subject to satisfying the generally applicable conditions for eligibility, access the usual range of benefits.

However, innovative measures were introduced in 2010 to cover informally employed workers. This entailed the creation of the Informal Sector Fund by SSNIT, which apparently due to a lack of legal mandate on the part of

²²⁷ Chaabane, M (2002), *Towards the universalization of social security: The experience of Tunisia* (Extension of Social Security, ESS Paper No.4, Geneva: ILO) 11-12.

²²⁸ Mouelhi, A (1990), "The role of traditional institutions and the cultural image of social security in Tunisia", *International Social Security Review*, Vol 43(4), 460-469.

²²⁹ *Ibid.*

²³⁰ See Arku, J & E Akagbo (2011), "90,000 Join SSNIT – from the Informal Sector" (31 July 2011), accessed at <http://jasssyaku.blogspot.com/2011/07/90000-informal-workers-join-ssnit.html?m=0> on 2 August 2019 and Adombila, M (2016) "Contributions under SSNIT Informal Sector fund rises to GH ₵75m" (22 June 2016), accessed at <https://www.graphic.com.gh/business/business-news/contributions-under-ssnit-informal-sector-fund-rises-to-gh-75m.html> on 2 August 2019.

SSNIT, had to be transferred. This led to acquisition of the Fund by the private securities firm National Trust Holding Company (NTHC) in 2012.²³¹ With the inception of the Fund, an agreement was concluded with a private sector financial institution to finance business development and home improvement loans for members of the Fund.²³² In fact, the Fund provides members with access to a range of other financial services, including life insurance and loans, through partnerships with microfinance organisations. As a condition of receiving the loan, workers are required to pay 5% of the total value of the loan in informal sector fund contributions.²³³

The Fund accommodates dedicated arrangements relating to both contributions and benefits. Contributions to this Fund need not be fixed, but could be based on their ability to pay on a basis preferred by them, be it daily, weekly, monthly, annually or seasonally. Not only individuals who are not in group schemes can save for retirement, but also formal or informal organised groups (e.g., drivers' association, market women associations, etc.).

The Fund is essentially of a defined contribution nature. Informal economy workers contribute to two accounts:

- A Retirement Account (a pension account, from which a member is permitted to withdraw only in the event of retirement, death or disability occurring); and
- An Occupational Scheme Account, which serves as a form of a personal savings account, from which the contributor can withdraw after five months of initial contributions, provided the account has a credit balance (with rules for withdrawals before retirement, e.g. for education and business enhancement).

The normal retirement age is 60 years, but early or late retirement is also possible.²³⁴

Within three years since the establishment of this Fund, 90 000 members have joined on this basis. It currently has 150 000 members. Nevertheless, as has been noted:

*"... the Fund covers just a fraction of an informal workforce estimated at 11.2 million according to the World Bank. Unsurprisingly, the government estimates that more than 70 per cent of informal workers do not have a pension of any kind and this is partially due to the remaining 30 private pension firms catering their products primarily to formal sector workers."*²³⁵

This led to several *private sector* pension funds offering products tailored to the informal sector, on the basis of flexible contribution and benefit arrangements similar to those available under the Informal Sector Fund.²³⁶ In one

²³¹ Amedo, J (2017), Pension Funds for Ghana's Informal Sector (16 May 2017) – accessed at <http://africabusiness2020.com/2017/05/16/pension-funds-ghanas-informal-sector/> on 2 August 2019. However, as noted in a recent World Bank publication, the scheme continues to operate from an informal sector desk in each of the SSNIT regional offices. The same World Bank publication also notes that governance of the scheme may again revert to SSNIT: "SSNIT management has now determined that the National Pension Act does not preclude SSNIT from managing a tier 2 scheme, and it is interested in moving back into the informal sector market. It is exploring whether it should revive the current scheme or create a new one. To revive the scheme would require buying the scheme back from the National Trust Holding Company. A launch date in late 2019 has been announced with the intention of maintaining the new scheme more directly within the existing SSNIT organizational structure to reduce costs and build on synergies with the tier 1 scheme" – see Guven, J (2019), Extending Pension Coverage to the Informal Sector in Africa (Social Protection & Jobs Discussion Paper No. 1933) (World Bank) 31 – accessed at <http://documents.worldbank.org/curated/en/153021563855893271/pdf/Extending-Pension-Coverage-to-the-Informal-Sector-in-Africa.pdf> on 26 September 2019. See also SSNIT eyes 13m informal sector workers by 2020, accessed at <https://www.myjoyonline.com/business/2019/April-17th/ssnit-eyes-13m-informal-sector-workers-by-2020.php> on 26 September 2019, as well as Government of Ghana (2019), Government to provide informal sector with pension scheme, accessed at <http://www.ghana.gov.gh/index.php/media-center/news/5179-government-to-provide-informal-sector-with-pension-scheme> on 26 September 2019.

²³² Boadi, S (2008), "Credit Scheme for SSNIT Informal Sector Members in Ghana", *Ghana Daily Guide*, 4 December 2008, accessed at <https://www.globalcommunities.org/node/32668> on 2 August 2019.

²³³ See RNSF (2017), *Extending coverage: Social protection and the informal economy. Experiences and ideas from researchers and practitioners* (Research, Network and Support Facility, ARS Progetti, Rome; Lattanzio Advisory, Milan; and AGRER, Brussels) 95.

²³⁴ See National Trust Holding Company (NTHC) *SSNIT Informal Sector Fund*, accessed at <https://nthc.com.gh> (in particular https://nthc.com.gh/products/pension_trustees) on 2 August 2019, for further details.

²³⁵ *Ibid.*

²³⁶ *Ibid.* See also Anders, M (2017), *Can a new pension scheme offer security to informal workers in Ghana?* (23 October 2017), accessed at <https://www.devex.com/news/can-a-new-pension-scheme-offer-security-to-informal-workers-in-ghana-91296> on 2 August 2019.

instance, for example, it is possible to make payments via mobile money wallets or through group collections, by organising community members into cooperatives.²³⁷

3.2.5. Rwanda Universal Digital Pension Scheme²³⁸

In December 2018 Rwanda launched a long-term savings scheme named Ejo Heza ("Brighter Future") scheme, which offers opportunity and incentives for all Rwandans²³⁹ to save a voluntary share of regular or irregular earnings to mitigate against the risk of old age poverty. The scheme has been described as "the first national-level universal pension program in the world being launched by leveraging existing digital financial inclusion infrastructure in the true spirit of Public-Private-Partnership."

As has been noted:

*"A scheme based on individual accounts is feasible in Rwanda because several key pieces of the required implementation ecosystem already exist – (i) national ID for every citizen; (ii) high financial access rates; (iii) a functional network of cooperatives; (iv) over 70% mobile phone penetration including fast growing mobile payment services and; (v) strong mobilization via local Government administrative structures. These elements are all critical parts of the eco-system that can enable a new approach to delivering pension coverage ..."*²⁴⁰

The scheme is a response to the reality that formal pension arrangements in Rwanda are restricted largely to salaried public and private sector employees. The remaining 94% of its citizens, including farmers, workers in small and micro enterprises, daily wage earners, domestic help and other non-salaried individuals are excluded from formal retirement saving programmes. The scheme provides all Rwandan citizens, including the diaspora, an equal right and opportunity to voluntarily accumulate savings for their old age. As has been noted:²⁴¹

"Ejo Heza accounts will be mapped to each member's unique National ID and shall be portable across jobs, locations and service providers. Citizens will use their National ID and mobile phones or computers to 'activate' their Ejo Heza accounts. Members will be free to decide how much and when they want to save based on their own cash-flows and make periodic contributions using their mobile wallets, bank accounts, debit or credit cards. Contributions will be indexed to account for inflation and wage increases over time."

As far as access to benefits are concerned, a senior Rwandan government representative comments as follows:

*"Members of the scheme shall be expected to keep savings in their assigned account for a minimum pre-defined number of years. Upon completion of the minimum period, a member may be authorized to withdraw part of his/her benefits as a pre-retirement package. The pre-retirement package may be invested in housing and education or/and any other investment (for those with sufficient savings under the RSSB mandatory scheme). However, it should be noted that the amount of the authorized pre-retirement package will be capped to a maximum percentage of the total individual savings to ensure that the beneficiary retains sufficient funds under the scheme to cater for his/her retirement days."*²⁴²

²³⁷ Douglas, K (2016), *Ghana's first pension fund targeting the informal sector*, 6 December 2016, accessed at <https://www.howwemadeitinafrica.com/ghanas-first-pension-fund-targeting-informal-sector/56924/> on 2 August 2019.

²³⁸ See *Rwanda launches Africa's first universal digital pension scheme for the mass market* (accessed at http://www.findevgateway.org/sites/default/files/announcement/ejoheza_pressstatement_afr.pdf on 2 August 2019), from where some of the information in this part has been taken.

²³⁹ The scheme is therefore open to Rwandans living abroad and to children (below the age of 16 years) without a national ID who will access the scheme through a sub account opened by the parent/guardian: Rwigamba, E (2018), "An inclusive and integrated pension model for informal sector workers in Rwanda" in Khana, P, W Price & G Bhardwaj (eds) *Saving the next billion from old age poverty: Global lessons for local action* (Pinbox Solutions) 157.

²⁴⁰ *Ibid*, 157-158.

²⁴¹ *Rwanda launches Africa's first universal digital pension scheme for the mass market* (accessed at http://www.findevgateway.org/sites/default/files/announcement/ejoheza_pressstatement_afr.pdf).

²⁴² Rwigamba, E (2018), "An inclusive and integrated pension model for informal sector workers in Rwanda" in Khana, P, W Price & G Bhardwaj (eds) *Saving the next billion from old age poverty: Global lessons for local action* (Pinbox Solutions) 158.

Other (suggested) contribution and benefit arrangements include the following:²⁴³

- Apparently, contributions will be automatically indexed at 5% per year.
- The actual pension value will be calculated and calibrated to last for 20 years subject to a minimum of RWF20,000 per month (at 2017 prices).
- Subscribers who accumulate enough to achieve a monthly pension of RWF 100,000 for 20 years will be able to withdraw a part of their savings as a lump-sum.
- A subscriber will be permitted to set up a lien on up to 40% of his/her pension corpus to avail a home or education loan from a bank or financial institution.

The scheme provides a special, means-tested fiscal incentives package for the first three years to encourage mass-scale enrolments and sustained savings discipline by non-salaried workers. This includes a matching government co-contribution of up to a certain amount per year along with a free life insurance cover and a funeral insurance cover. It has been said that design and implementation of The Scheme began as a project under the Ministry of Finance, through a special Project Management Unit. It is now being rolled out and managed by the Rwanda Social Security Board (RSSB).

The *management and administration regime* relevant to the scheme reflects the progress made in Rwanda with digital solutions, and the quest for independence —²⁴⁴

- A System Administrator and Integrator is being established to manage the individual pension accounts. It will develop a central record-keeping system, integration and payments processing IT platform that will issue and manage portable, individual pension accounts, and record static and transactional data of each subscriber over multiple decades.
- The trustees/board of directors of the scheme shall recruit independent fund managers (approved by the regulator) to carry out required investments.

The applicable *legal, tax and regulatory framework* has been summarised as follows:²⁴⁵

- The scheme will be managed as a voluntary universal long-term savings scheme by all residents and citizens in Rwanda. The National Bank of Rwanda will be the regulator of the Scheme. It will ensure establishment and enforcement of appropriate regulatory, institutional, technology, and administrative frameworks to ensure long term viability of the scheme.
- As a way to motivate sustained voluntary retirement contributions/savings, it is proposed that for the tax relief option the Government adopts an Exempt contribution - Exempt interest earned - Taxed benefits income tax structure for the scheme (EET), which is common internationally. However, there will be matching contributions to encourage participation for those contributors who do not pay tax. In addition, ensuring incentives for all potential contributors, matching has the advantage of being simpler to understand, and ensures that a pension system is not regressive, since taxpayers tend to be the higher income segment of a population.

In the pilot phase, over 30 000 citizens used their mobile phones to open digital Ejo Heza accounts in less than a fortnight and have already contributed over Rwf 20 million in long-term savings using mobile money wallets. A recent World Bank publication notes that: "Based on the initial results, the government projects that if 2 million citizens joined the universal pension scheme over the next five years and saved the equivalent of US\$ 10 a month, the government could mobilize retirement savings of over US\$ 1 billion by year five and over US\$ 3.6 billion by year 10."²⁴⁶

3.2.6. Selected Latin American experiences

²⁴³ See Pinbox Solutions (2019), *Ready-to-deploy digital solutions for micro-pension inclusions* (accessed at <https://www.pinboxsolutions.com/> on 2 August 2019).

²⁴⁴ *Ibid.*

²⁴⁵ *Ibid.*, 159.

²⁴⁶ Klapper, L & J Hess (2019), *The Role of Digital Financial Inclusion in Preparing for Older Age and Retirement* (World Bank) 16.

Whereas Latin America experiences high levels of labour informality and income inequality, it has been remarked in a recently published study that "[T]he Latin American region is diverse and the labour market in Central America is very different from the Southern Cone region. Thus, it is very difficult to make affirmations about trends considering the Latin American region as a whole. There are informal workers in both sub-regions, but we think the reason of their existence as well as measures to protect them vary greatly. So, there are no measures to be applied as remedies for the whole region, nor can some of them be exported to other regions. But we do think that they can be adapted and their results are worth being studied."²⁴⁷

Extension of social security via contributory mechanisms have been introduced through trade union intervention and involvement of public social security and other public institutions, including tax authorities. In the process innovative mechanisms to achieve coverage extension has been implemented and, where necessary, adjusted. Several examples can be cited:

- 1) Incorporation of independent workers in the Dominican Republic: As noted by Ortiz, one of the major challenges of the social security system of the Dominican Republic is the incorporation of independent workers, in many cases migrant workers coming mostly from Haiti who are excluded from social security benefits. He continues:²⁴⁸

"In order to face this problem, the Mutual Association of Solidary Services (Asociación Mutual de Servicios Solidarios AMUSSOL) was created with the aim to incorporate workers of the informal economy into a more formal framework and provide them with social security coverage. It is the objective of this Association to represent workers so that they can join the Dominican Social Security System. In the end this Association sometimes functions as employer so that informal workers have access to social security. It has more than 14.000 affiliates plus their dependent beneficiaries, covering more than 40.000 people in total. Among its members are a considerable number of street vendors and housekeeping staff, typically excluded from social security. Coverage is obtained by means of a voluntary insurance depending on the contributions paid. If the beneficiary does not pay contributions, there is no coverage. The most interesting feature of AMUSSOL is that it was created by the Autonomous Confederation of Workers' Unions (Confederación Autónoma Sindical Clasista CASC). This makes this initiative even more remarkable, as it shows the importance union movements may have not only for dependent but also for informal workers. It shows also that informal workers do not have to change radically their way of work, it is the policies around them that change and adapt to their reality, in this case the approach of the unions."

- 2) Including micro and small enterprises (own account workers) involved in the informal economy in Uruguay:²⁴⁹ The *Monotributo programa* in Uruguay consists of a unified tax package, optional, which includes both the payment of social security contributions and the payment of taxes. It was initially implemented in 2001, when it was established that more than 80 percent of Uruguayan independents were excluded from social security. However, it only proved to be successful when new criteria were introduced in 2006, enabling multiple companies to access the Monotributo regime.

The Monotributo scheme, established in 2001, consisted of a unified optional tax payment which replaced special contributions to social security generated according to economic activity, as well as all applicable national taxes in force (except for import taxes). Initially, this scheme focused on small one-person businesses developing business activities in the street or in public spaces. However, the system was modified in 2006 in order to achieve the goal of increasing social protection coverage. The introduced changes allow for the taxation of the productive micro enterprises of informal economy workers, and increased access to social security benefits, mainly to health benefits. As a result of this reform, the annual average of contributing one-person businesses registered reportedly rose to 68,588, which is 12,722 more than the annual average of contributing one-person businesses registered in the previous period (55,866). As noted by Ortiz, as a consequence, the relative share of one-person businesses in comparison with the total of contributing companies increased by about 2.0%: "These results show that the Monotributo scheme has effectively reached a vulnerable group of workers (such as craftspeople, locksmiths,

²⁴⁷ Ortiz, P A (2019) "Informal and self-employed workers in Latin America: from an excluded category to an example of innovative inclusive measures" in M Westerfeld & M Olivier (eds) *Social Security Outside the Realm of the Employment Contract – Informal Work and Employee-like Workers* (Edward Elgar Publishing Ltd) 141-161 at 142.

²⁴⁸ *Ibid* 153.

²⁴⁹ *Ibid* 154-156 and authorities cited there – from where the narrative has been taken.

carpenters, grinders, weavers, photographers, blacksmiths, welders, and car washers, among others), favouring their coverage and inclusion."²⁵⁰

In 2011, the system was again reformed to include personal and associative businesses of persons who live in households under the poverty line or in a situation of socio-economic vulnerability, by allowing them to only contribute a reduced and graduated amount of money. Contribution payment is progressive, starting with 25% of the total contribution, later 50% and then 75%, until only after 36 months of activity, 100% of the contribution needs to be paid. On the lessons learnt from the Monotributo scheme and its adjustments, it has been commented:²⁵¹

"One of the main lessons to learn from this system is that in contexts of diverse socio-economic profiles the designing of more flexible funding mechanisms may constitute a valuable tool to promote social inclusion protecting a wide range of economic activities. In addition, the Uruguayan experience shows that it is possible to form strategic alliances between social security institutions and tax collection authorities. Uruguay's quest to include sectors of society previously excluded from social security coverage is well worth pointing out. These categories will keep their work in the form that they wanted and at the same time participate in a social protection scheme. In our view it is a partial formalization, an incentive to be protected but being informal at the same time. These reforms turn the country into a model to follow in Latin America by its efforts to extend coverage to informal workers through innovative mechanisms."

- 3) Inclusion of independent agricultural workers and local fishermen in Ecuador: The Peasants' Social Insurance programme (Seguro Social Campesino, SSC) in Ecuador provides coverage to independent agricultural workers and local fishermen. Ortiz describes the characteristics of the programme in the following terms:²⁵²

"The old age pension paid under this program amounts to 75% of the minimum wage. Affiliation can be individual or collective, although individual affiliation is given priority. Contributions are collected by the farmers' organization. The system is funded on a solidarity basis with the involvement of the affiliates and employers who belong to the National Social Security System, contributions by the State and contribution payments of the protected workers. As can be seen, this scheme is based on the fundamental principles of any social security system: solidarity. However, the way how contributions are calculated is original due to the difficulties to determine the monthly income of agricultural workers and fisherman."

Ortiz indicates that the great majority of agricultural workers who belong to a social security system do so through the SSC, and refers to data from the Household Survey 2005, suggesting that overall 262,986 workers are affiliated to the SSC, out of which 181,932 belong to the sector of private non-wage-earning workers, and 83% of this population group (151,156) are independent agricultural or peasant workers. He concludes:²⁵³

"The SSC is characterized by an important service infrastructure, through which it achieves remarkable regional presence. By the year 2008 the system had some 600 dispensaries distributed in the 24 provinces of Ecuador, where beneficiaries have access to health services. Also, when more specialized medical assistance is required, affiliates have the option to turn to the hospital units of the General Individual and Family Health Insurance and other medical units having agreements with the SSC. In short, Durán Valverde indicates that operationally the SSC is characterized by its operating under a model of geographical de-concentration and operative decentralization, under the hierarchy of SSC's Management, which in turn reports to the Instituto Ecuatoriano de Seguridad Social (IESS)' general management, and must submit its policies and programmes to the approval of that entity's Board of Directors."

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²⁵⁰ Ibid, 155.

²⁵¹ Ibid, 155-156 and authority cited there.

²⁵² Ibid, 156.

²⁵³ Ibid, 157. Authorities omitted.

of SSC's Management, which in turn reports to the Instituto Ecuatoriano de Seguridad Social (IESS)' general management, and must submit its policies and programmes to the approval of that entity's Board of Directors."

"The SSC has been affected by a series of situations that make clear that improvement still needs to be made. One of these improvements is the development of the affiliation rates over recent years, which is far from desired, in comparison with the many people in the rural areas who still are totally unprotected. SSC affiliation has been losing ground compared to the growth of the rural population. At the same time, predictions have referred to problems existing in the processing of information and registers, monitoring of the affiliated population and their contributions and the State's commitment, among others."

"Nevertheless, the SSC stands out due to several factors mentioned above and still constitutes one of the major strengths of social security in Ecuador. In 2009 it covered 917,417 people, 227,694 families and a total of 34,729 pensioners. Hence this means important progress for a category of workers within the informal economy commonly excluded from protection. Its innovative character of universal coverage while respecting the typical features of the protected group makes it an example worth mentioning."

3.2.7. A note on the European context

A reflection on the European context needs to take account of the prevailing understanding of the informality concept and its social security implications. Generally, in the global north, a generally accepted approach to informality is to imply that individuals and their employer who engage in productive activities that are not taxed or registered by the government. As has been remarked:

"In this approach 'informal' is, in other words, associated with illegal, if not criminal activities, such as tax evasion, evasion of immigration laws and – relevant for our topic – avoidance of social insurance contributions."²⁵⁴

In European standard-setting informal work, and the social security consequences thereof, therefore does not receive dedicated attention, as opposed to the *self-employed*. Article 12 of the *European Social Charter* (1961) establishes the right to social security as a specific human rights instrument, and links this to an obligation on contracting states to establish and develop a system of social security that complies with ILO standards embedded in *Convention 102 of 1952 on minimum standards in social security*. This particular Convention, unlike the more recent *ILO Recommendation 204 (2015) (The transition from the informal to the formal economy)*, is of little relevance to those working in an informal context. In similar vein, Article 34 of the *European Social Charter* explicitly states a *right* to social security. Nevertheless, despite the generality of this provision, it has increasingly been realised that "self-employed workers are – or can be – just as economically vulnerable as their counterparts in a formal employment relationship".²⁵⁵ At the EU level, this has translated into a *Proposal for a Council Recommendation*, presented in March 2018.²⁵⁶ In terms of this Proposal, EU Member States must ensure that the self-employed have access to social protection by extending formal coverage:

- a) On a mandatory basis for sickness and healthcare benefits, maternity/paternity benefits, old age and invalidity benefits as well as benefits in respect of accidents at work and occupational diseases, and
- b) On a voluntary basis for unemployment benefits.²⁵⁷

However, these developments and proposals do not, as such, deal with the issue of social security for informal (economy) workers, and will therefore not be pursued further here.

3.3. Conclusions

²⁵⁴ See Westerfeld, M and M Olivier (2019), "Preface" in M Westerfeld and M Olivier (eds) *Social Security Outside the Realm of the Employment Contract – Informal Work and Employee-like Workers* (Edward Elgar Publishing Ltd) xii and authority cited there.

²⁵⁵ *Ibid*, xvi-xvii and authority cited there.

²⁵⁶ European Commission (2018), *Proposal for a Council Recommendation on Access to Social Protection for Workers and the Self-Employed* (COM(2018) 132 final, 13 March 2018).

²⁵⁷ *Ibid*, paragraphs 8 and 9.

The developments described in this part are indicative of a conceptual understanding and operational framework of social security which transcend traditional approaches and boundaries. Social security reform in relation to informal economy workers in developing countries is evidently prompted by:

- An overall purpose-driven orientation;
- The adoption of a non-standard mix of public and private, contributory and tax-financed interventions;
- Innovative reconceptualisation;
- Progressive institutional arrangements; and
- Flexible design modalities.

A recent ILO report comments that globally, "The extension of social insurance to categories of workers with contributory capacity who were previously not covered, including through entirely or partially subsidizing contributions, is increasingly being used as a means of ensuring protection and fostering formalization."²⁵⁸ As a principled position, contributory capacity should trigger coverage via contributory-based arrangements:

*"... the Committee considers that workers with contributory capacity should in principle be covered by contributory income security mechanisms which provide higher levels of social protection than those available through the basic social security guarantees, while also contributing to formalization strategies. It may be necessary to adapt existing mechanisms to the situation of specific categories of workers in order to secure adequate levels of income protection relative to their needs. A strategy of this nature allows countries to ensure the sustainable and equitable financing of social security systems, based on the principles of collective financing, risk sharing and solidarity. The Committee notes in this respect the importance of designing policies that are inclusive of persons with a limited contributory capacity, for example, by subsidizing their contributions."*²⁵⁹

It is indeed necessary, according to the report, to consider the particular context of informal economy workers when designing and implementing coverage modalities of a contributory nature, and to develop tailor-made arrangements to suit this context. As noted in the same report:

*"The Committee notes, based on national practices, that various measures can be considered with a view to achieving basic income security, including the reduction of the cost of affiliation to contributory schemes, the provision of state support in the form of social contribution subsidies, measures to cover all those with contributory capacity, and measures to strengthen labour inspection and law enforcement."*²⁶⁰

As alluded to above, of equal importance when devising appropriate coverage modalities in the South African context, is the need to properly consult with institutions representative of workers in the informal economy.²⁶¹

Finally, it may be necessary to reflect on the sustainability of a scheme designed to serve the interests of informal economy workers. The comparative evidence emphasises the need for arrangements of a sufficient scale – specific measures need to be taken to deal with potentially low take-up by such workers. Apart from matters such as ensuring tailor-made modalities concerning contribution and benefit regimes and eligibility conditions, the provision of incentives and the rendering of sound administration, the very design of the scheme is of critical importance. In particular, most of the comparative schemes described above provide coverage on the basis of defined contribution arrangements, on the assumption that for several reasons defined benefit arrangements entail too much risk to the scheme itself – among others due to the irregularity of contributions and the difficulty with calculating income and period of service, factors which are typically relevant in defined benefit contexts.

²⁵⁸ ILO (2019c), *Universal social protection for human dignity, social justice and sustainable development* (General Survey concerning the Social Protection Floors Recommendation, 2012 (202), Report of the Committee of Experts on the Application of Conventions and Recommendations) par 593. The report continues: "The majority of governments (50) report that their national objectives and priorities in the area of social protection include the extension of existing contributory schemes. This sometimes requires certain adaptations of the legal framework, financing arrangements or administrative procedures to take into account the specific characteristics of these categories of workers." (*ibid*)

²⁵⁹ *Ibid*, par 596.

²⁶⁰ *Ibid*, par 412.

²⁶¹ "The Committee also recalls the importance of tripartite participation and consultation with other representative organizations of persons concerned, including workers in the informal economy and other generally under-represented categories, when defining and regularly reviewing adequate levels of protection for the various categories of persons." *ibid*, par 497. See also paras 2.3.2, 2.3.4 and 3.1.5 above.

4. FEATURES OF THE TARGETED MEMBERSHIP

No systematically-developed data set exists that describes the individuals working in South Africa's informal economy in any detail. For this reason, an understanding of the characteristics of this group must be developed from a number of sources. The purpose of this chapter is to chart the development of this understanding and to present the broad attributes of the workers targeted for participation in an informal-economy retirement scheme.

The discussion that follows describes efforts undertaken to understand the characteristics of workers in South Africa's informal economy. It may be divided into three parts:

- An introductory section laying out the broad attributes, incomes and working conditions of these workers, with reference to a range of studies,
- A description of the quantitative work undertaken to develop an understanding of the size and demographic attributes of this work, and
- A summary of the key features of the group utilised in the financial modelling underlying this report.

This description is supported by the more detailed material set out in:

- **Annexure 5**, which describes the analysis of the data available through quarterly LFSs,
- **Annexure 6**, which covers the GHS, and
- **Annexure 7**, which provides a more detailed narrative of the insights gained from a variety of qualitative Sources.

While the qualitative sources cover a relatively wide period, the figures used for modelling purposes are drawn primarily from recent quantitative sources which are then supplemented by the insights gained from the analysis of qualitative information.

4.1. Qualitative Assessment

How do we set about describing and quantifying an elusive group of workers? These men and women are by definition either devoid of legal support, including retirement provision, or subject to lower levels of institutional and legal support than those participating in the formal economy for registered tax-paying companies and therefore harder to detect. Some of these workers are employees of formal-economy companies who, for a number of reasons, do not enjoy the status of formality. Many of them are self-employed or work for unregistered employers. We see these workers all around us.

And, as many researchers suggest, many of those who should be identified as working in the informal economy are not even counted because their means of survival are not regarded as work.

As discussed earlier in this report, consistent and universally applicable classifications of these workers may not be available; also, merely classifying these workers presents challenges. In consequence, describing and enumerating them can be expected to be difficult. Before setting out efforts to quantify this group using the methods of statistical surveys (see Section 4.2), the discussion that follows provides a synopsis of the South African literature that paints the picture of the livelihoods of this group of workers. This picture is complex and uncertain. It presents at times contradictory information. It shows a group that is large and diverse, scattered throughout the country and, using a variety of methods of gaining an income, on the whole just getting by.

More difficult still than putting a number to the size of the group is dealing with the evidence that suggests that many of the country's workers are employed in both the formal and informal economies, not just over their working lifespans but at times simultaneously. Neves and his colleagues warn of this difficulty, which is also reflected in comparative experiences globally:²⁶²

“the moniker of the informal sector potentially invokes an overstated dualism. It overlooks the manner in which formal and informal are intertwined, and the manner in which the precarious employment conditions associated with informality are increasingly to be found at the heart of ‘formal’ enterprises and economies.”

²⁶² Neves et al (2011) 2

With reference to the literature studied, the group of workers participating in South Africa's informal economy may be broadly characterised as follows:²⁶³

- **Numbers are significant but uncertain.** Well over 3 million individuals work in informal economy occupations, contributing significantly to overall economic activity. Disagreement exists regarding this number. Widespread scepticism characterises the commentary on the available data and the possibility that perceived increases may be attributable to improved methods of detection and measurement. Probably the greatest challenge is that formal and informal are not easily defined as a binary alternative, as occupations lie frequently on a continuum between the two and many people work simultaneously in both economies. As expressed by Miriam Altman (2008),²⁶⁴ "What can be done about the informal sector?" is the wrong question as there is no sector."
- **Workers are geographically dispersed and working in a range of occupations.** Informal employment is not limited either to cities or the countryside. The majority of informal workers appear to be rural in location but this appears to be changing. The rapid influx of workers to the major metropolitan centres, Gauteng, for example, is not limited to formal-economy employees. Gender dynamics are difficult to read but worthy of careful attention. The numbers of men and women working informally is roughly the same but the proportional contribution of informal work to all employment is greater for women.
- **Informal employment shows a measure of clustering.** Though informal occupations exist in wide variety, including those workers of registered companies who do not enjoy formal employment, some aggregation into large groups (see Figure 2) may be detected.²⁶⁵ Rates of self-employment among the informally employed appear to be high but not dominant.
- **Earnings are highly variable and volatile.** Analysis of earning patterns shows the income of informal workers, reckoned per hour or overall, as consistently and substantially below that of their formal-economy counterparts. But this income is variable; large differences between clusters are evident. It is also extremely volatile; informal-economy workers typically suffer very high variation in the level of their income over time, even in the very short term.

Figure 2: Most common occupations of men and women working in the informal economy

Male		Female	
% of total informal sector employment		% of total informal sector employment	
Farm-hands and labourers	14.4%	Street food vendors	30.5%
Bricklayers and stonemasons	10.3%	Street non-food vendors	13.5%
Street food vendors	8.4%	Spaza shop operator	6.0%
Street non-food vendors	5.8%	Tavern and shebeen operators	5.4%
Motor vehicle mechanics and fitters	4.3%	Hairdressers, beauticians and related workers	4.4%
Spaza shop operator	3.9%	Tailors, dressmakers and hatters	3.8%
Car, taxi and van drivers	3.8%	Bricklayers and stonemasons	2.8%
Painters and related workers	3.2%	Healer and sangoma	2.7%
Carpenters and joiners	3.1%	Personal care of children and babies	2.6%
Construction and maintenance labourers	2.2%	Shop salespersons and demonstrators	2.6%

²⁶³ Formal citations are provided against the statements set out in [Annexure 7](#). The sources contributing to this assessment, formally detailed in the references section to this paper, are: Altman (2008), Blaauw *et al* (2006), Blaauw (2011), Davies & Thurlow (2009), Essop & Yu (2008), Hovsha & Meyer (2015), Muller (2003), Neves *et al* (undated), Sustainable Livelihoods Foundation (undated), Valodia (2007) and Willis (2009).

²⁶⁴ Altman, M (2008), "Formal-informal Economy Linkages", Employment Growth & Development Initiative, Human Sciences Research Council, April, page 28

²⁶⁵ This suggests the importance of engagement by the designers of this scheme with these workers or the organisations representing the interests of these workers. This should include efforts to support the further development of representative organisations.

Without implying that periods of relatively high earnings represent extraordinary prosperity, this income volatility nevertheless suggests the potential demand for a short-term, flexible savings vehicle that could facilitate consumption smoothing over time. This appears to have been confirmed by research among the members of this group (see DSD, 2014: 6).²⁶⁶

4.2. Quantitative Analysis

Quantitative analysis of the data available in the quarterly LFSs (**Annexure 5**) and annual GHS (**Annexure 6**) has been undertaken. The key challenge with the analysis of both of these surveys is the inconsistent, and varying over time, definition of informal economy workers (as also indicated earlier in this report) and inconsistency in the data.

The LFS, for example, reports a total of between 2.9 million and 3.0 million informal-economy workers. This total has shown a gradual increase since 2010. But some of this increase may be attributable to improved levels of detection, as designers of the survey have begun to include workers in formal companies that are employed informally.

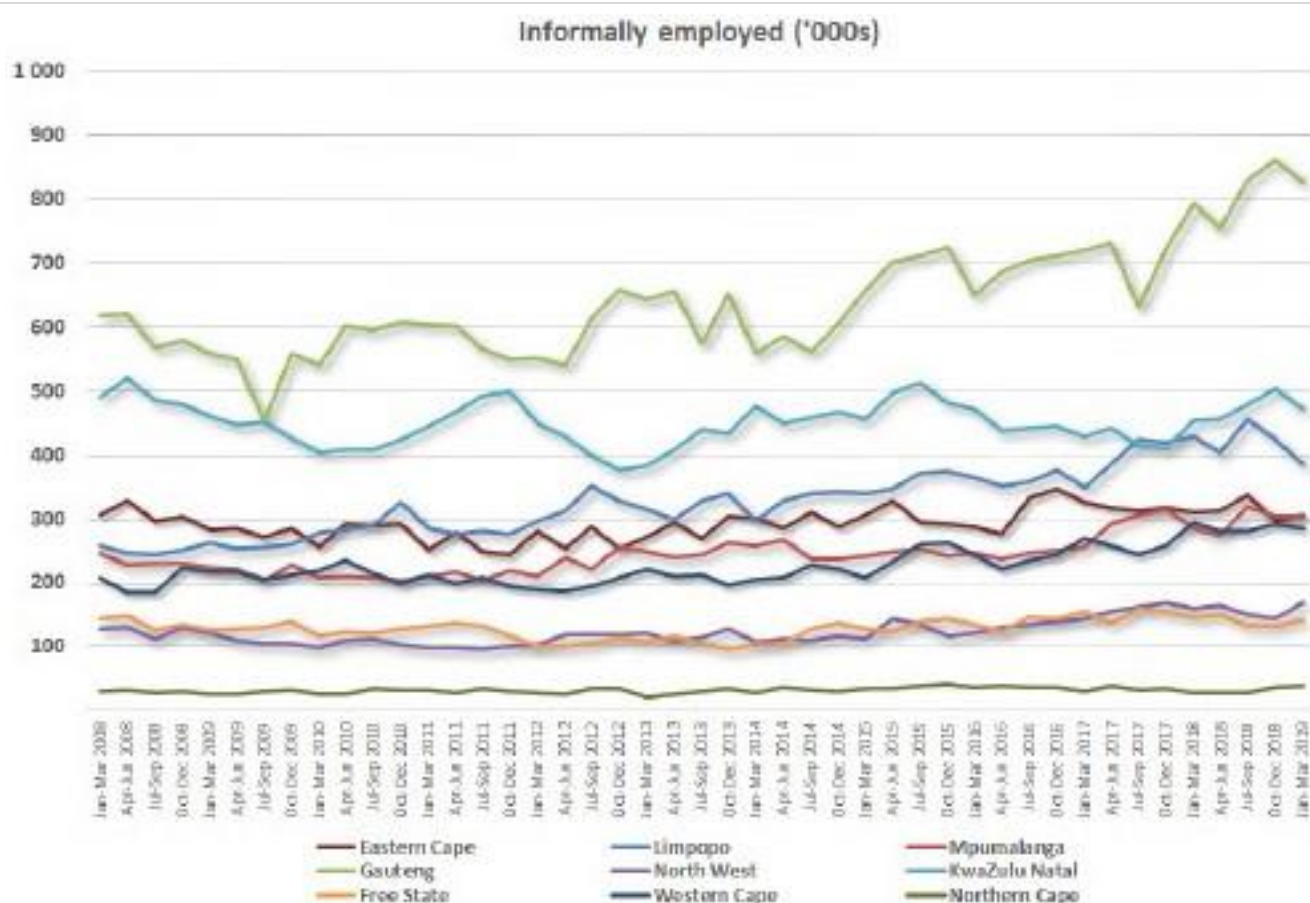
Though estimation errors from quarter-to-quarter should not be ignored, the LFS hints at an environment of dynamic change over time (see Figure 3 and further descriptions in **Annexure 5**). Explaining these changes, however, can be difficult. While it is tempting, for example, to describe the increase in informal-economy employment in Gauteng over the last few years in terms of increasing informality, this is not necessarily the case. Increases in informal-economy employment in urban areas may be associated more with broad-based increases in workers moving to the cities to take up informal employment rather than to an increase in the proportion employed informally.²⁶⁷

Observation of the data indicates that, among females the proportion of all employees that work informally appears to have fallen between 2010 and 2014 and then stabilised, but among men these rates seem to have shown a steady increase. The corresponding rate of informal employment (as a share of all employment, males and females combined, agricultural and household workers excluded) suggests enduring differences across provinces in employment dynamics but reasons for these differences are elusive.

Figure 3: Informal-economy workers by province

²⁶⁶ DSD (2014), "Department of Social Development: Inclusion of informal workers in the reform of retirement provision in South Africa", Consolidated Report, prepared by Oxford Policy Management in partnership with Callund Consulting

²⁶⁷ The population of Gauteng has also grown faster than the country as a whole, from 8.8 million in 2001 to an estimated 14.7 million in 2018, a compound annual growth rate of 3.06%, against the corresponding national average of 1.50% for the same period (Stats SA, <http://www.statssa.gov.za/>, accessed 7 June 2019).



In summary, on LFS definitions, some 2.9 million to 3.0 million employees work in the informal economy to which might be added a proportion of the 1.3 million noted as working in households and the 800 000 to 900 000 in agriculture. A slight increase in the proportion of all workers that are occupied in the informal economy has been detected.

The GHS asks a series of questions that seek to confirm the formality of employment, so more cases of informal employment are likely to be identified along with a mild risk of overcounting through self-reporting. The GHS reports between 3.2 million and 3.3 million self-employed workers in mid-2017.

Under-counting is a material risk in both cases, for a number of reasons:

- The LFS counts separately more than 2 million employees based in households or working in agriculture, some of which are likely to be informally employed without being identified as such,
- Neither of the surveys attributes employees to both formal and informal categories at the same time, though evidence exists that a number of workers operate in both (Neves *et al*, undated),²⁶⁸
- A number of workers are unlikely to be captured effectively in either of the surveys (Muller, 2003),²⁶⁹ for example, those engaged in purely survivalist activity and those who work too few hours per week to be counted.²⁷⁰

Not all of this under-counting should be taken explicitly into account when considering the number of workers eligible for the scheme under consideration or inclined to participate. Firstly, double-counting these individuals is possible. Second, at the margins of survivalist strategies are individuals who, while certainly eligible for participation in the scheme, are unlikely to participate by virtue of their poverty.

²⁶⁸ Neves, D, M Aliber, J Mogaladi & A du Toit (undated), "Self-employment in South Africa's Informal Sector: Prevalence, Prospects & Policy", Institute for Poverty, Land and Agrarian Studies, University of the Western Cape

²⁶⁹ Muller, C (2003), "Measuring South Africa's Informal Sector: An Analysis of National Household Surveys", Working Paper 03/71, Development Policy Research Unit, University of Natal, January

²⁷⁰ Illegal activities are typically also not part of a survey.

The GHS data appears to confirm the findings of a number of researchers that the earnings of informal-economy workers are poor (some R2 330 monthly, 2017 terms) and that the average for women (R1 880) is substantially below the corresponding average for men (R2 690). Differences by age appear to exist, but as these differences do not exhibit a reliable pattern, these cannot be used to conclude that age counts against or in favour of income. Average earnings by province do show material differences, but are not utilised in the financial modelling described in this document as provincial differences are not taken into account in the model.²⁷¹

4.3. Summary of Modelled Membership

The discussion that follows aims to reconcile membership from various sources to develop a stable base from which financial modelling may proceed.

4.3.1. Total membership

Between 2.9m and 3.0m South Africans are working informally, in addition to 1.3m workers in households, not necessarily domestic workers, and between 0.8m and 0.9m in agriculture, not all of whom are working informally.

The GHS 2017 suggests 3.26m informal-economy workers. It is proposed that this underestimates somewhat the total number of workers operating full-time or part-time in the informal economy. It is estimated, by reference to insights gained from a variety of sources, that a total of 3.9m should be regarded as working, for some part of a year, in the informal economy, made up as follows:

- 2 950 000, as defined by the average of recent LFS quarterly reports; plus
- An additional 700 000 in households, excluding the 650 000 domestic workers registered to the UIF who are assumed to be formally employed and erring on the high side; and
- 250 000 in agriculture, whom it is assumed do not have formal employment contracts.²⁷²

This makes no explicit allowance for survivalist workers or those counted in the formal economy who are also working informally, but errs on the high side against both LFS and GHS figures. As GHS information includes insights on earnings, for the purposes of filling in the details, GHS is used, rating up by just under 20% to obtain the 3.9 million considered appropriate in total. All figures expressed in the analysis that follows are calculated after this upward adjustment.

4.3.2. Earnings profile

The GHS proposes average monthly earnings of R2 330 per person working in the informal economy, compared with R8 050 for their counterparts working in the formal economy and just under R200 for the 23.1 million cases with identifiers, “Do not know”, “Not applicable” or “Unspecified”, which covers mainly unemployed individuals.

The average of R2 332 may include income from social grants.²⁷³ The number is, however, no larger than would be expected from CPI adjustments of the qualitative data of Essop & Yu (2008) and is somewhat lower than the corresponding data ranges (averages not provided) of Altman (2008). For these reasons, the monthly earnings of the GHS 2017 survey are regarded as appropriate, also for extension to the full set of 3.9m individuals.

4.3.3. Occupational mix

Detailed information on the employment and earning characteristics of workers in the informal economy is not available. Determining the mix of occupations from a number of different sources is difficult. While a wide range of sources has been consulted, it is not clear how reliable these sources are and to what extent the data utilised for each of these studies may be regarded as representative of the millions of workers participating in the informal economy. The GHS data states that 2.74 million of the self-identified 3.26 million informal-economy workers (that

²⁷¹ More precisely, the rates of take-up across provinces is assumed to be such that any income differences between provinces that may exist are not material to the financial projections.

²⁷² This number feels rather low, given a total of between 800 000 and 900 000 workers in agriculture and anecdotes of poor pay and working conditions, but it reflects the information available through a review of the available literature.

²⁷³ Some recipients of child grants and old-age grants may identify themselves as working in the informal economy.

is 84%) describe themselves as employers or own-account workers. This is not easily reconciled with the qualitative information on informal-economy workers assessed. Blaauw (2011), for example, states that 27% of informal-economy employees work in households. Some of these are indeed self-employed but many of them are not.

Combining the four available sources of information and smoothing the results, the mix of workers by occupation type is proposed in [Figure 4](#).

Figure 4: Proposed profile of informal-economy workers for modelling

	Numbers			Percentages			Average Income		
	Male	Female	Total	Male	Female	Total	Male	Female	Overall
Agriculture	263 050	13 853	276 904	12.2%	0.8%	7.1%	1 808	1 352	1 785
Community	73 017	219 188	292 205	3.4%	12.6%	7.5%	4 445	3 325	3 605
Construction	394 077	57 335	451 413	18.2%	3.3%	11.6%	2 486	1 860	2 407
Finance	81 551	81 603	163 154	3.8%	4.7%	4.2%	3 892	2 911	3 401
Manufacturing	269 688	29 984	299 672	12.5%	1.7%	7.7%	3 308	2 474	3 224
Mining	116 034	1 173	117 207	5.4%	0.1%	3.0%	4 271	3 195	4 260
Households	409 653	614 866	1 024 519	18.9%	35.4%	26.3%	1 390	1 040	1 180
Transport	211 881	4 327	216 208	9.8%	0.2%	5.5%	3 937	2 945	3 917
Trade	344 996	713 723	1 058 719	15.9%	41.1%	27.1%	2 713	2 030	2 252
	2 163 947	1 736 053	3 900 000	100.0%	100.0%	100.0%	2 691	1 884	2 332

This figure is considered a reasonable representation of the numbers and average earnings of informal-economy workers, separately for males and females and separately by each of the working classifications. This data has been used for modelling purposes, as described in [Section 6](#).

5. BENEFIT DESIGN

The discussion that follows sets out the process utilised to arrive at the recommended design of the proposed arrangement, covering:

- Methodology, criteria and considerations;
- Benefits;
- Contributions;
- Vesting and withdrawals; and
- Participation incentives.

The modelling described in [Section 7](#) describes how the adequacy and sustainability of the recommended benefit structure has been tested.

5.1. Methodology, Criteria and Considerations

The design of any pension arrangement is complex, calling for evaluation across an extraordinary number of decision points and parameters. Choices concerning this particular arrangement are further complicated by three additional factors concerning the earnings characteristics of those working in the informal economy, who:

- Suffer substantial variation in income;
- Experience long periods during which they have no income at all; and
- May move frequently between the formal and informal economies, sometimes operating in both at the same time.

Simultaneously evaluating a multiplicity of trade-offs is complex. If optimisation were based on purely technical grounds, it would be difficult enough, but ideological concerns and considerations from outside of the scheme itself further complicate the design process. How does one allow for the constitutional imperative of equity of treatment between groups? How does one evaluate the pros and cons of defined benefit and defined contribution designs where the income upon which the former rests is inherently uncertain, volatile and potentially subject to manipulation by participants? How should pre-existing designs, the social old age grants or private pension funds, informal arrangements like stokvels and others based on systems of mutual support, or those that have been considered separately like the draft National Social Security Fund, be taken into consideration? What types of metrics may be considered appropriate for comparing alternatives where the uncertainty in the earnings pattern of covered workers is so considerable?

The sheer complexity of the trade-offs, the enormous spread of available design variations and the multitude of assumptions involved in financial modelling of the scheme makes such modelling inappropriate as a primary tool for evaluating the available design options.

5.1.1. Broad approach to selecting and refining the design of the scheme

An iterative approach to addressing this complexity has been adopted:

1. **List the elements of the design.** These include retirement benefits, for example, death and disability benefits, early access to accumulated saving, eligibility for membership, the framework for contributions and the system of incentives.
2. **Identify the available alternatives concerning each of these elements.** For example, the formula for determining the benefit on retirement could be intrinsically defined with reference to earnings (defined benefit) or accumulated contributions (defined contribution), or a hybrid model could be utilised. A proportion of the total benefit available at retirement may be available as cash at that date with the balance taken as an income, itself subject to a number of design rules and parameters.
3. **Establish a set of criteria for evaluating each of the alternatives.** For example, the advantages and disadvantages of defined benefit, defined contribution and a hybrid model are identified. These criteria are set out in **Annexure 8**.
4. **Define and assess a number of prototype designs.** Collectively covering a range of alternatives, and taking into account the rationale put forward along with existing proposals, four designs are described and thoroughly evaluated. The insights derived from this process are summarised. This material is set out in **Annexure 9**.
5. **Put forward and evaluate a design that satisfies the insights derived from the process.** The lessons learned from the evaluation of alternatives are used to construct a recommended design. This design is described in the discussion starting in Section **5.2**. The process of evaluation includes the assessment of adequacy and sustainability, as described in Section **7**.
6. **Refine and finalise the parameters.** The evaluation typically identifies flaws in the parameters initially chosen for evaluation. The model is used to refine these parameters, as described in the discussion that follows in this section.

This approach permits (1) a gradual developing appreciation of those features of the scheme design most appropriate to the members for whom the scheme is intended followed by (2) an incremental refinement of the parameters that put these features concretely into place.

5.1.2. **Determinants of the choice of design alternatives chosen for review**

The four designs selected for assessment are prototypes. Each of them represents a serious effort to meet the needs of the members of the envisaged scheme but none of them were selected on the basis that they were considered a perfect effort to do so.

How were these four options chosen? A number of factors were taken into account as part of this process. Key considerations included putting together a mix of alternatives that collectively exhibit a suitable range of features and giving due consideration to those possibilities already put forward in earlier papers.

The papers considered for this purpose were the National Social Security Fund (NSSF) discussion paper by the Inter-department Task Team (IDTT, 2012)²⁷⁴ on Social Security and Retirement Reform and a study published by the Department of Social Development (DSD, 2014) that explicitly considered the design- and operational alternatives of an arrangement focused on informal economy workers.²⁷⁵ Three of the proposals come from those papers and the fourth arose out of a motivation to examine the feasibility of a final-salary defined benefit system.

Alongside these were a number of other considerations:

- Examples from other countries and international developments containing standards and guidelines, particularly those that impact the design of systems targeting informal-economy workers;
- Coherence with the corresponding system of social old age grants in South Africa;
- Consistency with the constitutional framework, particularly in respect of the equality of treatment of participating members working respectively in the formal and informal economies; and
- Consideration of the likelihood of workers moving between the formal and informal economies, through simultaneous participation in both or through shifts between participation in one and the other over time.

5.1.3. **Determinants of financial viability**

The scheme must be financially viable, in two ways. First, it must be sustainable, in the sense that, in the long-term, the cost of benefits and administrative expenditure is equal to or lower than the corresponding contributions, at acceptable cost to government.²⁷⁶ Second, it must be adequate, in the sense that, under realistic assumptions regarding contributions, expenses and investment returns, the scheme provides benefits that are regarded as sufficient to meet its underlying objectives.

Adequacy is important not just in fact but in perception. Members, in other words, must buy into the concept, find the arrangement attractive and actively participate in it. Only the members themselves ultimately judge the appropriateness of the scheme to their needs. The Department of Social Development (DSD, 2014) cites the following elements of a benefit structure that prospective members indicated would enhance the attractiveness of a scheme for informal-economy workers:²⁷⁷

- Benefits are provided on death and disability prior to retirement;
- Contributions are flexible in the hands of members to allow for the inherent variability of the income of workers;
- Incentives to participate are granted through providing a greater benefit in return for greater contributions;
- Accumulated rights to benefits are preserved in those instances in which contributions cannot be paid for an extended period;
- The scheme is administered through central government not municipal authorities;

²⁷⁴ IDTT (2012), *Comprehensive Social Security in South Africa Discussion Document (Version 11.9)*, Inter-departmental Task Team in Social Security and Retirement Reform, South African Government, March

²⁷⁵ DSD (2014), "Department of Social Development: Inclusion of informal workers in the reform of retirement provision in South Africa", Consolidated Report, prepared by Oxford Policy Management in partnership with Callund Consulting

²⁷⁶ This cost may be explicit, for example, the expenditure of setting up or running operational infrastructure or the value of incentives provided to members. It would also be implicit or conditional, for example, the potential cost of providing a guarantee that the investment returns do not drop below a stipulated level.

²⁷⁷ DSD (2014) 6

- It is identifiable and widely recognised as a legitimate government initiative, and
- it encourages rather than forces participation, through providing information and education.

Thorough consultation with these potential members prior to launch is regarded as critical to the success of the scheme.

The discussion in the next subsection and those that follow it builds on the foundation work described in the appendices, the criteria for evaluating design alternatives ([Annexure 8](#)) and the analysis of the alternatives ([Annexure 9](#)), which leads to a set of lessons learned through the process. These lessons are applied in turn to each of the design elements in turn. These elements are: the benefits, the contributions, the system of vesting and withdrawals and the set of participation incentives. Section 5.6 provides a summary of the recommendations. All of this is supported by the financial modelling described in [Section 7](#), but referred to from the discussion below.

5.2. Benefits

The first part of the discussion considers the benefits that the scheme is to provide to its members. This includes details of the underlying formula used to determine the overall quantum of benefits and the form in which benefits are paid, as a lump sum or income, for example and, if in the form of an income, flat or increasing over time. It also covers all type of benefits payable under the scheme, not just those that are due on retirement. The discussion starts by summarising the lessons learned from the analysis of alternatives, the details of which are set out in [Annexure 9](#), after which it considers the available options and sets out a recommendation.

A number of those working in the informal economy, and contributing to this arrangement, are likely also to work formally for some time, either over different working periods, or simultaneously. These members would then be eligible to receive pension benefits under three arrangements:

- The social grants system (if they currently meet the means test requirement), non-contributory and paying a flat monthly benefit regardless of working history;
- The defined benefit informal-economy scheme, which pays a final salary based on the number of contributions paid and the average earnings (in reality, contributions) paid over the last five years; and
- The national social security fund (as envisaged by the IDTT), which pays a career average pension based on formal-economy earnings (also contributions) and a system of accrual.

It is proposed, on the basis of equality, that members be permitted to draw an income from all three of these sources simultaneously. As proposals for the removal of means-testing of social grants are already in place, the basis for any offsetting, with their associated disincentive impacts, is weak.

5.2.1. Discussion of attributes

The analysis of the alternative prototype arrangements suggests that:

- Retirement benefits should be prioritised over the benefits payable on other events, such as death or disability prior to retirement, because this approach underpins the primary function of the scheme and ensures that, as far as possible, the adequacy of these benefits is sufficient to render participation in the scheme worthwhile to its members;
- A defined benefit type of scheme is attractive (refer to the definitions in [Box 1](#)) but exceedingly difficult to deliver under the circumstances, exposing government to considerable financial risk; defined contribution arrangements provide a tangible account with growth that can be monitored and a link between contributions and benefits; a hybrid scheme that combines elements of defined benefit and defined contribution arrangements would be helpful in balancing these objectives, if feasible;
- Smoothed investment returns under a modified defined contribution scheme are attractive if they can be delivered at acceptable risk to government and to the members of the scheme;

- Survivor- and disability benefits should be provided on the respective events of death or disability prior to retirement, but this should be achieved at reasonable cost, to protect the prospects of reasonable retirement benefits, and designed under the premise (as proposed under the NSSF) that these benefits ought to be no more than sufficient to facilitate a transition to stable living conditions, albeit adapted to the changed circumstances under which these benefits are being provided;
- Early access to accumulated saving would considerably enhance the attractiveness of the arrangement to the intended participants, but this should be considered only if it were possible to offer it without unduly compromising funding for the other benefit priorities; and
- Retirement benefits should be payable primarily in the form of an income, suggesting that, except on administrative grounds, devoting a proportion of the accumulated saving to a lump sum at retirement in addition to providing early access to this saving may unduly compromise the funding for other forms of benefit.

Box 1: Design fundamentals: defined benefit and defined contribution

The income payable in retirement under a *defined benefit* arrangement is expressed with reference to the corresponding income of the member prior to retirement. This relationship may be described in a number of different ways. Pertinent pre-retirement income, for example, may be the income earned in the year prior to retirement or it may be averaged over a number of years running up to retirement, say three or five, or it may be averaged over a working lifetime, typically with adjustments for inflation. The first and second alternatives are usually referred to as *final salary* and the third as *career average*.

The benefit formula typically involves a rate of accrual under which each completed year of contributions provides a stipulated percentage of the pertinent pre-retirement earnings. If this percentage were 2%, for example, then 15 years of contributions would provide for an income in retirement of 30% of the stipulated pre-retirement earnings.

Members typically appreciate the certainty of income in retirement but this approach involves an element of risk to the ultimate guarantor of the scheme because the mix of members and their earnings pattern may render the balance of contributions and benefits unsustainable. This arrangement may also be regarded as inherently inequitable to those who are less likely to survive until retirement, on average the lower-income members of the fund who suffer higher rates of mortality.

Under a *defined contribution* structure, the contributions payable by members are expressed typically as a percentage of earnings but the corresponding benefits are known only at retirement, when the accumulated saving is converted into an income. The sustainability of the arrangement is generally not a problem because the commitment to members is equal to the contributions received (plus investment returns, less expenses). Members may appreciate the tangibility of the personal account, but they bear significant risk associated with fluctuating investment returns and the rate at which this account may be converted to an income at retirement.

Hybrid arrangements combine some of the respective features of defined benefit and defined contribution designs, providing to members a mix of the advantages and disadvantages of each. prospects of reasonable retirement benefits, and designed under the premise (as proposed under the NSSF) that these benefits ought to be no more than sufficient to facilitate a transition to stable living conditions, albeit adapted to the changed circumstances under which these benefits are being provided;

5.2.2. Alternatives and recommendations

Possibly the most important design issue to resolve is the question of defined benefit, defined contribution or something in between. Defined benefit arrangements are frequently utilised for social security arrangements because they provide income in retirement that is related in some meaningful way to the corresponding income of

the member immediately prior to retirement.²⁷⁸ These schemes convey a sense of equity as successive generations working in similar occupations over their working lives can expect similar levels of income in retirement.²⁷⁹

Defined benefit arrangements tend to discriminate against lower-income members, however, who are less likely to reach retirement, unless the scheme provides generous survivor benefits. The inequity feature is not the primary disadvantage of a defined benefit arrangement in this case, however, where the scheme is intended for workers in the informal economy. Defined benefit arrangements work well in conditions of full employment and stable occupations. They are not as well suited to environments of unstable and interrupted income. In fact, they are very difficult to design for informal-economy employees whose income is ill-defined and can only realistically be inferred from their contributions on the basis of some assumed rate of contribution. That in turn renders the scheme highly vulnerable to moral hazard as members take advantage of opportunities to utilise the formula to their benefit.

For these reasons it is difficult to conceive of practical and equitable ways to manage the scheme on the basis of a defined benefit formula. Some of the disadvantages of defined contribution arrangements nevertheless need to be recognised and overcome. It is possible to smooth investment returns, for example (see [Box 2](#)), without subjecting the ultimate guarantor to undue risk. This should be undertaken by holding back a portion of investment returns in good years and releasing them when these returns are poor or negative. The basis upon which this is undertaken should be established at commencement and reviewed from time to time.

The retirement age of the scheme is a key determinant of the expected adequacy of benefits to members. The possibility of setting an age as high as 65 has been considered as it improves the prospects for good benefits. The analysis described in Section 7 shows the considerable benefit to members of retiring later. The expected income after retirement for a typical female member of this scheme retiring at age 60 is 37% of the corresponding expected earnings immediately prior to retirement. If retirement is deferred until age 65, this percentage is estimated at 51%.

Box 2: Smoothing Investment Returns

Defined contribution arrangements are based on the premise that the risks associated with investment returns lie with the members. Contributions are paid into accounts that are notionally attributable to members and the investment returns earned on the underlying assets, whether positive or negative, are credited to these accounts.

The design of this scheme is different. It aims to protect members from poor investment returns by smoothing these returns over time, holding a little back in good years in order to support the corresponding returns in very poor years. The mechanism could work in practice as described in the following paragraph.

When investment returns over the portfolio in any given year are positive in excess of the rate of inflation, for example, only 75%, say, of this excess should be credited to members, and the balance held back. When returns are below inflation but above zero, they should be credited in full. When returns are below zero, then member accounts should be held constant, the shortfall being funded from the excess of prior years.

The ultimate guarantor of this arrangement is the government. The parameters actually utilised should be subject to regular review by the actuary to the scheme to keep acceptably low the probability of government support for the returns of the scheme.

On grounds of consistency with the age of eligibility for social old age grants and recognising the challenging working lives of workers in the informal economy, however, it is recommended that retirement be permitted from the age at which social old age grants may first be received, currently age 60. Members should be permitted to postpone the age at which income is first drawn, boosting their retirement income in the process.

²⁷⁸ For an employee who has worked for 40 years and is eligible to a final-salary retirement income accruing at a rate of 1.5% per year of contribution, the income payable at retirement is equal to 60% of the corresponding income immediately prior to retirement, frequently sufficient to sustain a reasonable income in retirement because living costs are typically lower than during the working years.

²⁷⁹ The same is not true of their counterparts in defined contribution arrangements, whose retirement income is dependent on the state of the investment markets, which can fluctuate significantly over time.

Members of defined contribution arrangements are also subject to fluctuations in the rate at which their accumulated accounts are converted to income at retirement. These fluctuations are also attributable to market movements as a counterparty must convert the lump sum to an income at prevailing interest rates.

It is recommended that income in retirement is determined on the basis of a published set of annuity rates that are underpinned by a guarantee provided by the scheme and underpinned by government. Annuity rates are to be guaranteed for each calendar year and any change to these rates is announced at least six months in advance. The modelling described in Section 7 distinguishes between the respective mortality experiences of men and women, but the principle decision not to distinguish between these rates may be considered. Annuity rates should in practice, however, be set based on the experience of the scheme, to reflect the shorter-than-average life expectancy of the members of the scheme. Such an approach is to the benefit of the members. The annuity grows at the annual rate of price inflation.

It is further recommended that the part of the accumulated retirement benefit that is not accessible to members for early withdrawal (see the discussion of vesting and withdrawal, Section 5.4) is payable only in the form of an income. This is to be waived only under those circumstances in which the value of the accumulation is such that the income due is less than a pre-stipulated threshold that would make administration of the payment impractical. This threshold should be stipulated as a percentage of the old age grant so that it changes automatically with the value of the grant. The recommended threshold percentage is 25 percent of the old age grant, in line with the maximum level of subsidy payable in respect of contributing members.

To protect a surviving spouse in the event of the death of the member after retirement, this income, it is recommended (1) is subject to a guaranteed minimum period of five years, and (2) is converted to a spouse's pension, at a rate of 50% of the original pension, on the death of the main member (after the guarantee period) until the corresponding death of the spouse.

Does this combination of benefits provide an adequate retirement to members? Allowing realistically for rates of adoption by members and assuming that members do not withdraw anything prior to retirement but utilise all of their savings at that date, the average income at retirement for women aged 60 is estimated at 37% of the corresponding income prior to retirement, with 90% confidence intervals of 24% to 51% (see the details in Section 7). For men aged, the corresponding average ratio is 41% and for women and men retiring at age 65, the averages are 51% and 55% respectively. These are not substantial, but are in line with the levels regarded by the International Labour Organization as acceptable retirement outcomes. Note, however, that they are not guaranteed.

The main reason for the differences in the respective ratios for men and women is the acknowledged difference in the life expectancies of men and women. Other factors being equal, women are expected to live longer than men. The same amount saved up until retirement needs to last longer for women and so the equivalent income is lower. It is well understood that, notwithstanding the life-expectancy argument presented here, such an arrangement may not be regarded as treating women equitably.²⁸⁰ The financial modelling in Section 7 and the table of ratios provided in the Executive Summary show the differential results for men and women, were such differences permitted, and the corresponding common ratio for all members on the assumption that a unisex approach to annuity rates were required.

Benefits to surviving dependents in the event of the death of the member prior to retirement are payable, but the cost of this benefit, together with the corresponding cost of the disability benefit, is limited in order to retain the intended focus of the scheme on retirement benefits.

It is recommended that the share of the resources of the fund ear-marked for retirement should be set at a level of 80%, with the balance of 20% available for the provision of other benefits, and administrative costs payable by government.

The appropriateness of this 80/20 split has been modelled. Increasing the 20% ear-marked for the provision of risk benefits to 40%, for example, would allow for a doubling of the amount of the death- or disability benefit specified below (or an extension of the term over which death benefits may be paid). This could only be achieved, however,

²⁸⁰ Gender-based annuity rates in private-sector arrangements have been outlawed for some time in the European Union.

by reducing the corresponding proportion of contributions that are directed to retirement saving, from 80% to 60%. That would reduce the expected average replacement ratio for women from 37% to 28%.²⁸¹ A compromise between these respective positions is possible, with a 70/30 split between retirement and risk benefits. This, it was felt, would still unduly compromise the potential for the scheme to deliver an average replacement ratio of around 40%, which is regarded as an appropriate target under international norms, particularly those specified by the ILO.

In line with the corresponding recommendations of the NSSF, but limited on the grounds of affordability constraints the benefit to dependent children is recommended payable until age 18. The corresponding benefit to the spouse is payable for a limited time, on the same grounds as proposed by the IDTT:²⁸²

“Surviving spouses would receive a benefit for a limited period of time, to assist the household’s adjustment to the loss of earnings.”

The term recommended for the income benefit to the surviving spouse is two years, with the balance of this period payable to other surviving dependents should the spouse die during this period. It is recommended that the income payable to dependents is linked to the contributions paid by the member in the previous three years, incentivising active participation in the scheme.

The benefit payable is recommended as a monthly income to the surviving spouse equal to one-eighteenth of the total contribution paid by the member (plus the corresponding government subsidy received) over the last three years prior to death. Payments in the second year of receipt are recommended to be higher than the corresponding payments in the first year by the rate of price inflation at the time. Income payable to surviving minor dependents is payable to each at a rate of half the corresponding benefit to the spouse, limited to four children. These benefits are not payable beyond the 18th birthday of any of the dependents.

Where the total monthly income payable to the surviving spouse and minors is less than 25 percent of the old age grant at the time, it may be converted to a lump sum and paid all at once.

Death benefits are not high. The surviving spouse of a member earning an average of R2 769 monthly over the previous three years and contributing 10% of earnings to the scheme every month over that period would receive R1 326 monthly for two years, with an inflation-related increase at the beginning of the second year. Each child would also receive R663 monthly until the end of the two years or the attainment of age 18, if earlier (see Section 7.2). The benefit is constrained by the recommendation that the allocation to pension saving is pitched at 80% of the total contribution and aims to provide a measure of support for the period of adjustment that follows the shock of the loss of the bread-winner.

Tests have been carried out to determine the viability of extending these benefits. These are described in [Annexure 12](#). If the period over which income is paid to the surviving spouse is extended from two years to five years, without adjusting the 20% share of contributions allocated to risk benefits, the risk-benefit pool is certain to go insolvent at some stage. The appropriate share of contributions that need to be directed to risk benefits under this design approach rises from 20% to 38%, reducing the allocation to pension savings to 61% and severely reducing the expected retirement ratio.²⁸³

A further alternative is considered, extending the benefit to children young dependents to the age of 23²⁸⁴ On the basis both that the proportion of dependents in tertiary education is not known and that only supporting young dependents that are in tertiary education may be seen as discriminatory, the modelling includes all dependents up until the age of 23.²⁸⁵ Combining a 5-year income period to the spouse and continuation to child dependents until

²⁸¹ The corresponding ratio for men would fall from 41% to 30% and the ratio calculated on the basis that no discrimination in annuity rates is permitted would reduce from 39% to 29%.

²⁸² IDTT (2012), “Comprehensive Social Security in South Africa Discussion Document (Version 11.9)”, Inter-departmental Task Team in Social Security and Retirement Reform, South African Government, March, page 22

²⁸³ The female replacement ratio at age 60 would fall from 37% to 28%, the unisex rate from 39% to 30%.

²⁸⁴ This is typically considered to recognise that children in tertiary education are financially dependent on their parents well beyond age 18.

²⁸⁵ Different approaches to the issue are evident from other South African institutions. The *Unemployment Insurance Act* (UIA) defines this dependent as under 21 or under 25 if a learner and mainly dependent on the deceased (UIA, Act 63 of 2001, section 1: definition of “child”). The *Compensation for Occupational Injuries and Diseases Act* (COIDA) assesses only the extent of the

age 23 would require fully 59% of the contribution to be allocated to risk benefits.²⁸⁶ The recommended balance between retirement- and risk-benefits is considered the most appropriate balance, with the primary objectives of the scheme in mind.²⁸⁷

A flat-rate funeral benefit has been considered but, at a level of benefit that is considered reasonable for a funeral, would represent a considerable additional cost to the scheme and hence a compromise on the capacity of the scheme to provide other benefits, particularly retirement benefits, at a reasonable level.

It is recommended that all contributions paid by the member throughout the term of membership of the scheme plus investment returns, are returned to dependents in the form of a funeral benefit. Assuming that the member had not withdrawn any of their accumulated savings, this benefit would amount to twice the level of the fund available for such withdrawals and could be significant.

The estimated funeral benefit for a member earning a monthly R2 769 monthly with a history of paying contributions for 10 years at a rate of 7.5% of income amounts to a little over R32 000 (refer to Section 7.2).

Disability benefits are payable only on permanent disability. Paying only in the event of permanent disability reduces the costs of providing this benefit and the costs of assessing claims, since the state of permanent disability is objectively more straightforward to identify. The level of the disability benefit is, as for the corresponding benefit on death, determined by the contributions paid into the scheme by the member.

The monthly benefit, which is payable only in the event of total and permanent disability, is one-eighteenth of the total contribution paid by the member, plus government subsidy added, over the previous three years. A contribution to retirement saving is also automatically credited to the scheme accounts of disabled members. The contribution is equal to 10 percent of the income payable to the disabled member, without regard to the floor placed on the level of contributions payable (see Section 5.3.2) as contribution collection costs are not relevant. Government incentives are payable into the account on the basis of the contribution made on behalf of the member. Disability benefits are paid monthly until the normal retirement age of the scheme, recommended as 60 and are subject to an automatic inflation-related increase.

Again, the benefit is not particularly large. Refer to the examples provided in Section 7.2.

A lower threshold for the minimum payment is considered appropriate for disability benefits than for other forms of income. Where the monthly income is below 25 percent of the equivalent old age grant, it may be converted to a quarterly income at the option of the member, by multiplying it by a factor of three. Where the quarterly equivalent income would be less than 25 percent of the equivalent old age grant, it may be converted to a lump sum, at the option of the member, on rates determined by the actuary to the scheme from time to time, allowing also for the contribution to the scheme that would otherwise be payable, which falls away. The government incentives that would have been paid on the contribution are no longer payable, unless the member choose to make further payments to the scheme.

The total cost of benefits payable in the events of death or disability prior to retirement is targeted at 20% of the level of contributions paid plus government incentives added, leaving 80% to be directed to the provision of retirement benefits.²⁸⁸ Regular actuarial reviews will assess the extent to which actual experience is consistent with this level. Benefit levels will be adjusted over time, it is recommended, with careful communication to members,

financial dependence (COIDA, Act 130 of 1993, section 1: definition of "dependant of an employee"). The *Pension Funds Act* (PFA) contains no age restriction as regards child beneficiaries (PFA, Act 24 of 1956, section 1: definition of "dependant").

²⁸⁶ This would reduce the replacement ratio for women at age 60 from 37% to 19%, on the assumption that gender-distinct annuity rates are used, and the corresponding unisex ratio from 39% to 20%.

²⁸⁷ These calculations are carried out on the basis that the probability that the risk-benefit pool remains solvent throughout the period of projection to 2065 should be the same as under the base scenario, that is, around two-thirds.

²⁸⁸ As noted below, it is recommended that the costs of administering the scheme are covered directly by government. An allowance has been made in the financial modelling for the monthly costs of administration as some cost is likely whether the scheme is managed in conjunction with the NSSF or not.

should this proportion fall below 15% or increased to above 25% of the total contributions paid and incentives received.

The financial viability of the risk-benefit part of the scheme is not dependent on the reliability of contributions received as the benefits are linked in value to the contributions received.

Indications are that the balance between contributions and benefits in the risk pool is finely balanced. The estimated probability that the risk pool remains solvency throughout the period 2020 to 2065, over which the modelling takes place, is 68%. (Refer to the details provided in [Section 7.6](#)).

5.3. Contributions

The text that follows considers first the primary considerations affecting the level of contributions and then turns to discussing the alternatives and making recommendations.

5.3.1. Discussion of attributes

The following key considerations have guided the framing of the recommendations that follow:

- **Any form of mandate** regarding the regularity of the contribution or the level of the contribution expressed as a percentage of earnings would be impractical, unhelpful and a disincentive to enrolment and participation by workers in the informal economy;
- The **level and frequency of contribution should thus be flexible**, save for a rand minimum to ensure the administrative feasibility of the scheme;
- **Administrative arrangements should be tailored to the needs of the target group**, suggesting a range of cost-effective money-transfer channels that are convenient to these workers and that appropriately and effectively utilise the available technological solutions that would work best for these members, adapting as the range of solutions grows.

5.3.2. Alternatives and recommendation

As is frequently highlighted by the research that underpins this paper, the income earned by workers in the informal economy is highly volatile and generally low. Requiring, or even requesting, these workers to contribute a fixed proportion of their earnings to the scheme is impractical and pays little attention to the challenges experienced by these workers on a month-to-month basis.²⁸⁹ If, on the other hand, appropriate incentives are provided for participation in the scheme, including a measure of access to accumulated savings, workers might themselves see the benefit of contributing to the scheme, if not on a regular basis then at least when able to and in the amounts possible.

It is thus recommended that workers be permitted to contribute to the scheme whatever they wish to, subject to the administrative constraints noted below, on a flexible basis. Contributions may be paid as frequently as wished, on multiple occasions in a month, for example, or once or twice a year, without limitation. No penalties are imposed on members who do not contribute for long periods. Members may also make further contributions into the *member* account (see the discussion in [Section 5.4](#) on vesting) after the retirement date. Since charges are covered by government (refer to the recommendation below) member accounts are not eroded during periods of inactivity. No contributions are assumed to be required from employers.

Questions may be asked about the ability of the scheme to manage interruptions in the payment of contributions. The freedom of members to contribute as and when they wish to overturns the conventional thinking for an arrangement designed for members with stable occupations regarding interruptions to contributions. From the perspective of members, contributions may be paid as and when the member wishes to and, subject to a minimum payment to reflect administrative constraints, at the level selected by the member. While the scheme must be

²⁸⁹ Fluctuations in income are, in many cases, sufficiently severe that, in poor months, workers cannot contemplate a contribution to the scheme and, in good months, workers might wish to set aside a relatively high proportion for retirement saving. Another practical consideration regarding the feasibility of a fixed monthly contribution expressed as a proportion of earnings is that workers typically would not even know what their earnings were at the end of a given month.

administered as efficiently as possible, recommendations in this paper call for government financing of the administration and the costs of administration are not adversely affected by the absence of a contribution.

Notwithstanding the voluntary nature of contributions, government should make every effort to encourage members to contribute. This should include explicit financial support and non-financial benefits like access to special services or skills development (see Section 5.5). A variety of approaches should be used for this purpose, including mainstream media, but most critical for this purpose is constructive engagement with organisations representing the interests of these members. This should take place in advance of launch, to confirm the appropriateness of the design proposed in this report, and after launch, to provide channels for engagement with the members of the scheme.

Members must be granted convenient channels for making payments. These should include cash payments at offices of the South African Social Security Agency (SASSA) and South African Post Office (SAPO), money transfer payments through the systems available at supermarkets and electronic payments through the banking or mobile-money networks. As further alternative channels become available, every effort should be made to add this functionality to the scheme, for the payment of contributions, receipt of benefits and withdrawal of cash under the rules permitting flexibility of access to a portion of the contributions.

The cost of providing death- and disability benefits is recovered from the combination of member contributions and subsidies received and deducted when the contribution is received. This cost, as discussed earlier, is pitched at 20% of the total of contributions and subsidies. The balance of 80% of the member contribution is split equally between the *accessible member account* and the *frozen member account* (see Box 3). The deduction for risk benefits must be transparently disclosed to members. Frequent communication with members is an essential requirement of the scheme. All contributions received should be confirmed electronically to members and fund balances should be available on request, separately disclosing that part that may be withdrawn by the member (see Section 5.4).

Box 3: Distinct accounts in the fund

Defined contribution arrangements establish notional accounts for members. Each account represents the financial interest of that member in the scheme. This particular arrangement has two accounts for each member, the *member account* and the *subsidy account*.

The contributions paid by members go into the *member account*. The amounts payable by government as an incentive to members to contribute to the scheme go into the *subsidy account*. The accounts are kept separate because members are permitted to access part of their accumulated savings, but only to a limited extent. They may not touch the balance in the *subsidy account* unless benefits are payable under the benefit structure. They may only access half of the balance in the *member account*. For this purpose, the member contributions are split into two parts, one of which, *accessible member account* may be accessed by the member and the other part, the *frozen member account*, is retained by the fund to provide for benefits. Both parts of the member account are paid as a funeral benefit.

One constraint on premium-payment flexibility needs to be considered. Administration costs are proportionally most acute at the level of the contribution because scale effects are not possible on small contributions.

A minimum contribution of R50, exclusive of the administration cost and government subsidy, is proposed to manage the expenses of administration on small contributions. This contribution is equivalent to 10% of earnings of R500 and 5% of R1 000. While this threshold may need to be increased from time to time, such increases should be infrequent and communicated carefully and with sufficient advance notice for members to adjust their plans appropriately.

Clear communication to members is a critical part of operational delivery and is discussed further in Section 6.1.

5.4. Vesting and Withdrawals

The issue of vesting and the potential for premature withdrawals are considered in general terms in the discussion that follows before setting out recommendations on these issues.

5.4.1. Discussion of issues

As the scheme under consideration is a modified defined contribution arrangement, vesting of benefits should not present any difficulties.²⁹⁰ Defined contribution arrangements typically have liabilities – the accounting value of their commitments to their members – that are the same as, or very close to, the corresponding assets – the investments that back these commitments. Full vesting of contributions paid is thus theoretically possible.

Two complications to this principle arise in this instance:

- First, a part of the member account may not be available for access by the member, as discussed in the recommendations on withdrawals below. This portion is theoretically available but may not be paid out to members.
- Second, smoothing of investment returns means that the liability to members is not exactly the same as the assets available to back these liabilities. When returns have been strong, then a portion of these returns is not credited to member accounts, and assets consequently exceed the corresponding liabilities. The opposite is possible: after long periods of poor returns; the value of liabilities may then be greater than the corresponding value of the assets²⁹¹

Feedback from potential members (see DSD, 2014)²⁹² strongly suggests that some form of access to accumulated retirement benefits would render the scheme more attractive to those considering contributing to the arrangement. This principle, which has precedent in international arrangements (see [Box 4](#)) and has also been advocated in a recent World Bank report²⁹³ is strongly supported. It is nevertheless important to protect the essential qualities of the scheme to provide, first, retirement benefits and second, a set of supplementary benefits on death and disability prior to retirement. For this reason, also, for a scheme to provide both early access to accumulated funds and access to a proportion of accumulated savings in the form of a lump sum at retirement could compromise the key purposes of the arrangement. It would also be useful if the design could include some link between the contributions actually paid by an individual and that part of the accumulated fund that is accessible to him or her.

Concerning the conditions under which a payment is to be made, it may be considered appropriate to limit early access to those withdrawals required to meet specific needs of the member, a health-related crisis, for example. This appeals well to principles of fairness and matching to need, but it involves not only significant administration but considerable judgment. It is difficult to defend an administrative decision regarding access to funds that a member may regard as notionally or even legally theirs. It is considered preferable instead to establish an unambiguous set of rules that may be applied universally.

²⁹⁰ Smoothed investment returns present some challenges for the accessible member account that calls for a modified approach to investment management (see discussion immediately below).

²⁹¹ This has consequences for any part of the scheme under which members are granted the right to access their retirement savings. Members might act against the scheme by withdrawing funds at a time when the fund is in deficit on the basis that the value of the member account exceeds the corresponding value of assets. Sophisticated members could even use the fund as an investment tool.

²⁹² DSD (2014), "Department of Social Development: Inclusion of informal workers in the reform of retirement provision in South Africa", Consolidated Report, prepared by Oxford Policy Management in partnership with Callund Consulting

²⁹³ The study recommends consideration by policy-makers of the following as an element of pension product design in the informal economy context (emphasis in the original): "**A combination of long-term pension accounts and short-term savings accounts.** A pension scheme savings account is, by nature, a long-term savings account. Informal sector workers need to save for 15–20 years to be eligible for pension benefits when they reach the eligibility age. Experience in countries in Africa and interviews with informal sector representatives indicate that a short-term savings account would make the pension scheme more attractive to informal sector workers. There are several reasons for this. First, a voluntary pension scheme needs to build trust, and knowing they have short-term access to their savings may help build this trust among these workers. This is substantiated by evidence in Ghana. When the informal sector pension scheme was first established, participants had the option of gaining access to 50 percent of their accounts six months after they started making contributions. On the day contributors were allowed to access their savings, they typically withdrew the short-term savings account. However, they returned it back into the account the next day. This appeared to be the way the participants tested whether they could actually access the savings. Second, the pension scheme could be made more attractive to informal sector workers by allowing them to use the short-term savings account as collateral for various financial transactions, including obtaining credit from MFIs, thereby making it easier for them to access financing. Third, the short-term savings accounts could be used by informal sector workers following idiosyncratic or covariate shocks." – Guven, J (2019), *Extending Pension Coverage to the Informal Sector in Africa* (Social Protection & Jobs Discussion Paper No. 1933) (World Bank) 42 – accessed at <http://documents.worldbank.org/curated/en/153021563855893271/pdf/Extending-Pension-Coverage-to-the-Informal-Sector-in-Africa.pdf> on 26 September 2019.

In summary, the principles that are considered appropriate to the design of the system of vesting and withdrawals are as follows:

- As far as possible, vesting should be immediate;
- Members should be granted access to a portion of the accumulating saving, on terms that are as clear as possible and involve as limited a set of conditions as may be permitted;
- The portion of the accumulated saving to which members should be granted access should be large enough to incentivise participation to individuals subject to a precarious existence and thus mindful of their need for liquidity, but small enough that the fundamental objectives of accumulation for retirement and other benefits should not be unduly compromised;
- The system under which early access to accumulated saving is permitted should be combined, if possible, with the corresponding rights of members to convert a part of their retirement saving, otherwise received in the form of an income, into a lump sum, and
- Members should not be able to game investment markets by withdrawing when the value of accounts exceeds the corresponding value of the underlying assets.

Box 4: International precedent for member access prior to retirement

The separate-account arrangement recommended for the scheme is not without supporting precedent in other countries. Under the informal-economy fund established in Ghana by the SSNIT (see Section 3.2.4), members contribute to two accounts. The first of these is a Retirement Account, from which members may only withdraw in the event of retirement, death or disability. The second is an Occupational Scheme Account, from which members may make withdrawals subject to rules. A number of private-sector funds in Ghana have followed suit, offering arrangements to members of the informal economy facilitating similarly flexible contribution- and benefit arrangements.

The corresponding scheme recently launched in Rwanda does not split contributions into two accounts, but seeks to provide early access to accumulated savings subject to conditions (see Section 3.2.5). Indications from policymakers in Rwanda are that members will have access to a limited portion of their savings, as long as this access is put to specified uses and members have contributed for a minimum period.

Providing early access to saving is regarded as an important feature of the scheme, and is also advocated in a recent World Bank study. The key disadvantage of the approach is that it undermines retirement saving. For this reason, it is considered prudent to limit the extent to which withdrawals are permitted. The design recommended for consideration in South Africa aims to recognise the feedback of the members of the targeted participants (DSD, 2014) that some access to accumulated saving is considered vital, but tempers the degree of access to protect early access to government subsidies

5.4.2. Alternatives and recommendations

A straightforward system of vesting and withdrawals

- Unambiguously labels that part of the accumulation of saving that the member may access; and
- Places no constraints on withdrawals from that labelled part of the accumulation.

The member's interest in the fund increases, at the time of contribution, from two sources of inflow, the contributions that he or she makes, which is payable into the member account, and any incentive that government provides in addition, which is directed to the subsidy account (see the discussion in Section 5.5 and Box 3). A strong argument surely exists that members should not be able to access, prior to retirement and at their option, any of the subsidy paid into the account by government. That leaves the question only of how much of the member contribution ought to be made available to them to take out of their account when they wish to.

The position taken is that half of the member's contribution, plus any investment return accumulated on that contribution, should be available for withdrawal, at the option of the member. If it is indeed the case that early

access to contributions represent a significant incentive to participate and contribute actively, then locking up a significant part of these contributions should be considered a compromise on this position.²⁹⁴

This nevertheless means that the probability of meeting adequacy requirements, in other words ensuring a significant income in retirement, is undermined. A trade-off is being made between:

- The benefits of locking away a portion of member contributions in order to increase the expected retirement income, compromising the potential for active involvement; and
- The benefits of encouraging greater participation by members through a comprehensive set of incentives, compromising the possibility of greater preservation of savings until retirement.

The view expressed here is that reasonable access to contributions is required to attract participation and that the compromise of access is appropriate. The position should be tested as part of the strongly recommended engagement with the community of potential participants.

In summary, none of the government subsidy, which is payable into the *subsidy account*, and half of the member contribution, which is directed to the *member account*, is accessible to the member for withdrawal, at any time before, at or after retirement. For this purpose, the *member account* will need to be split into two parts, the *accessible member account* and the *frozen member account*. Information on the balance in both accounts should be made available to members using appropriate communication media.

Practical limits are considered appropriate to discourage the treatment of the fund as a ready pool of cash, like a bank account. It is recommended, for this purpose, that withdrawals be limited to two a year. In the event that any members are tax-paying, it is recommended that tax incentives are not provided on contributions into the scheme – an explicit incentive is recommended (see Section 5.5 and that withdrawals may be taken free of income tax. A charge at the time of withdrawal may be appropriate to cover administration costs that are not directly related to the primary purpose of the scheme.

Smoothing of investment returns cannot be applied to the *accessible member account* as opportunity should not be given to members to game the investment markets. For this reason, however, a more conservative investment strategy may be appropriate to these members so that the balance in their account is not subject to undue fluctuations. This is recommended.

Finally, allowing members to draw some of their accumulated saving prior to retirement and permitting them to take a portion of their savings at retirement in the form of a lump sum risks a significant compromise on the central objective of the scheme, which is to provide an income in retirement.

It is therefore recommended that all of the assets accumulated in the *subsidy account* and the *frozen member account* must be converted to an income at retirement and that the corresponding assets in the *accessible member account* may be withdrawn at retirement in the form of a lump sum, left for later access or, at any time after retirement, converted into an income on the same terms available to the accumulation in the *subsidy account*.

The *accessible member account* is therefore structured as a flexible fund for drawing on at any time, subject to the twice-annual limits, during the working years, at retirement or thereafter.

²⁹⁴ While the default position is that half of the contributions made by the member are directed to the *member account*, the member has the right to request that an additional portion of their contributions be directed instead to that part of the *member account* to which early access is not permitted.

5.5. Participation Incentives

The South African government plays a considerable part in supporting the social protection fabric of those living in South Africa. Total government expenditures on social grants is estimated at R192.7 billion for the 2018/19 financial year,²⁹⁵ of which R70.5 billion is attributable to old age grants. These grants benefit South Africa's large community of elderly poor. Some R73.0 billion in tax revenue foregone in the 2016/17 fiscal year is attributable to the incentives paid on formal pension saving either to employees or employers.²⁹⁶ These incentives benefit many of those working in the formal economy. They are regressive in nature, because they benefit particularly those with higher incomes for whom the benefit is proportionally greater than for their lower-income peers. It is entirely reasonable that government provides financial support to encourage pension provision by workers in the informal economy.

Government incentives may be provided in a number of ways, with contributions, for example, on an ongoing basis through the working life of an individual, or in proportion to the benefits, providing a top-up of some form. Government incentives can also be provided in kind, with access to state services or other benefits that might not otherwise be available to these members. As members have flexibility to contribute when they wish to, however, direct financial incentives to do so are likely to be the most effective way to encourage participation and contributions by members.

Recommendations concerning direct incentives by government are put forward with caution. On the one hand, precedent for generous direct financial support is strong and long-standing, in the form of the regressive tax incentives for retirement saving described above. On the other hand, state resources are scarce, so money spent on incentives need to be as effectively applied as possible. Precedent for state support of micro-pension initiatives exists, in India and in Rwanda for example, but this is typically intended to be temporary in nature. Finally, though tax incentives are largely meaningless to workers in the informal economy, if incentives are to be considered on constitutional grounds, then a direct rand incentive, proportional to contributions paid is not in line with the system of tax incentives currently in place for workers in general. This may be the time for a broader change to a credit-based system of incentives for all forms of retirement saving to be considered.

It is suggested that incentives are provided in such a way that a higher contribution by the member results in a higher subsidy by the state, and that the incentive is progressive in nature, paying a proportionally higher amount for the first Rands contributed by a member and reducing with increasing member contributions. This need not be complex: contributions could be matched on a rand-for-rand basis up to a defined level, call this *Tier I*, and at half of this rate thereafter up to a ceiling, call this *Tier II*. Policymakers can then determine a maximum monthly subsidy and set the respective levels of the two tiers accordingly.²⁹⁷

Consideration has been given to setting the maximum subsidy at the level of the social old age grant on grounds of equitable treatment, but members contributing to the scheme at a monthly rate equivalent to the social old age grant have considerable disposable income available to them. This suggests that a lower subsidy level would be appropriate, of the order of one-quarter of the old age social grant. At the current grant level of R1 810, Tier I would be R226.25, Tier II would be R452.50 and the maximum subsidy of R452.50 would be payable for any member contribution of R678.75 or higher. This is high, equal to a contribution of 10% of earnings for workers with an income of R6 787.50 or more, but strikes a balance between the constitutional mandate to provide fair levels of financial support to the members of this scheme and the costs of such support.

It is recommended that the monthly subsidy to members be limited to the level of one-quarter of the social old age grant at that time, that one-for-one matching be provided up to one-eighth of the social old grant, Tier I, and that 50c in the rand be provided for contributions from Tier I to a level equal to three-eighths of the social old age grant, Tier II.

Members should be encouraged to contribute on a regular basis but not in a way to maximize the benefits available from the rand-for-rand top-up available for contributions applicable only up to Tier I.

²⁹⁵ National Treasury (2019), *Budget review*, 20 February 2019, accessed at <http://www.treasury.gov.za/documents/national%20budget/2019/review/FullBR.pdf> on 12 June 2019, page 56.

²⁹⁶ National Treasury (2019) 121.

²⁹⁷ Setting the level of Tier I equal to half of the proposed maximum subsidy and Tier II equal to 1.5 times this subsidy, but contributing at a contribution of between Tier I and Tier II at the rate of 50 cents in the rand would result in a maximum government contribution in line with the proposed maximum subsidy.

It is recommended that the subsidy is reckoned monthly on the full amount of the contributions directed to the fund over the course of the month. It follows that no subsidy is payable towards the account of a member who does not contribute during the course of a month, whether that member has a record of consistent contributions or has made only rare payments into the scheme.

Though the account of the member, specifically the member's *subsidy account*, is to be credited with the subsidy, government does not necessarily need to physically pay the subsidy into the fund. It is nevertheless recommended that it do so,

- running a transparent national budget,
- keeping consistent the accounting for the assets and liabilities of the fund (and the calculation of the investment returns and associated additions to member credits), and
- avoiding the risks associated with a growing debt to the fund and its members.

These incentives are nevertheless expected to represent a significant addition to government expenditure. The total cost to government of the subsidies and administration is estimated at R247m in the first year of operation growing to R1.67bn four years later (see Section 7.7 for short-term projections for the corresponding long-term picture.)²⁹⁸ How should they be funded? A number of sources could be considered but the option recommended appeals to the constitutional provision of fair treatment of workers. available from the rand-for-rand top-up available for contributions applicable only up to Tier I.

It is recommended that the most logical of the available financial options to fund the cost of financial support for this scheme is a reduction to the incentives payable on formal-economy retirement contributions, most practically by reducing the annual rand cap that currently applies to these incentives. This would help to address the inequity of the regressive system of tax incentives and redirect some of this benefit to workers who have no access to such incentives at present, at least not through their informal-economy employment.

Government is in a strong position to provide other forms of incentives, training, for example, and initiatives that facilitate access to markets. Perhaps the key difficulty in this regard is identifying benefits to members of this scheme that could be denied to those who are not in this position.

It is recommended that the attractiveness of these and other benefits should form part of the engagement with these workers and their representative organisations.

5.6. Summary of Recommendations and Consideration of Disadvantages

The discussion that follows provides a synopsis of the proposed scheme design and concludes with a list of the key disadvantages of the proposed approach.

5.6.1. Summary of Recommendations

The table that follows summarises the recommended structure of the scheme.

²⁹⁸ The subsidy portions of these Figures are estimated, respectively for 2020 and 2024, at R220m and R1.47bn.

Table 1:

DESIGN FEATURE	RECOMMENDATIONS
Benefits	
Main categories	
Retirement benefits	The scheme is structured as a DC scheme with smoothed annual performance. The retirement age is the age of eligibility for social old age grants and changes with any changes to that age. Annual returns, net of investment fees, are smoothed over time, using a model that is subject to review from time to time to avoid insolvency risks or an undue build-up of reserves. Annuity rates are guaranteed for one year with notice of change of at least six months. The annuity increases at the rate of price inflation. It includes a five-year guarantee and contingent spouse's benefit, unless waived at the option of the member, who must confirm that they are not married at the time of waiver.
Survivor & disability benefits	Survivor benefits on death prior to retirement are payable to surviving spouse(s) and children, for a maximum of two years and age 18 for children. The income payable to the spouse is one-eighteenth of the total contributions (plus government incentives) received in the three years prior to death. The income to each minor dependent is payable at half of this rate and limited to four recipients. Income received increases by inflation after one year. All contributions paid by the member throughout the term of membership of the scheme (excepting those already withdrawn), plus investment returns, are returned to dependents in the form of a funeral benefit. Disability benefits are payable on total and permanent disability until the scheme retirement age at a rate of one-eighteenth of the total contributions (plus incentives) received over the three years prior to disability plus 10% of this amount payable as a retirement contribution, also attracting government incentives as if it were a normal contribution.
Early access to saving	Contributions paid by members are allocated to a member account, split evenly between an <i>accessible member account</i> and a <i>frozen member account</i> . The balance of the <i>accessible member account</i> is available to the member for up to two withdrawals a year, before, at or after retirement. Incentives received from government are directed to a <i>subsidy account</i> , which, together with the balance in the <i>frozen member account</i> , is not accessible to members but converts to an income on retirement. The member may direct the scheme to allocate more than half of the member's contribution to the <i>frozen member account</i> should they wish to. Notice, once given, may only be altered after one year.
Form of retirement benefit	
Income	All accumulated benefits except those in the <i>accessible member account</i> are converted to an annuity on the terms described above. Where the starting monthly income available from retirement is below 25 percent of the social old age grant, the full amount is transferred to the <i>accessible member account</i> , where it may be taken as cash at the option of the member.
Cash lump sum	The available lump sum is limited to that portion still left, at the time of retirement, in the <i>accessible member account</i> . It may be taken both at and after retirement and it may also be converted to a lifetime annuity on the terms then available to members.
Combination of options	Benefits must be taken primarily as an income, with cash available to the extent that the member account earmarked for early access still has a positive balance at the time of retirement.
Portability	A legal framework needs to be developed to allow and stipulate conditions for the portability of benefits to other countries, when a member resides in another country. This can also, in addition, be regulated by appropriate bilateral agreements concluded by South Africa. It is recommended that a regulatory framework be developed to inform, facilitate and streamline inter-(public) scheme portability.
Membership and contribution arrangements	Membership is voluntary and contributions not subject to any rules. Discussion with representative organisations is strongly recommended in order to develop ways to encourage active participation in the scheme.
Contributions	
Formula for contribution level and regularity of contribution payment	Contributions are entirely voluntary, though subject to an administrative minimum of R50. In the absence of any mandate, engagement with representative organisations encouraging and facilitating participation and active contributions is critical. It is not required that regular contributions be made.

DESIGN FEATURE	RECOMMENDATIONS
Incentives & vesting	
Incentive arrangements and withdrawals	Incentives are considered in four areas: 1) Contribution subsidies provide 100% matching up to a Tier I ceiling, subject to a minimum contribution of R50, and a 50% match thereafter up to the Tier II ceiling, giving a maximum subsidy of 25% of the social old age grant. 2) Early access to accumulated saving in the <i>accessible member account</i> should be permitted, at or before or after retirement. 3) Other membership incentives should be considered and evaluated with representative organisations. These could include access to labour offices and skills-development opportunities. 4) Member contributions are not applied to fund administration costs. Benefit incentives are not provided.
Delivery mechanisms	
Administrative backbone	Governance standards must be consistent with best practice in social security arrangements and equivalent to the corresponding norms set by private pension arrangements and corporate governance standards more generally. The scheme is not recommended to fall under the jurisdiction of the Pension Funds Act, but to form part of the social-security regulatory framework. The scheme is recommended as a ring-fenced extension of the NSSF, sharing its operational infrastructure and resources but separately managed and accounted for. If the scheme is launched in the absence of the NSSF, then it must be independently governed and administered, using a public platform, though it may outsource selected parts of its system development and operations. The investment of assets may not be conducted directly by the fund, managing conflicts of interest, but could be outsourced either to the Public Investment Corporation, a range of private-sector counterparts, or a combination of the two along the lines of explicit mandates that take into account the specific interests of the members of the scheme. The cost of risk benefits is to be funded from the contributions paid by members. For purposes of good governance, notice of three months must be given of any changes to the share of the contribution payable towards risk benefits. Administration costs are covered directly by government, directly incentivising the provision of an efficient service.
Contribution receipt and benefit payment	The administrative function must facilitate the collection of contributions from members and payments of benefits to members or their beneficiaries in ways that are convenient to their needs. Mobile-money payments and other electronic transaction channels should also be available for payment of contributions and receipt of benefits. In this regard, the governing body of the scheme must make an explicit effort to utilise the electronic money-transfer mechanisms most suitable to the members of the scheme, considering new options in future as they are developed. Progress updates should be provided to members, in a manner convenient to them, on pertinent features of their accounts such as: • contributions paid in total, • the allocation of contributions to insurance and saving, • government contributions received, • funds available for withdrawal, and • pension income due if received immediately or projected conservatively to retirement

5.6.2. Key disadvantages

Notwithstanding the diligence of the process with which the process of establishing and refining the design of the proposed scheme has been undertaken, it is appropriate to consider the most important disadvantages of the approach utilised and the manner in which these disadvantages may be addressed in position the scheme to targeted members. Each of the potential issues are considered in the discussion that follows.

- **Adequacy of benefits.** The balance between providing for retirement and the other key events of death and disability is difficult to achieve. This is particularly difficult for members with uncertain and irregular incomes because this renders the metrics typically used for workers in the formal sector somewhat unhelpful. The balance recommended emphasises retirement saving as a key objective of the scheme and positions the corresponding benefits payable on death or disability as the minimum required to support the members and beneficiaries through adverse circumstances. This is further mitigated by returning to

dependents all member contributions paid up until the time of death, and not withdrawn by the member prior to then.

- **System design.** Questions may be asked about the appropriateness of a defined contribution arrangement for these members. Careful consideration has been given to the alternative of a form of defined benefit and discarded on the grounds of financial uncertainty or the potential for gaming by members. The large majority of such arrangements in other countries are based on a defined contribution formula.
- **Access to retirement savings.** Feedback has been received from potential members that early access to some part of contributions is important and international precedent for such an approach exists. Nevertheless, the extent to which members should be protected from eroding their future retirement benefits is difficult to establish and contrary arguments either way are easily put forward. It is believed that an appropriate balance has been found in giving members access to half of their own contributions and none of the subsidy provided by government.
- **Cost to government.** Similarly, arguments that either too much or too little is being asked of government can be put forward. Administration costs cannot realistically be carried by members (or their employers) and government is considered the most appropriate funder as it is also indirectly responsible for administering the arrangement. Concerning the subsidy structure, some may argue that the scheme is unaffordable. Others may suggest that, with constitutional requirements in mind, subsidies are inadequate. A balance between these conflicting arguments has been sought in the recommendations put forward but the possibility is acknowledged that the equity of the overall system of incentives for retirement saving ought to be reconsidered.

This section starts with an acknowledgement of the extraordinary challenge of balancing a range of trade-offs across a number of design- and parametric options. The framework put forward aims to achieve this balance appropriately.

6. OPERATIONS

This section recommends an approach to oversight and management of the proposed arrangement, covering operational delivery and governance.

6.1. Infrastructure

What is this scheme required to deliver operationally? It must:

- Facilitate the receipt of member contributions, a process that is likely to be significantly more complex than under the NSSF because these contributions are expected to be paid in smaller amounts and using a variety of means suiting the interests of members;
- Maintain sound and accurate records of the membership and contribution history of members, split into the component accounts, their beneficiaries and their eligibility at any time to benefits;
- Transfer retirement benefits to eligible members or, on the death of these members, to eligible surviving spouses;
- Pay death- and disability benefits to members, assessing eligibility for these benefits, managing transfers to beneficiaries or to the estates of deceased members;
- Make available to members the amounts that these members wish to withdraw, up to the limits available to them, utilising payment mechanisms suitable to these members (refer to [Box 5](#));
- Communicate proactively to members the salient details of the contributions paid, account balances and eligibility to benefits on withdrawal, retirement, death or disability; and
- Manage queries and complaints from members within specified quality- and time standards.

Many of these requirements are shared with the corresponding obligations of the NSSF, the key differences being: (1) the flexibility with which the scheme needs to be able to manage the receipt of contributions and payment of benefits to suit the needs of members; and (2) the imperative to communicate clearly and frequently with members regarding the contributions received and the financial value of the benefits to which they are eligible.

Critical to the success of this arrangement are the establishment of a reliable system for tracking of member accounts and effective channels of communication. Members need to register with the scheme providing biometric information and identifying dependents. It is recommended that the tracking of member accounts is executed through their South African identification numbers and, for participating migrants who do not have a South African identification number (limited, it is assumed, in any event to those with regular status in South Africa, and to

employment in South Africa) a passport number along with the country of issue.²⁹⁹ These are used as scheme member numbers and are used to link any contributions paid to the members.

Box 5: Flexibility of financial interactions with members

Credit and debit cards, debit and stop orders and payroll deductions are among the many payment mechanisms utilised by customers in the last ten or twenty years as cheques were phased out and cash became outdated.

But the list of payment options now available is snowballing. Internet-based payment mechanisms like Paypal, Stripe, Google Wallet and South Africa's PayU are jostling for supremacy with alternative money-transfer mechanisms based on mobile wallets and QR-based payment options, SnapScan, Zapper and Masterpass, for example, and the third-party payment facilitators such as EasyPay that service the money counters in South Africa's major retailers. These retailers typically also offer a range of financial services in partnership with banks, which also provide money-transfer and eWallet services directly (FinMark Trust, 2017).

The scheme must provide to its members the payment options that best meet their needs and suit their lifestyles and uncertainty of cashflow. Insisting on payment by debit order may be the most convenient to the scheme, for example, but is completely unrealistic to members who do not wish to subject themselves to the inflexibility of the system. Permitting them, on the other hand, to pay in cash at the offices of the South African Social Security Agency or the South African Post Office, administratively intensive and prone to errors, is required in the interest of members but is generally expensive. More efficient than this is the alternative of deposits through the ATM network of the banks.

Mobile-money options are increasingly important to low-income South Africans, must be offered to members of the scheme and must develop to reflect changes in the preferences of these members and the technology available at the time. The principle of enabling a range of payment options is emphasised without making firm recommendations on exactly those methods that should be used, which may be out of date by the time the system is launched.

Reference: FinMark Trust (2017), *Research Report on Mobile Money in South Africa*, September

The tracking/tracing of individual beneficiaries *when benefits are due* raises particular problems, shared with the rest of the social security system in South Africa. This is in particular true in the case of beneficiaries moving to, or residing in other countries.³⁰⁰ To avoid or minimise the possibility of unclaimed benefits, deliberate steps need to be taken by the scheme administrators, in addition to a system of constant and sound communication with members and beneficiaries. In the event of payments to beneficiaries abroad, this is a matter, which should ideally also be regulated in bilateral agreements.

Communication channels should be flexible to the needs of members but the most promising alternative available at present appears to be a mobile number registered by the member with the scheme and alterable at the request of the member. This facilitates communication outwards to the member. For queries, complaints and other communication in the other direction, a website, toll-free number and a number of automatic mobile-based enquiry numbers should be available. Further alternatives should be made available to suit member needs as technology develops, just as for the payment options (see [Box 5](#)).

The discussion that follows sets out the alternatives considered for operational infrastructure of the scheme. Issues of governance are considered in [Section 6.2](#). Governance considerations nevertheless narrow the range of options considered from an operational perspective because they rule out the possibility of establishing this scheme under the auspices of the Pension Funds Act, which is not considered an appropriate legal framework for a social security arrangement.

²⁹⁹ The financial- and demographic projections of the scheme do not make explicit allowance for individuals that do not have a South African number. If such individuals are not reflected (or partially reflected) in the corresponding data contributing to the modelling, notably Labour Force Surveys and General Household Surveys but they are permitted to join as members of the scheme, then such an approach is conservative from the perspective of scheme viability. The approach understates the extent of government incentives, however, if the view were to be taken that foreign nationals should also be eligible for such incentives.

³⁰⁰ It needs to be noted that citizens of Ghana and Rwanda abroad may join the Ghana Informal Sector Fund and the new Rwandan Universal Digital Pension Scheme respectively.

The discussion that follows considers the advantages and disadvantages of five different possibilities,

- The Unemployment Insurance Fund (UIF);
- The NSSF;
- An existing private-sector pension arrangement;
- A completely new entity running the fund on in-house capability; and
- A new entity with extensive outsourcing of services.

Before considering each of the alternatives, preliminary comments are provided regarding the nature of the task facing the administrative operation. It is important, on the one hand, not to underestimate the complexity of the operational task required and, on the other, to recognise the extent of the skills and operations already in the market.

Outsiders to the world of pension-fund administration frequently fail to recognise the complexity of running a defined contribution retirement arrangement. The process of tracking the value of member accounts and of converting the value of pooled assets into the corresponding shares attributable to each member – the process is known as *unitisation* – is not straightforward. Instances of failed operations in this space characterise the retirement industry of the last ten or twenty years. To this should be added a number of features specific to this scheme that further complicate the administrative challenge:

- The formula for risk benefits that looks back on a recent history of contribution payments;
- Small contributions, infrequent or interrupted;
- Partial withdrawals on demand;
- A range of electronic payment- and withdrawal alternatives;
- The possibility of member queries to which administrators may not be accustomed; and
- The capacity to manage portability between schemes and across borders.

For an entity without working experience of the defined contribution environment to attempt to build an operation like this from scratch would be risky. On the other hand, a great deal of experience has been gained in the development and delivery of defined contribution arrangements, some of them providing death- and disability benefits and many of them collecting contributions from individuals. In addition to this, the experience of the UIF at gathering small contributions is helpful. The discussion of alternatives starts with the UIF.

6.1.1. The UIF

The UIF is a social security arrangement, falling under the oversight of the Department of Labour (DoL), with a long history of running complex operations, including collecting contributions, investing assets (on an outsourced basis) and paying benefits to its members. Since the contributions due to the UIF amount to 2% of income, it is accustomed to working with relatively small amounts at the collection stage. Its members are largely formally employed, but many of them are likely to be in informal employment for periods of their interaction with the UIF. Contributions are largely received from employers, however, not the UIF members themselves.

Payments to the UIF may be made:³⁰¹

- via stop order,
- by direct bank deposit through three of South Africa's banks, or
- by internet payment to accounts held on behalf of the UIF by four different banks.

The UIF also provides benefits to its members, sometimes in not particularly large amounts, but only through labour centres, not directly into bank accounts.³⁰² The website of the DoL suggests that documents must also be

³⁰¹ Source, the Department of Labour, <http://www.labour.gov.za/DOL/legislation/acts/how-tos/unemployment-insurance-fund-uif/how-to-pay-the-uif>, accessed on 13 June 2019.

³⁰² Source: the South African Labour Guide, <https://www.labourguide.co.za/uif/907-uif-unemployment-benefits>, accessed on 13 June 2019.

processed at labour centres,³⁰³ but it appears that the application forms concerning claims may also be submitted online.³⁰⁴

The UIF system must track contributions received and calculate benefits based on this record of contributions and the corresponding income of the worker, suggesting reasonable capacity to track individual accounts. This falls short of the corresponding administrative complexity associated with defined contribution pension funds, which should not be underestimated.

The UIF has established links with labour-support centres, which process the payments due to members. This would facilitate the provision of added services to the member of this scheme, access to the development of skills, for example, which it is recommended forms part of the suite of benefits provided to the members of the scheme.

The UIF also manages a very large asset portfolio, though the management of these assets is outsourced to the Public Investment Corporation. Unitisation of assets, the process under which those assets attributable to members are divided between them to produce the notional values of individual accounts, does not form part of UIF capabilities. Finally, the UIF has a long record of governance, oversight, audit and financial reporting. In summary, the UIF has:

- An established track record of collecting contributions, managing individual records and attributing the contributions received to these accounts;
- Soundly established links to the network of labour offices;
- A somewhat limited framework for paying benefits;
- An established system for managing assets through an outsourcing arrangement, albeit on an aggregate basis; and
- Strong experience in the disciplines of governance, financial management, audit and reporting.

It is not clear whether the use of the UIF as administrator would enhance or dampen the levels of confidence in the system by participants. If access to labour-support services forms part of the benefits available to members, then the issue may be moot. This subject may usefully form part of the recommended engagement with informal-economy workers to gauge their interest in the scheme and in the proposed operational structure.

6.1.2. The NSSF

Though the details of the NSSF are not known with certainty, it must have:

- Considerable premium-collection capacity, albeit primarily structured for interaction with members who are formally employed or self-employed;
- Member record-keeping capacity covering very large numbers;
- The capacity for retaining a full history of the working details of members;³⁰⁵
- Significant infrastructure for the investment of assets, internally or through outsourcing arrangements; and
- The means to make the payment of regular income to members, in all likelihood directly into bank accounts.

As a fully-fledged and very large social security arrangement, the NSSF is likely to be structured to meet international minimum requirements concerning the governance of such schemes. Due to its anticipated size, it is also likely to be established as an independent entity rather than seeking to tap into the corresponding operational or governance infrastructure of other state-owned social security entities. A number of members of the NSSF are also likely, particularly over the long-term, to be eligible for participation in the scheme under consideration in this paper (and vice versa), potentially leading to some saving on the costs of record-keeping.

The development of the informal-economy scheme in Ghana follows a pattern similar to that considered here. The informal-economy scheme was put in place as an independently-managed extension of an existing arrangement, the national pension scheme (SSNIT). The SSNIT itself established the fund for informal-economy workers.

³⁰³ Source: the Department of Labour, <http://www.labour.gov.za/DOL/legislation/acts/how-tos/unemployment-insurance-fund-uif/how-to-claim-uif-unemployment-benefits> accessed 13 June 2019, but marked as last updated on 18 December 2008.

³⁰⁴ Maya on Money, <https://mayaonmoney.co.za/2017/10/good-news-claiming-uif/>, accessed 13 June 2019.

³⁰⁵ The proposed career-average defined benefit structure for formal-economy workers requires the retention of a complete history of the income of the member throughout the working life of the member.

Subsequently, on the assumption that SSNIT lacked a legal mandate to manage/govern the Informal Sector Fund, the scheme had to be transferred, and was then acquired by the private securities firm National Trust Holding Company (NTHC) in 2012. Lately however, it has been determined that SSNIT is not legally precluded from managing a scheme for informal economy workers. SSNIT is therefore considering the revival of the scheme (by buying this back from the NTHC), or the creation of a new scheme.³⁰⁶

The key capacity that the NSSF will not necessarily have, given that, at the time of writing, it is not expected that it is structured as a defined contribution arrangement, is investment unitisation, the process under which assets are allocated across members. This is an involved process that requires considerable experience (see Section 6.1). Second to this disadvantage is the possibility that the designers of the NSSF do not prioritise the development of innovative channels for the transfer of contributions and benefits, which those working informally may need to a greater extent than their formally-employed counterparts, who often have better access to mainstream infrastructure.

One possibility, considered below, is that the NSSF is not extended to include the scheme considered for informal-economy workers, but that a large part of the operation of an independently-established arrangement is instead outsourced to the NSSF.

6.1.3. Outsourcing to private-sector pension fund

Administration of the scheme under consideration in this study could be outsourced to an entity already operating in the private sector.³⁰⁷ The challenges of administering defined contribution arrangements have been the domain of a number of arrangements, some of which are operated on an open basis and are geared to collecting contributions from individuals as well as employers. Note that the outsourcing arrangement would in all likelihood not be with a retirement fund itself, but with the entity providing the administration services to one or more suitable funds.

Full-service outsourcing to existing private pensions funds or their administrators is nevertheless not considered a strong possibility, largely on the grounds that these funds are not able to provide outsourced services but also because they are not in a strong position to manage highly fluctuating contributions and work with members outside of formal employment structures.

Perhaps the greatest risks in such a model, however, concern

- the profit motive of the administrators of these funds and of other services providers falling within the same financial group,
- the temptation for such entities to use the information at their disposal to attempt to sell further products or services to these members, and
- the associated damage to the confidence of members or potential members that may result from this possibility.

Those arrangements with the greatest capacity to provide the service sought are also those, generally very large, that have the strongest commercial incentives to provide services to the members of the envisaged scheme. Small, specialised, independent providers of administration services, which might be considered appropriate on grounds of their independence, are less likely to have the capacity to manage the volumes involved.

Still, parts of the administrative requirements of this scheme might be delivered externally. Outsourcing parts of the administration requirements to private-sector entities with experience in running pension funds is possible as long as clear measures are in place to protect personal data as well as legal measures prohibiting the marketing of products to Fund beneficiaries and/or deduction from beneficiaries' income received from the Fund. This is considered further in the discussion in Section 6.1.5.

³⁰⁶ See Section 3.2.4 and the accompanying authority.

³⁰⁷ The Government Employees Pension Fund (GEPF) has been considered as a candidate for outsourcing but disregarded for a number of reasons. The first, and probably the most important, is that the GEPF operates under a mandate to its members. Taking on the task of contributing to the administration of another arrangement potentially compromises its ability to deliver on this mandate. The second is that the GEPF is a defined benefit arrangement that receives contributions, in bulk, from the state and state-owned entities. For a number of technical reasons, in other words, it most likely does not have the skill set and experience for the requirements of this scheme.

6.1.4. New self-contained entity

A completely new entity may be established to manage the scheme. Operational infrastructure would need to be developed from the ground up under this model but could best be tailored to the specific needs of these members. The channels offered to members for premium collection and benefit payment could include all of the those considered most appropriate to the workers targeted by the scheme. These channels could also be further enhanced over time, and should, in the interests of members, as technology facilitates such improvement.

Such development may produce ultimately the best system but comes with risk and potentially large cost, particularly as a wide range of alternative channels ought to be considered, including the possibility of integration with other government agencies for the convenience of members.

Investment mechanisms and unitisation capabilities would need to be developed as well. These are commonly undertaken in the private sector but less so in public-sector entities. Careful sourcing of the skill set would be required and the risks associated with any tender process recognised. Full-time employment of the appropriate skills is a possibility, but such skills are likely to be scarce. One possibility is to tap into the skills and experience of any state-owned entities that provide access to retirement savings on a defined contribution basis.

Governance is of critical importance but not particularly expensive to establish. Designing a new scheme from scratch would provide a good opportunity to ensure the effectiveness of the infrastructure supporting systems of governance. Refer to the discussion in Section 6.2.

In summary, this route may provide the best outcome ultimately but it could also run the most significant risks along the way. Significant expenditure is likely to be incurred, well into the tens of millions of rands and possibly in excess of R100m, without any realistic certainty of the quality and reliability of delivery.

6.1.5. New entity with significant outsourcing

An alternative to the self-contained option is a new scheme that utilises a wide range of options for outsourcing. This retains the advantages of (1) putting in place the governance infrastructure best suited to the scheme and (2) identifying the best available providers of each of the services required by the scheme, contribution collection, record-keeping, benefit payment, investment and support functions like actuarial oversight and audit. Perhaps the main problem associated with the approach is that coordinating services across a wide range of providers can be inordinately complex and fraught with risk, even if each of them is the best available in their particular discipline.

In combination with a separately-established entity, the NSSF itself may prove to be the most attractive partner for a number of services, cutting down on the risks of coordination. What the NSSF, in its latest iteration, appears to lack is innovative premium-collection mechanisms and the capability to unitise assets. The latter must be offered under this scheme, however, if it is to accept voluntary additional contributions on a defined contribution basis. The former could be motivated to the designers of the arrangement on the basis that it offers the multiple channels that members of a national-scale operation should be provided.

6.1.6. Sectoral funds

The possibility of establishing separate funds for the members of different working sectors could also be considered. Tunisia provides a good example of such an approach (see Section 3.2.3 and in particular the details contained in Figure 1).

There are a number of reasons why such an approach might be regarded as inappropriate in the South African context, many of them concerning the loss of economies of scale that such an approach would involve. One of the most significant inhibitors of such an arrangement, however, is the problem of the lack of data. Policymakers in South Africa have, as a result of this problem, a deeply deficient understanding of the sectoral nature of informal-economy work. Sector-specific contributory social security arrangements of other types, specific to workers in the informal economy, do not appear to exist, making it more difficult to pursue this approach in the pension space.

A representative study that covers this issue would be helpful in this regard but would take some time to complete.

6.1.7. Recommendation

All things considered, the scale and internal technical capabilities of the NSSF appears to offer the most efficient way to establish this scheme. Whether it should be a fully-integrated part of the NSSF or a separate arrangement that utilises the services provided by the NSSF needs to be further considered. As it appears, however, that a large number of working individuals may be members of both arrangements, a fully-integrated arrangement is regarded as the most effective way to structure the two entities in combination.

The assumptions underpinning the financial modelling described in Section 7 are summarised in [Annexure 10](#). Allowance has been made for an annual administration cost per member of R300 in 2020 terms, increasing at the rate of inflation thereafter. This is consistent with the corresponding cost per member derived from the 2018 financial statements of the UIF, adjusted for inflation, and is approximately three-quarters of the corresponding average equivalent in the insurance industry, reflecting an expectation of some scale efficiency in the scheme. [Annexure 12](#) shows the sensitivity of results to changes in this assumption, providing outputs for the alternatives of R400 and R500 per member per year.

No explicit allowance has been made for the development costs of the infrastructure of the scheme, which is assumed to form part of government's financial contribution to the scheme and its members. Building the administrative capability of the scheme from scratch on a stand-alone basis could be both expensive and risky. Developing the capability as part of the corresponding development of the NSSF would be both fairer to all parties and more efficient. With careful planning, with coordination of this development with the corresponding development of the associated infrastructure of the NSSF and with appropriate outsourcing, this development could be undertaken at reasonable cost and with sound management of the associated risk.

It is nevertheless acknowledged that this scheme may be put in place in the absence of the NSSF. A good example of such an approach internationally is the defined-contribution arrangement put in place in Rwanda that encourages periodic contributions by members and is administered on a standalone basis. The development of infrastructure was supported by international expertise in micro-pension systems. Such expertise would be helpful were this scheme to be developed independently of the NSSF.

This should not be ruled out, but it does involve some cost and risk, along the lines mentioned in the discussion of this section. Nevertheless, expertise and experience of arrangements such as this one is considerable, notwithstanding some of the unique aspects of premium collection and risk-benefit formulae that characterise the scheme.

Designers of the operational infrastructure should be prepared to take advice from pension fund experts, being careful to ensure that this advice is provided at an arm's-length from the corresponding development of systems and other operational infrastructure. It may be tempting to entertain offers of inexpensive, or even free, development by private-sector providers in return for ongoing management fees or, more dangerously, access to customer information. This must be resisted in favour of tapping into private-sector expertise but retaining scheme independence.

6.2. Governance Principles and Recommendations

The principles underpinning the governance of this scheme are discussed in detail in Section 2.4. The discussion that follows draws from those principles and recommends a way forward. The recommendations are also mindful of the discussion on the operational framework above, and the requirements flowing from the discussion in this paper on the design of the recommended scheme option. The recommendations also assume a shared governance platform with the NSSF.

Bearing in mind the considerations above as well as relevant international and corporate governance standards and guidelines, the key components of a recommended governance framework should reflect the following core governance components:

- Care should be taken to ensure the independence of the governance framework. As a minimum, this should be guaranteed by supervisory and directory powers granted to an autonomous Board, whose mandate, powers, functions, rights and obligations are derived from the legislation specifically designed for the NSSF context. The composition of the Board should be tripartite in nature, and with representation of informal

economy workers specifically guaranteed, in addition to key experts representing core required professional skills.

- Consideration should be given to an appropriate institutional framework to provide regulatory direction to the Scheme/NSSF on an ongoing basis, as well as a suitable reporting framework applicable to the NSSF Board, embedded in the NSSF-specific legislation referred to above.
 - Regarding the former, in the absence of an existing institution to undertake this task in the public (retirement) environment, it is proposed that an entity, similar to the Financial Sector Conduct Authority, be established for this purpose. This entity should be independent from government, and should have a small, high-level governing structure, the composition of which should be tripartite in nature, but with representation of informal economy workers specifically guaranteed, in addition to key experts representing core required professional skills.
 - Regarding the latter, a threefold reporting framework is recommended, i.e. reporting to the regulatory institution indicated above, to Government, and to the relevant Parliamentary portfolio committees.
- The Board should delegate key functions to properly mandated and staffed sub-committees that have the required mandate to manage key functions on behalf of the Board – in particular in relation to investments, operations, financing, outsourcing, member care and communication, monitoring and evaluation, and human resources.
- To the extent required, the Board should have the power to outsource certain key functions to outside professional service providers where these functions cannot otherwise be adequately provided – for example, managing the assets and investments of the Scheme/NSSF.
- Well-designed policy frameworks should guide and inform the operations of the Board and its sub-committees, as well as outsourced institutions, approved by the regulatory institution indicated above – for example, investment, client service, operational and human resources policies.
- The Board should have the power to (independently) appoint and supervise the Chief Executive Officer and key senior officials of the Scheme/NSSF.
- Operations of and reporting by the Board and its sub-committees, as well as the management of the Scheme/NSSF, should be underpinned by ongoing monitoring and evaluation, provided for in a guiding instrument (e.g., a policy) approved by the regulatory institution.
- Operations of the Board, its sub-committees and the Fund/NSSF itself should be informed by a state-of-the-art underlying information technology platform.
- Given the specific nature and stated objectives of the informal economy-dedicated scheme, attention should in particular be paid to client service, communication, education and training, specifically with a view to ensure that informal economy workers are adequately sensitised and provided with ongoing communication, also in the form of regular member statements.

The details of implementation may depend on a number of factors but must adequately take into account the principles set out herein. While the operational infrastructure of the arrangement may depend on whether it shares resources with the NSSF, the governance does not. The governance of this scheme needs to be marked by independence of oversight regardless of the operational details or cooperation with other entities, in order to protect the interests of members of the scheme and their beneficiaries. Therefore, if the scheme is launched in the absence of the NSSF, or outside the NSSF framework, then it must be independently governed and administered, using a public platform, though it may outsource selected parts of its system development and operations.

7. FINANCIAL MODELLING

Financial viability for the proposed arrangement is established in the analysis described in this section. The discussion that follows includes consideration of:

- **Adequacy**, the implications of the arrangement for participating workers and their dependents;
- **Sustainability**, the financial viability of the scheme in the short-, medium- and long-term; and
- **Efficiency**, the approaches used to establish an acceptable overall cost of operation and investment of assets.

The analysis, to inform financial viability, was done by means of a stochastic model wherein allowance is made for some of the key, future uncertainties of the proposed scheme (e.g. the extent to which those in the informal economy would participate in the scheme). By allowing for variation in some of the model's input items, the model's

output then provides insight into the range over which future outcomes might be observed and which outcomes are more likely than other.³⁰⁸

At a high level, the model design is as follows:

- Modelling assumed the scheme to be introduced in 2020 and from there modelled it until 2065. The relatively long duration was chosen to ensure that indicative results could be observed for a generation who participate in the scheme throughout their entire working life (i.e. joining around 2020 and retiring around 2065).
- For the 2020-2065 modelling period, the South African population is projected, as well as the subset expected to participate in the informal economy.
- From the assumed informal-economy population, the model then projects the number of participants in the scheme over the period (under various rates of assumed participation) and for those who choose to participate, how much they contribute to the scheme (under various rates of assumed contribution).
- From this, the model then quantifies the value of risk benefits expected to be incurred every year, so as to inform the portion of contributions that is required to fund a sustainable “risk pool” over time. The balance of contributions is available to be saved for retirement, from which the model can then quantify the extent of accumulated savings that is expected to be available at retirement (under the various assumptions).

In the relevant subsections that follow below, the expected metrics of the scheme is shown for the first five years of operation. Further info is shown in [Annexure 10](#) (highlighting the key modelling assumptions), [Annexure 11](#) (setting out the key output metrics for the scheme from 2020 to 2065), [Annexure 12](#) (showing key sensitivities on the proposed design) and [Annexure 13](#) (providing the high-level assumptions and key output for the design alternatives).

7.1. Adequacy of Benefits | Retirement

The adequacy of retirement benefits is measured by means of the “replacement factor”. This is defined as the pension that a participant can buy with the accumulated savings at retirement from the scheme divided by the earnings of the participant immediately prior to retirement.

It must be borne in mind that an individual member’s accumulated savings will depend on a range of factors. These include when the scheme was joined, the contributions made between joining and retirement, the extent of savings withdrawn during the working years. The replacement factor, furthermore, depends on the assumed earnings prior to retirement, a potentially meaningless measure in the case of informal-economy workers, who may not have been earning anything in the period immediately prior to attaining the defined age of retirement.

For the purpose of illustrating a replacement factor, it is assumed that members do not withdraw any of their savings during their working life and that the entire accumulated amount at retirement is used to buy a pension (as opposed to taking part of it as a lump sum). Furthermore, in addition to the assumptions and methodology set out in [Annexure 10](#), the replacement factors shown below are for a member who joins the scheme in 2020 and retires in 2065.

Unisex results are shown, as well as separate results for female and male members. The reason for the difference is that males have a shorter life expectancy than females. As such, for a given purchase amount (and all else being equal), a male retiree is expected to be able to convert accumulated savings to a larger pension than his female counterpart (because his pension will be paid for a shorter period, on an expected basis, than hers).³⁰⁹

The financial model was run 100 000 times, using the assumptions as set out in [Annexure 10](#). The figure below illustrates the distribution of the replacement factor outcomes for a member who retires in 2065, after having

³⁰⁸ Not all of the inputs items were allowed to vary in this manner, just those inputs that were regarded as crucial to the assessment of the system and therefore risky to assume rigidly. Rates of participation in the scheme, for example, are subject to a high level of uncertainty. In order to accommodate this, it was assumed that these rates would increase over time and with the age of the member but the uncertainty of the rate within these parameters was managed by specifying a statistical distribution within which the participation rate (by age or year) would fall and then running the model many times and considering the corresponding distribution of the results. Refer to [Annexure 10](#) for further detail on the assumptions utilised.

³⁰⁹ In some markets, policymakers have taken the view that such a distinction between males and females in the conversion of retirement savings to income is not appropriate and should not be permitted. We have not taken a position on the matter and have instead modelled unisex rates as well as separate male and female rates for the purposes of the financial analysis illustrated in this report.

participated in the scheme throughout the working life. Given how sensitive the results are for the retirement age, the results shown, in the table below are for retirement at both 60 and 65. The graphs thereafter, depict the distribution of observed outcomes for retirement at 60:

Table 1:

Showing rounded percentages		Unisex	Female	Male
Retirement @ 60	Average expected replacement rate	39%	378%	41%
	90% of observed replacement rates	Between 26% and 54%	Between 24% and 51%	Between 27% and 56%
Retirement @ 65	Average expected replacement rate	54%	51%	55%
	90% of observed replacement rates	Between 34% and 75%	Between 32% and 71%	Between 35% and 78%

Figure 5: Distribution of observed replacement rates (unisex)

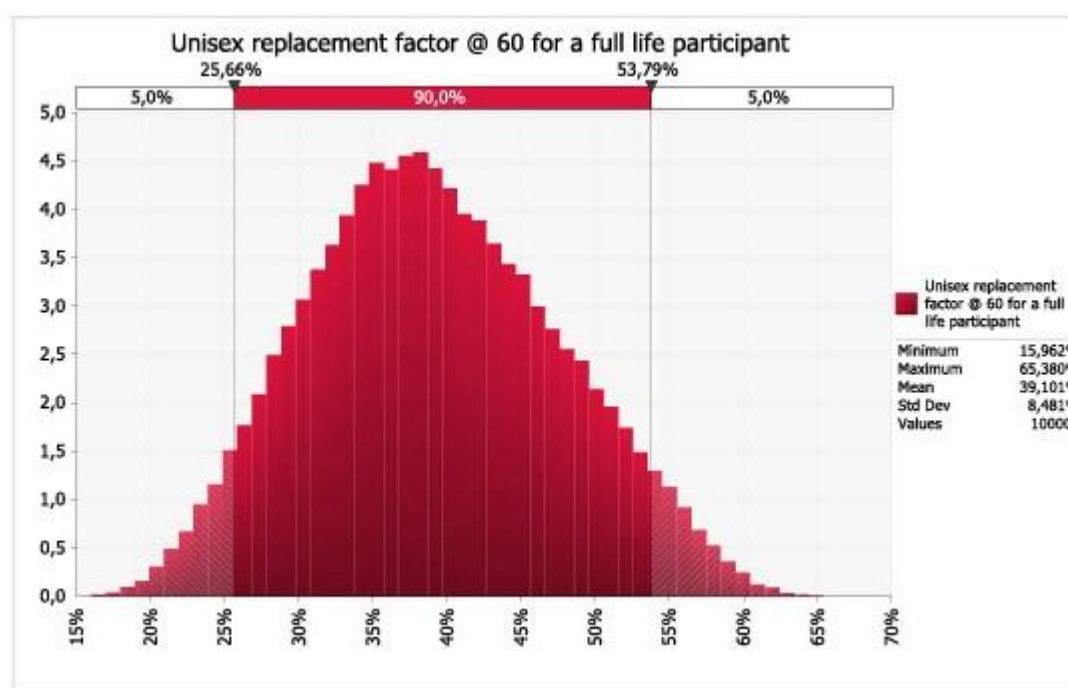


Figure 6: Distribution of observed replacement rates (female)

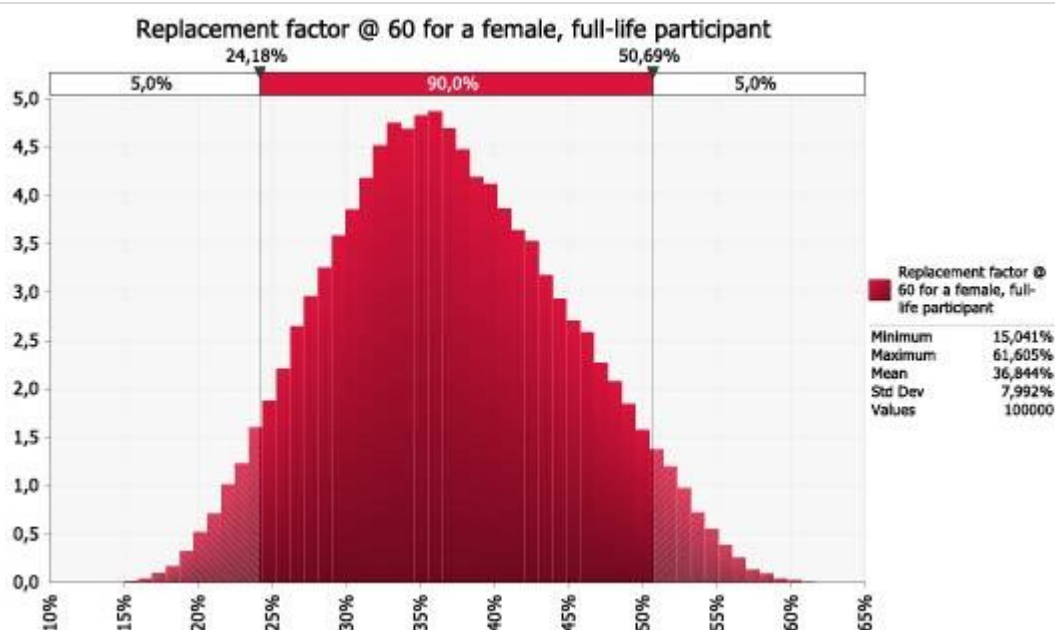
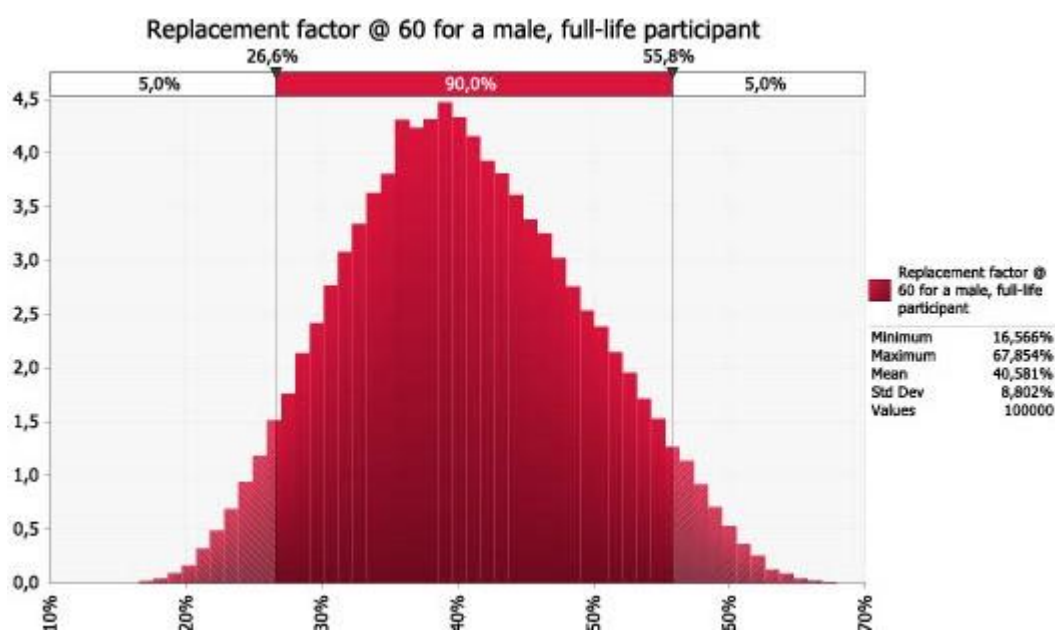


Figure 7: Distribution of observed replacement rates (male)



Discussion of observed replacement rates

Replacement rates can be boosted by the following measures:

1. *Participants*: Join sooner, save more & save consistently over the working life
2. *Government*: Provide a larger subsidy contribution
3. *Design*:
 - a) Reduce risk benefits (so that a larger proportion of contributions goes towards savings); and/or
 - b) Increase the retirement age to 65 (which boosts replacement rates as shown above).

Comparison with the alternative designs is provided in [Annexure 13](#), with a salient summary below:

1. *Simple Defined Contribution*: Yields lower replacement ratios, given the absence of Government subsidies.
2. *Simple Defined Contribution + Risk Benefits*: Yields lower replacement ratios, given the more generous dependents' benefits after retirement.
3. *Career Average Defined Benefit*: Replacement ratios will be higher overall, mainly driven by higher Government subsidies.

5. *Modified Final Salary Defined Benefit*: Yield lower replacement rates due to the openness of the design to “gaming of the system”.

7.2. Adequacy of Benefits for a Typical Member | Death before Retirement

In order to illustrate the adequacy of the death benefits, the following assumptions are used:

1. The participant joins the scheme in 2020, earning R2 769 per month (the assumed average in 2020 for all participants of the scheme). Beyond 2020, earnings grow in line with inflation.
2. The participant is assumed to die after having been a member of the scheme for 10 years.
3. The participant consistently contributed 7.5% of earnings every month throughout.

For this member, the benefits are thus as follows:

1. *Funeral benefit*: Own contributions (that is, contributions excluding the Government subsidy) over the 10-year period amounts to R32 848, which is paid as a funeral benefit.
2. *Partner & children pensions*: The contributions (own + Government subsidy) in the last 36 months (prior to death), amounts to R23 859. This implies a partner pension of R1 326 /month (1/18th of R23 859) and a child pension of R663/month (1/36th of R23 859) per child (both payable for 24 months, with the number of children capped at four).

The total value to the family of the deceased, would depend on the family composition, as shown in the table that follows below.

Table 2:

	Monthly pension (paid for 24 months)	Replacement rate (vs earnings before death)	Capitalised value of the monthly pension	Funeral benefit return of own contributions	Total value of the death benefit
			(A)	(B)	(A+B)
Partner only	1 326	28%	30 383	32 848	63 231
Partner + 1 child	1 988	43%	45 575	32 848	78 423
Partner + 2 children	2 651	57%	60 767	32 848	93 614
Partner + 3 children	3 314	71%	75 958	32 848	108 806
Partner + 4 children	3 977	85%	91 150	32 848	123 998

As noted above, the benefits depend on the participant's contributions over the period. For this reason, it is important to consider the impact of contributions at different rates, as shown in the table below (using the same assumptions as above, but each time with different contribution rates):

Table 3:

Total value of the death benefit at different contribution rates					
Sensitivities at different rates of contribution	Contribution @ 2.5%	Contribution @ 5%	Contribution @ 7.5%	Contribution @ 10%	Contribution @ 12.5%
Partner only	21 077	42 154	63 231	84 308	105 385
Partner + 1 child	26 141	52 282	78 423	104 564	130 705
Partner + 2 children	31 205	62 410	93 614	124 819	156 024
Partner + 3 children	36 269	72 537	108 806	145 075	181 343
Partner + 4 children	41 333	82 665	123 998	165 330	206 663

7.3. Adequacy of Benefits for a Typical Member | Disability before Retirement

In order to illustrate the adequacy of the disability benefit, the following assumptions are used:

1. The participant joins the scheme in 2020, earning R2 769 per month (the assumed average in 2020 for all participants of the scheme). Beyond 2020, earnings grow in line with inflation.
2. The participant is assumed to become disabled after having been a member of the scheme for 10 years.
3. The participant consistently contributed 7.5% of earnings every month throughout.

For the above member, the disability benefit amounts to a replacement rate of 31% (against the earnings immediately prior to disablement) made up as follows:

1. *Disability pension*: A monthly pension of R1 326/month, payable until retirement at age 60 (since the benefit is for “total and permanent” disability, recovery prior to age 60 is assumed not to be possible). The monthly pension amount increases annually at the rate of inflation.
2. *Continued contribution to retirement savings*: From disablement, until retirement, the risk pool will continue to make the participant's contribution towards retirement savings in the scheme, at a contribution rate of 10% of the disability pension amount.

The total value to the disabled participant, would depend on his or her age at the date of disability (since the benefit is payable until retirement) and gender (given the difference between female and male mortality). Hence the illustrative results, as well as the sensitivities are shown separately for the two genders (first for female and thereafter for male), for various ages at date of disablement.

Table 4:

FEMALE					
Illustration @ 7.5% contributions	Monthly pension amount	Monthly contribution to retirement	Total monthly benefit accruing to the disabled	# of years benefit will be paid	Capitalised value of the disability benefit
Disability @ age 25	1 326	133	1 458	35	383 567
Disability @ age 30	1 326	133	1 458	30	348 313
Disability @ age 35	1 326	133	1 458	25	307 965
Disability @ age 40	1 326	133	1 458	20	261 787
Disability @ age 45	1 326	133	1 458	15	208 937
Disability @ age 50	1 326	133	1 458	10	148 452
Disability @ age 55	1 326	133	1 458	5	79 227

Table 5:

FEMALE	Capitalised value of the disability benefit at different contribution rates				
Sensitivities at other contribution rates	Contributions @ 2.5%	Contributions @5%	Contributions @7.5%	Contributions @10%	Contributions @12.5%
Disability @ age 25	127 856	255 711	383 567	511 423	639 279
Disability @ age 30	116 104	232 209	348 313	464 417	580 521
Disability @ age 35	102 655	205 310	307 965	410 620	513 275
Disability @ age 40	87 262	174 525	261 787	349 050	436 312
Disability @ age 45	69 646	139 292	208 937	278 583	348 229
Disability @ age 50	49 484	98 968	148 452	197 936	247 420
Disability @ age 55	26 409	52 818	79 227	105 636	132 045

Table 6:

MALE					
Illustration @ 7.5% contributions	Monthly pension amount	Monthly contribution to retirement	Total monthly benefit accruing to the disabled	# of years benefit will be paid	Capitalised value of the disability benefit
Disability @ age 25	1 326	133	1 458	35	368 378
Disability @ age 30	1 326	133	1 458	30	336 137
Disability @ age 35	1 326	133	1 458	25	298 726
Disability @ age 40	1 326	133	1 458	20	255 317
Disability @ age 45	1 326	133	1 458	15	204 949
Disability @ age 50	1 326	133	1 458	10	146 504
Disability @ age 55	1 326	133	1 458	5	78 689

Table 7:

MALE	Capitalised value of the disability benefit at different contribution rates				
Sensitivities at other contribution rates	Contributions @ 2.5%	Contributions @5%	Contributions @7.5%	Contributions @10%	Contributions @12.5%
Disability @ age 25	122 793	245 585	368 378	491 170	613 963
Disability @ age 30	112 046	224 091	336 137	448 182	560 228
Disability @ age 35	99 575	199 151	298 726	398 301	497 877
Disability @ age 40	85 106	170 212	255 317	340 423	425 529
Disability @ age 45	68 316	136 632	204 949	273 265	341 581
Disability @ age 50	48 835	97 669	146 504	195 339	244 173
Disability @ age 55	26 230	52 459	78 689	104 918	131 148

7.4. Sustainability and Efficiency | Member Administration

Subject primarily to take-up by participants, (but also to the other modelling assumptions as set out in the annexure), there is no obvious reason why the administration of the scheme should not be sustainable. Furthermore, reasonable take-up should see the scheme benefit from scale efficiencies from early on. The table below provides insight into the expected scale of member administration over the first five years of the scheme. For the purposes hereof, member administration includes all administrative functions required for the operation of the scheme, only excluding the cost of asset management. These figures do not include the cost of managing the asset build-up, which are modelled as a deduction from the investment return achieved.

Table 8:

	2020	2021	2022	2023	2024
Number of pre-retirement member records	92 735	192 464	295 703	402 347	512 054
Number of post-retirement member records	-	3 685	9 245	16 639	25 793
Total number of member records administered	92 735	196 149	304 948	418 987	537 847
Cost to administer a single member record (R)	300	318	337	357	379

Sensitivity of results to the assumed annual cost of administration, R300 in the base scenario, are provided in [Annexure 12](#), which indicates alternative scenarios based on 2020 annual per-member costs of R400 and R500.

7.5. Sustainability and Efficiency | Savings Assets under Management

Subject primarily to take-up by participants and their rates of contribution (but also to the other modelling assumptions as set out in [Annexure 10](#), the scheme's asset management should benefit from scale efficiencies from early on. The table below provides insight into the expected level of assets under management (backing the participants' savings) over the first five years of the scheme.

Table 9:

Amounts in R'm	2020	2021	2022	2023	2024
Total contributions (participants + subsidy)	439	944	1 523	2 182	2 931
Less portion going to the risk pool	-88	-189	-305	-436	-586
Amount available for investment	351	755	1 218	1 746	2 345
Return of contribution to deaths	-2	-11	-29	-66	-110
Capitalised outflow to those who retire	-	-8	-27	-58	-104
Smoothed investment return	13	55	130	245	406
Accumulated assets under management	R362m	R1 153m	R2 445m	R4 312m	R6 848m

7.6. Sustainability and Efficiency | Risk Pool Net Asset Value

The financial modelling treats the risk pool as a separate pool of assets, from which all pre-retirement risk benefits are paid. The inflows to this pool comprise the portion of total contributions allocated to risk, plus the return of the subsidy portion of contributions for those participants who die. Outflows are made up of the return of own contributions paid to the family of deceased participants (the funeral benefit), as well as the capitalised values of pensions payable following deaths and disabilities. This is shown below for the first five years of the scheme.

The extent of assets under management in the risk pool is considered sufficient to ensure efficient asset management, even if this pool were to be managed separately from the savings pool for any reason, which we do

not regard as necessary. As modelled, the probability that the risk pool remains solvent throughout the 2020-2065 period is assessed at around 68%. Sustainability of the risk pool is to be ensured by regular actuarial valuation of the scheme, so that the portion of contributions going to risk can be adjusted over time to ensure ongoing financial soundness of the risk pool.

Table 10:

Amounts in R'm	2020	2021	2022	2023	2024
Risk portion of total contributions	88	189	305	436	586
Return of subsidy contributions on death	2	11	29	66	110
Total inflow	90	200	334	502	697
Death: Return of own contribution	-2	-11	-29	-66	-110
Death: Capitalised value of pension benefits	-10	-64	-165	-278	-375
Disability: Capitalised value of pension benefits	-6	-36	-94	-158	-211
Smoothed investment return	3	9	15	17	19
Net Asset Value	R74m	R171m	R231m	R249m	R268m

7.7. Sustainability and Efficiency | Total cost to Government

To a large extent, the overall viability of the scheme depends on its affordability to Government. Government's contribution to the scheme is made up of the contribution subsidy as well as the cost of the scheme's administration.³¹⁰ The table below sets this out for the first five years of the scheme (shown at 5-yearly intervals until 2065 in [Annexure 11](#)).

Table 11:

Amounts in R'm	2020	2021	2022	2023	2024
Contribution subsidy	220	472	761	1 091	1 466
Scheme administration	28	62	103	150	204
Total cost to Government	R247m	R534m	R864m	R1 241m	R1 669m
Contribution subsidy as % of total cost	89%	88%	88%	88%	88%
Scheme administration as % of total cost	11%	12%	12%	12%	12%

These figures are based on the base-case annual member-administration cost of R300. [Annexure 12](#) & [Annexure 12](#) shows the sensitivity of these numbers to the respective alternative assumptions of R400 and R500.

8. CONCLUSIONS

The thoughts set out in this paper are of critical importance. They are important to the millions of informal-economy workers who have little realistic means at present of preparing for their old age. But they are important to the country as a whole. Years of thought has been applied to the challenges of providing coherently for South Africa's workers but the specific needs of those marginalised in the informal economy have not been adequately considered. This paper aims to redress that imbalance.

Key to the findings of this work is the realisation that the information available on this substantial group of workers is inadequate. We do not know with certainty how many workers operate in the informal economy, let alone where

³¹⁰ No allowance has been made for the possibility of government incentives to members of the scheme who are foreign nationals.

they are, how much they earn and how they get by. With this in mind, it should not be surprising that do not know very much about their needs and aspirations either.

Consultation with the workers operating in the informal economy regarding the recommendations set out in this paper is critical. This consultation must be thorough, open-minded and systematic. At the same time, mechanisms should be put in place to address the inadequacy of the information available on the workers forming this considerable and invaluable part of South Africa's workforce and economy.

This is a discussion document. Its recommendations need to be thoroughly evaluated and criticised. The workers whose interests are represented in this paper must not be left behind.

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Annexure 5: Analysis of Labour Force Survey Data

The LFS is regarded as a reliable source of South African data on employment patterns.³¹¹ It is compiled quarterly by StatsSA. Apart from totals and trends, it provides helpful subtotals in a number of respects, covering employment in each of the following categories, for example:

- Formal-economy workers, excluding those in households and in agriculture;
- Informal-economy workers, excluding those in households and in agriculture;
- Workers in households; and
- Workers in agriculture.³¹²

For this purpose, the definition of formal and informal are most important, not least because some commentators have criticised StatsSA for not defining informal-economy workers sufficiently widely. The designers of the survey have responded to this by seeking to allocate to the informal category those workers in formally-registered entities that do not enjoy the protection regarded as appropriate under law for formal-economy workers. Care should be taken when interpreting trends as changes of this nature impact the consistency of data. Furthermore, the LFS makes no attempt to allocate household- and agricultural workers into formal and informal categories. Inferences need to be drawn that are unavoidably imperfect.

Figure 8 shows the breakdown of all workers at quarterly intervals over the period of just over ten years from the beginning of 2008 to the first quarter of 2019. Workers are split between the four categories outlined above. The percentage represents the total of non-agricultural workers and other informal-economy workers divided by all non-agricultural employees, a rough proxy for the rate of informality among those who are working.³¹³

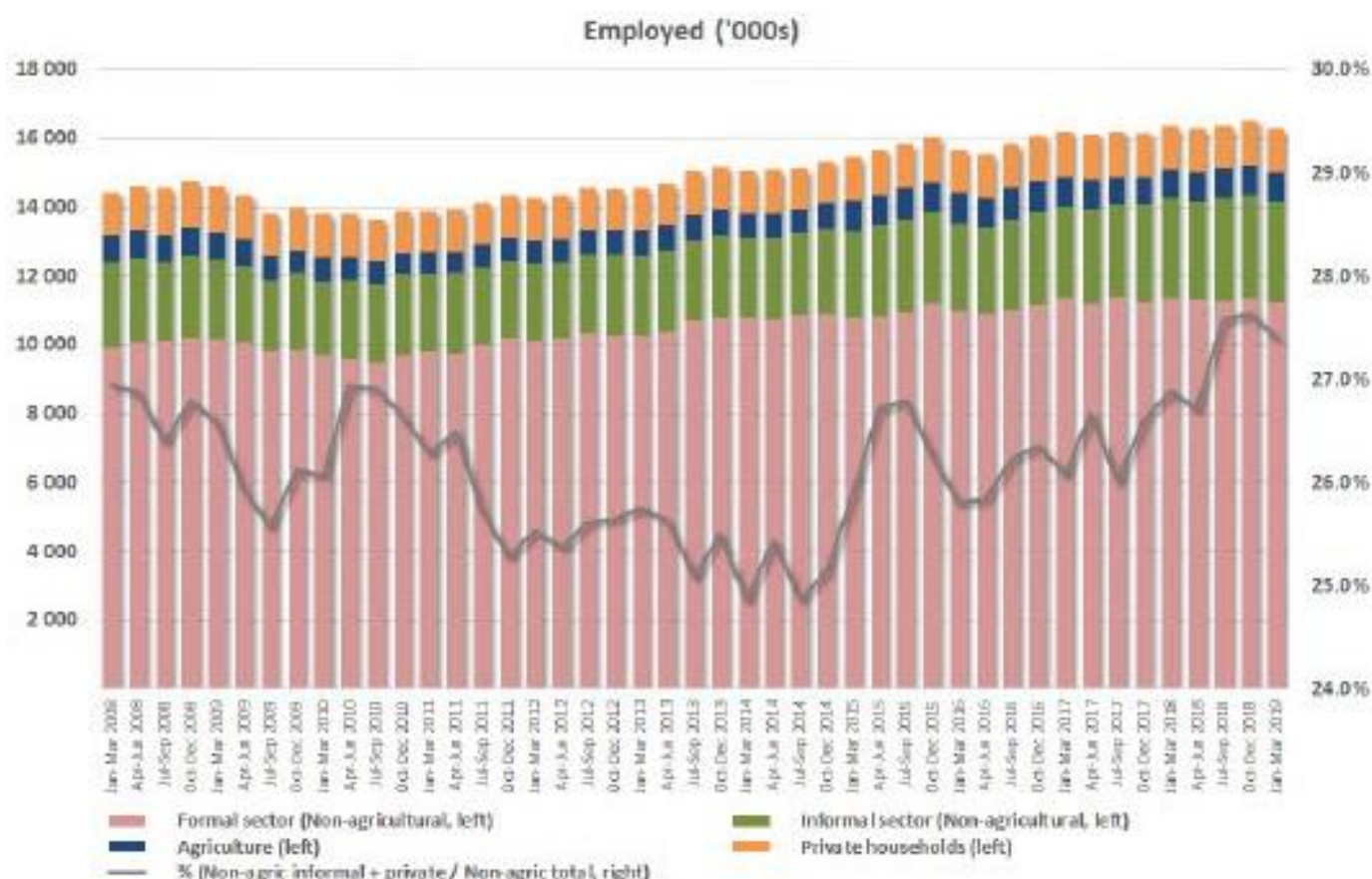
On LFS measures, the informal economy has remained a relatively stable percentage of non-agricultural total employment over the last ten years, though the increase over the last year or two is noteworthy. The actual number of workers in these economy segments has increased gradually since 2010, reaching, by the beginning of 2019, of the order of 3 million informal workers, 1.3 million workers in private households, and just under 850 000 agricultural workers.

³¹¹ All data referred to in this annexure is available at Statistics South Africa, <http://www.statssa.gov.za/>.

³¹² The survey does not split either household or agricultural workers between the formal and informal categories. Note that workers denoted as household employees are not necessarily domestic workers. Some of them are working from home as employees of formal or informal enterprises, repairing motor vehicle, for example.

³¹³ The percentage itself should not be regarded as significant, but the trends are worth noting.

Figure 8: All workers by category, 2008 to 2018



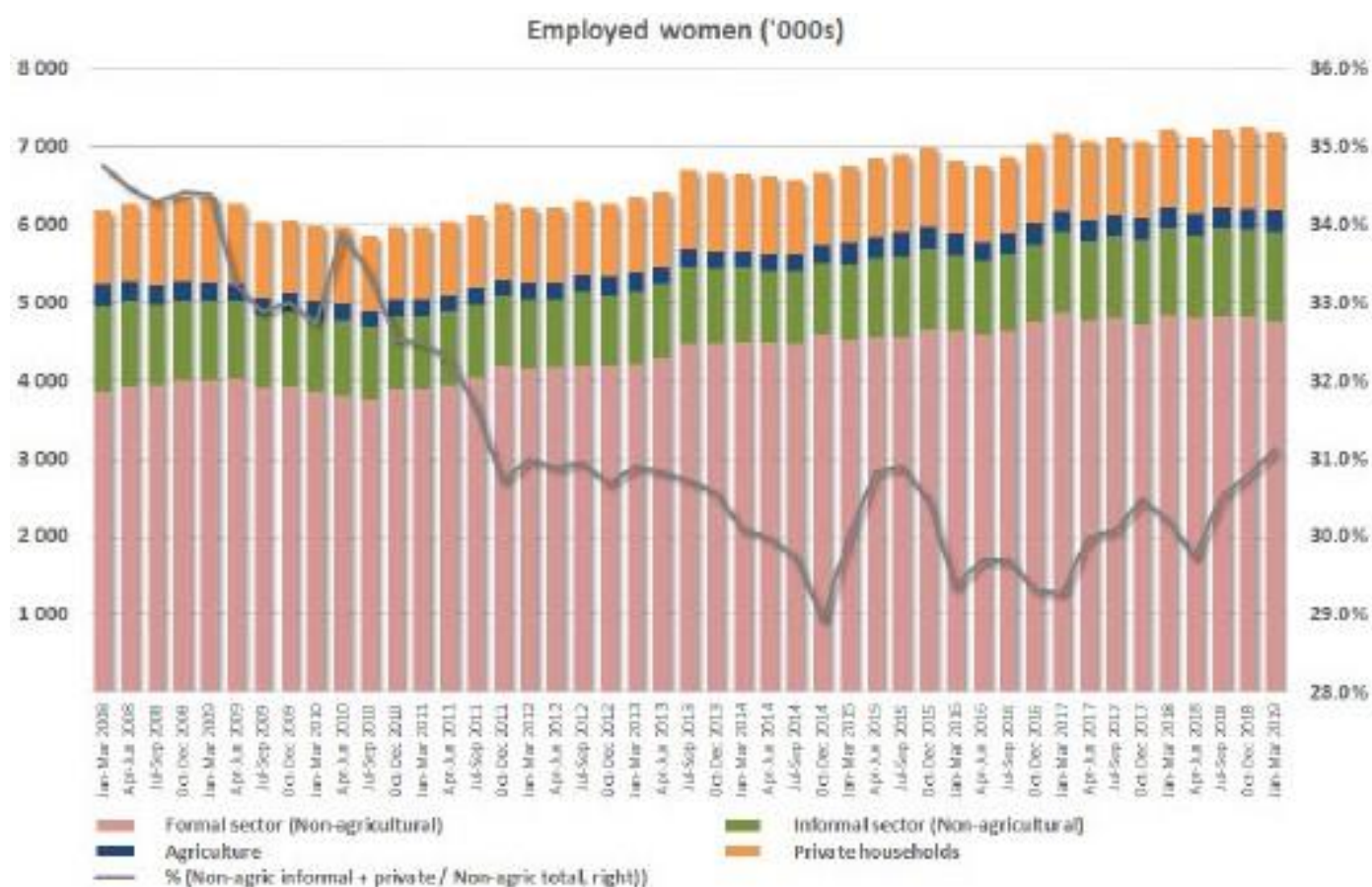
The total of all formal-economy workers has been stable over the last nine quarters at around 11.3 million. The corresponding total not economically active reached a high of 15.8 million, of which just under 3 million, also a record, are discouraged job seekers.

Figure 9 shows the corresponding statistics for women and Figure 10 for men, again including all workers in private households with the informal-economy workers for the purposes of constructing the proxy for the percentage of all employees working in the informal economy. For women, this percentage fell from 35% in 2008 to 29% at the end of 2014 and then stabilised before rising again more recently. In contrast, for men, the percentage has increased from a floor of below 20% in 2009 to around 25% during 2018.³¹⁴

In absolute numbers, informal-economy female workers, excluding agricultural workers, fell from the level of around 1.1 million in 2008 to below 900 000 in 2012 but rose again to just over 1.1 million at the beginning of 2019. In addition, approximately one million women work in households, a figure that has been reasonably stable over the period.

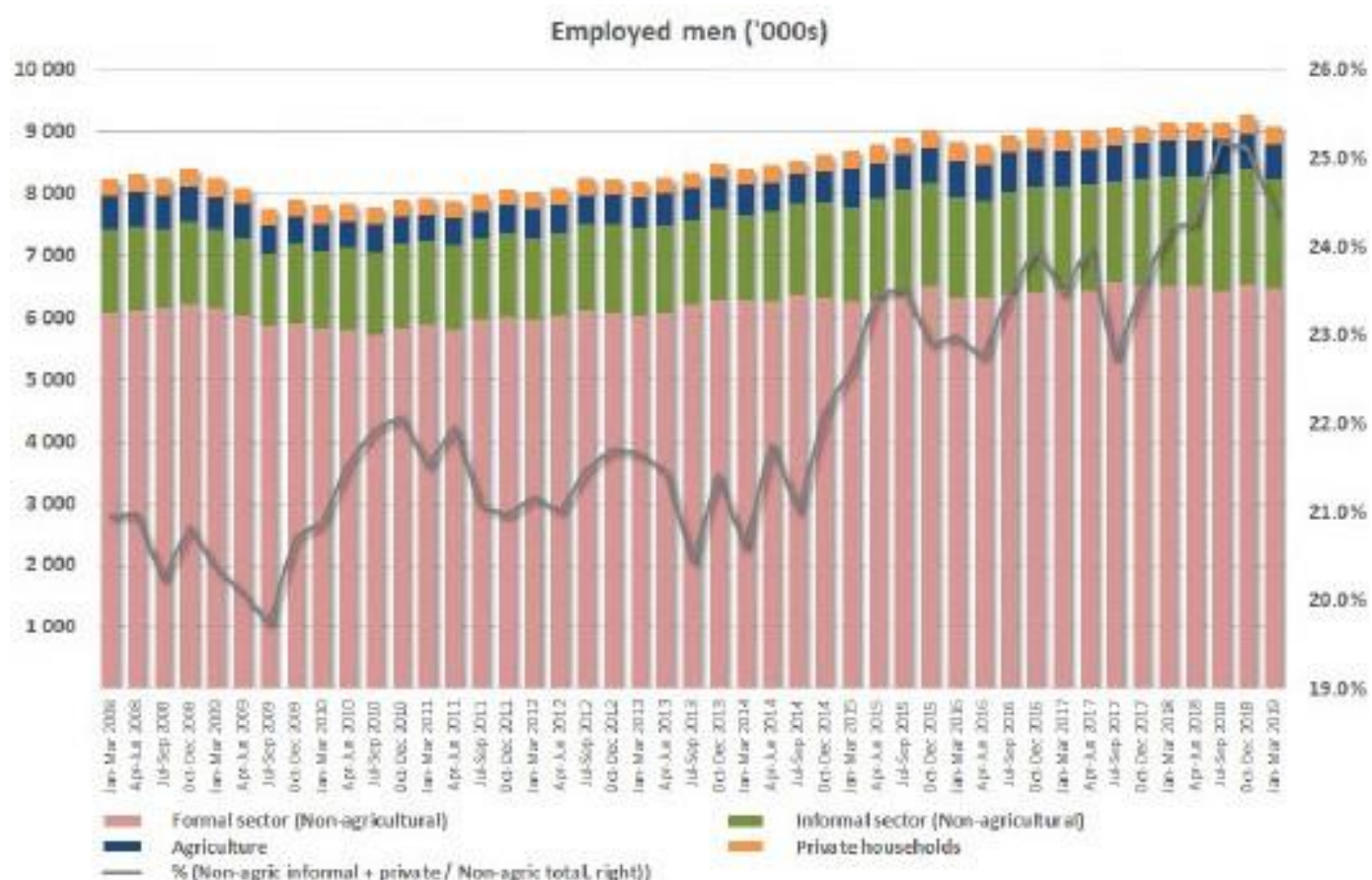
³¹⁴ The proportion of working women employed in private households is much higher than for men. Counting these women into the informal economy raises the calculated rate of informal employment to a level (31.3%, Quarter 1 2019), which is above that of men (24.4% at the same time). However, excluding household workers from this ratio brings the corresponding level (16.6%) to below that of men (20.9%).

Figure 9: Breakdown of workforce, 2008-2018, women only



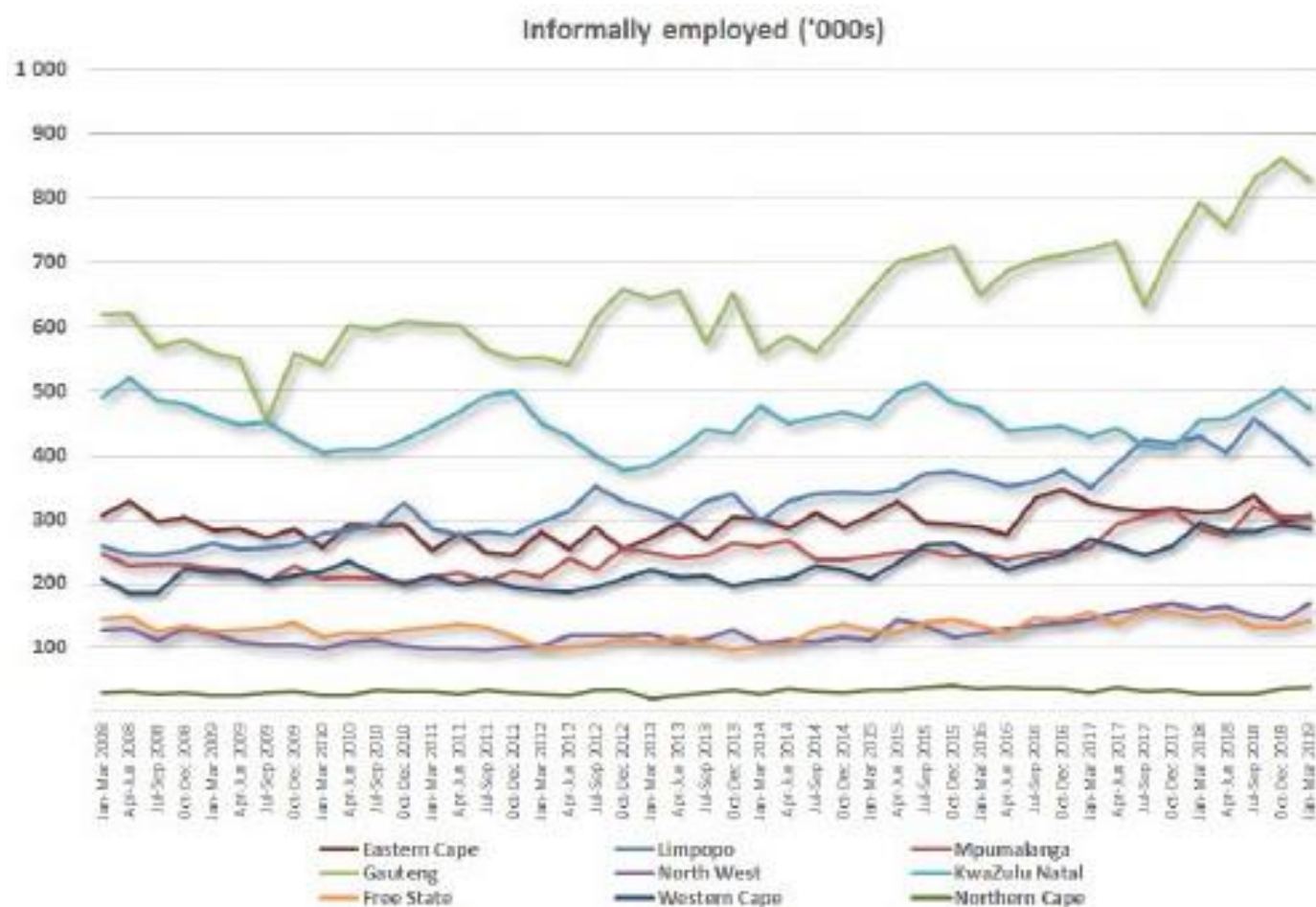
After falling somewhat in 2009 and 2010, the number of men working in the informal economy, outside of agriculture increased, from a low of under 1.2 million to a high of 1.89 million before reducing to current figures of just below 1.8 million.

Figure 10: Breakdown of workforce, 2008-2018, men only



Based on these figures, the proportional increase in informal employment is attributable to this rise in informal-economy workers rather than a reduction in the overall level of the workforce. Methods of detection of informality may have contributed to this increase, but it is largely limited to men. The increase is also evident in the corresponding ratio excluding workers in private households, which do not contribute a large number in the case of men. workers defined as informally employed, in each of South Africa's nine provinces.

Figure 11: Informal-economy workers by province



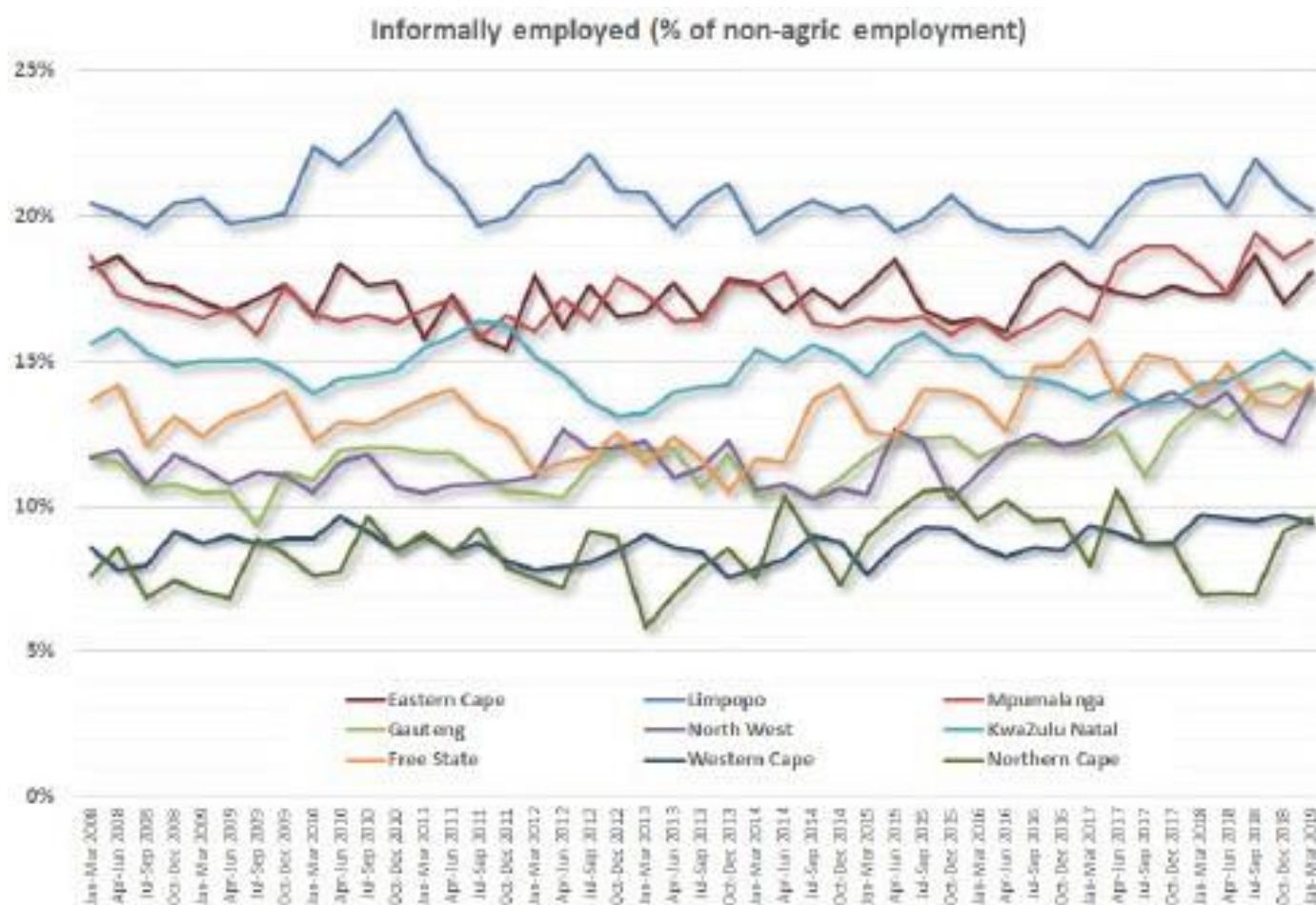
The numbers of informally employed by province show overall consistency, with one or two noteworthy exceptions. Numbers in informal employment have increased particularly rapidly in Gauteng, but also in Limpopo, the Western Cape, Mpumalanga and the North West province.³¹⁵ They have remained broadly stable in KwaZulu-Natal, the Eastern Cape and the Northern Cape.

Gauteng's leadership of informal-economy employees needs to be assessed against its total workforce, much larger than in any other province.³¹⁶ Figure 12 depicts the percentage of all non-agricultural workers defined as working in the informal economy, also by province.

Rates of informal employment are not evenly distributed through the country. They are highest in Limpopo, Mpumalanga and the Eastern Cape and lowest in the Western and Northern Cape. Little evidence of trend increases or decreases over the full period of assessment exists in this data, though rates of informality appear recently to have increased in the Free State and Gauteng.

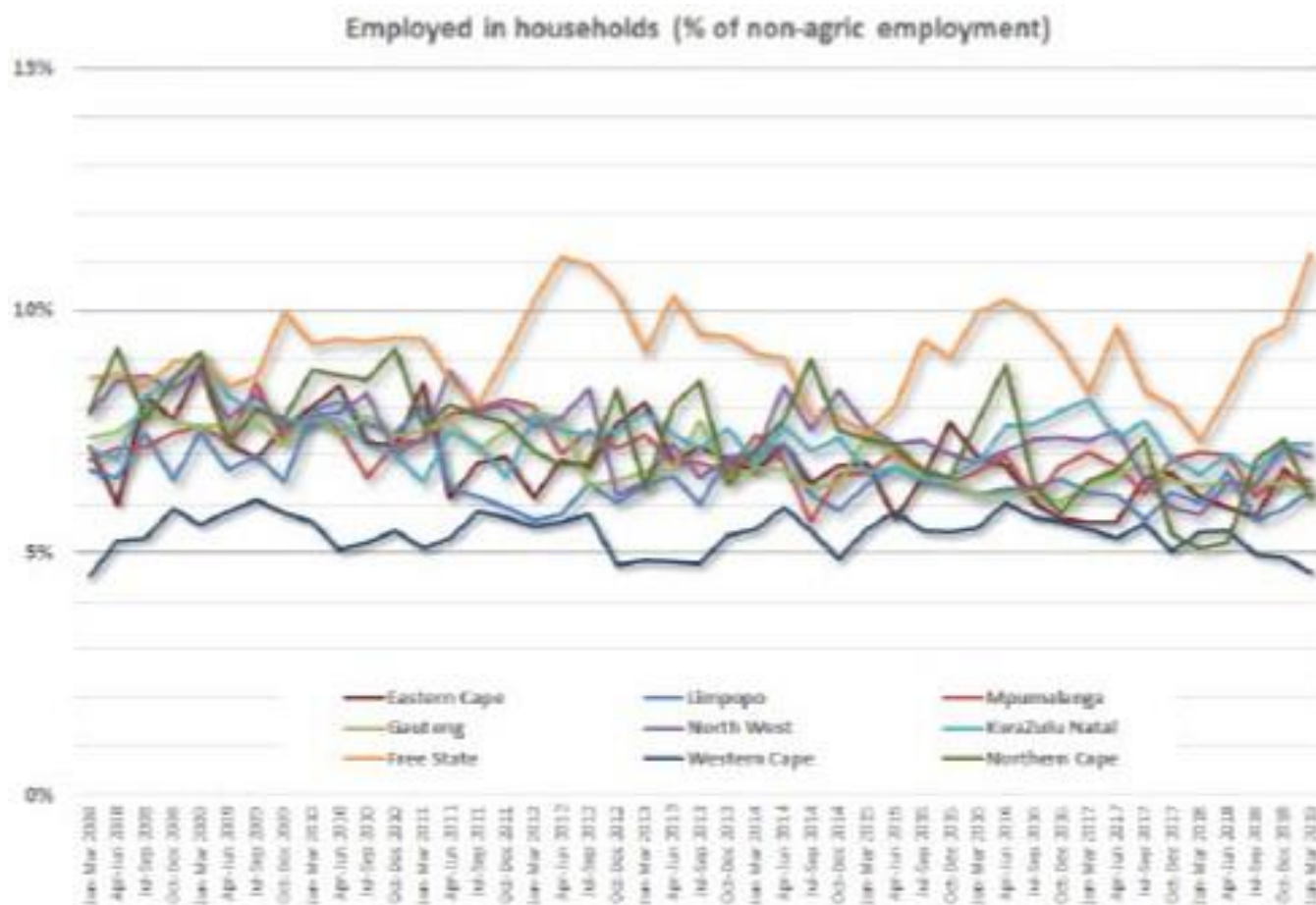
³¹⁵ Does this represent an increase in informality in the largest cities as part of a migration to urban areas? The LFS survey provides a split of these figures between metropolitan and non-metropolitan areas from 2015, but only for the Eastern and Western Cape, Free State, KwaZulu Natal and Gauteng, not the Northern Cape, Limpopo, North West and Mpumalanga. Simplistically attributing all workers in those four provinces without the urban-rural split into the rural grouping, no evidence of an increase in informal-sector workers in metropolitan areas is evident. Quarter-to-quarter fluctuations are significant, but overall the two groups grow between 2015 and 2019 by roughly the same extent.

³¹⁶ The population of Gauteng has also grown faster than the country as a whole, from 8.8 million in 2001 to an estimated 14.7 million in 2018, a compound annual growth rate of 3.06%, against the corresponding national average of 1.50% for the same period (Stats SA, <http://www.statssa.gov.za/>, accessed 7 June 2019).

Figure 12: Informal-economy employees relative to all non-agricultural workers, by province

The corresponding proportions of all non-agricultural workers who are employed in households (refer to [Figure 13](#)) shows little evidence of sustained provincial differences or trends.

Household employment appears to be lowest in the Western Cape and highest in the Free State. Both of these outliers appear to have diverged further from the bunch in the last few quarters. Other provinces show similar levels of household employment and have done so over the last few years, though with a mildly decreasing trend, from between 7.5% and 8.0% in 2008 to below 7.0% for the last 11 quarters from the third quarter of 2016 to the first quarter of 2019.

Figure 13: Household employees, as a proportion of all non-agricultural workers, by province

Evidence of creeping informalisation (formal-economy entities employing workers under informal conditions) might be evident from patterns of working hours. **Figure 14** shows the percentage breakdown of all workers into five categories according to the hours worked each week.

It is admittedly not easy to know what to look for in this regard. An increasing proportion of employees working very long average hours per week could suggest employer abuse or an increasing incidence of multiple jobs, but it might be associated with an increase in the incidence of work associated with good economy times. An increase in the incidence of short weeks might suggest an increase in piecemeal work.

The evidence is inconclusive. Some increase in employees working between 15-29 hours per week is evident, but this appears to be at the cost of those working 30-39 hours. The proportions of employees working less than 15 hours has remained constant. At the top end of the spectrum, more workers appear to be avoiding working weeks longer than 45 hours, but this does not provide a reliable indication of trends regarding informal employment.

Distribution of weekly working hours (% of all employed)



- In summary, when considering eligibility for an informal-economy scheme:

- Counting household workers and all agricultural workers, eligibility is as high as 5 million. But most household workers should be considered formally employed and a number of agricultural workers fall into the formal economy.
- On the other hand, large numbers using survival methods are obviously informal-economy workers and are not counted into the survey, and large numbers of formal-economy employees are likely to be working informally as well.

Annexure 6: Analysis of General Household Survey Data

The General Household Survey (GHS) is a detailed study of the living conditions in households carried out annually, less frequently than the LFS. It provides more detailed insights across these living conditions, particularly income and how it is spent. It should not be regarded as perfect in the way it scales up from the sample to the population, and the manner in which it determines the income of sampled households, but it provides much richer insights than other statistical sources.

The discussion that follows provides an analysis of some of the statistics derived from the 2017 GHS followed by a summary of insights.

Analysis

The images that follow are drawn from arithmetic analysis of GHS figures from the 2017 survey, using the allocations to formality and informality utilised in the survey. Note that the GHS does not define the terms that it uses for its purposes.

Table 12: GHS 2017: worker totals and, for informal-economy workers, average earnings

	Formal-economy workers		Informal-economy workers	
Gender	Count	Avg monthly earnings (R)	Count	Avg monthly earnings (R)
Female	5 743 438	7 504	1 451 569	1 884
Male	7 740 651	8 461	1 809 345	2 691
Total	13 484 090	8 053	3 260 914	2 332

Table 12 shows the total numbers of formal and informal-economy workers, according to the 2017 iteration of the survey. It also shows, for those workers operating in the informal economy, average monthly earnings. Against the LFS (Quarter 2 and 3, 2017),³¹⁷ the GHS proposes a higher formal economy (13.5m v 11.3m) and a higher informal economy (3.3m v 2.7m). As the LFS separately identifies those working in agriculture and households, bringing the total employed to 16.1m, the GHS total of 16.7m is reasonably close to its LFS counterpart.

265 figures used from the LFS are averaged over the middle two quarters of 2017 to give a reasonable fit to the corresponding mid-year GHS data.

The differences between these figures may be reconciled by assuming simplistically that:

- All household and agricultural workers are formally employed excepting 500 000, making up the informal economy difference, and that
- Some 600 000 workers that are not counted in the LFS, because they are not considered to be working long enough for work, identify themselves in the GHS as working.

Full reconciliation is unlikely to be as straightforward as this, and both of the surveys should be regarded as subject to some estimation error, but this approach provides a way of bridging the gap between the respective figures.

Monthly earnings declared for informal-economy employees averages R2 300, in 2017 Rands. This is a little higher than suggested by the qualitative research, but may include income from all sources, including grants of all types.³¹⁸ The GHS permits a more detailed assessment of the distribution of earnings, which has been utilised for modelling purposes. Appropriate adjustment has been made for the likelihood that grants contribute part of the income.

³¹⁷ Figures used from the LFS are averaged over the middle two quarters of 2017 to give a reasonable fit to the corresponding mid-year GHS data.

³¹⁸ Table 13, which depicts GHS assessment of monthly income by age, shows the possibility of an income spike at old age, though this is not consistent for all age bands above eligibility for the social old age grant.

Table 13: Age distribution and average earnings of informal-economy workers

Age range	Count	Avg monthly earnings (R)
15-19	32 082	1 304
20-24	214 286	2 041
25-29	472 391	2 301
30-34	551 689	2 336
35-39	522 459	2 429
40-44	404 728	2 281
45-49	353 035	2 791
50-54	287 222	1 804
55-59	237 222	2 529
60-64	100 768	3 064
65-69	48 371	1 679
70-74	15 007	2 592
75+	21 655	1 176
Total	3 260 914	2 322

Table 13 shows the statistical distribution of informal-economy workers by age group and the corresponding average monthly earnings in each age group. The figures in this Table are broadly within expectation. Individuals are well distributed through the age range, with a peak in the 30s, but significant numbers all the way to old age. Average earnings tend to drop off with increasing age, as physical strength wanes, and as individuals are less likely to receive child grants.³¹⁹ The spike in old age is most likely attributable to inclusion of grants income in the total.

Table 14 shows the corresponding numbers and average earnings by province. The GHS provincial totals are consistently above the corresponding totals for mid-2017 in the LFS, but not by the same proportion across all provinces.³²⁰ Provincial income differentials are stark. Though they are understandable based on the differences in the respective wealth levels in each province, other factors (the male-female mix, for example) may contribute.

Table 14: Provincial distribution and average earnings of informal-economy workers

Province	Count	Avg monthly earnings (R)
Eastern Cape	389 628	1 737
Free State	208 153	2 049
Gauteng	897 205	2 825
KwaZulu-Natal	489 660	1 936
Limpopo	430 611	1 975
Mpumalanga	312 852	2 554
North West	225 081	2 283
Northern Cape	52 012	2 084
Western Cape	255 712	2 919
Total	3 260 914	2 332

³¹⁹ This may be confirmed by considering the distribution separately for men and women.

³²⁰ The smallest differences are in the Western Cape, Limpopo and Mpumalanga, less than 7%, and the largest in the Free State, North West and Northern Cape, between 39% and 46%.

Summary

Calibration provided by the GHS numbers suggest reasonable consistency with the LFS and qualitative information, both on the numbers of potential members and the levels and spread of income. Most helpfully, this data confirms the impression gained from the other research that the incomes of those working in the informal economy are typically low, most likely less than R2 000 on average, after adjusting the GHS for grants received, but with a large statistical distribution leaving large numbers with very low income. Provincial differences should not be ignored and require further exploration.

Annexure 7: Informal-Economy Qualitative Research

The discussion that follows summarises the diverse characteristics of those who may be regarded as participating in South Africa's informal economy, as illustrated by the insights gathered by a number of researchers. Clear conclusions regarding the strategies and earnings characteristics of this diverse group are elusive and generalisation should be avoided as much as possible, but findings may nevertheless be grouped under the tentatively expressed set of statements that follows. The studies summarised in this discussion do not present themselves as nationally representative. Applying their conclusions to a countrywide group of workers must be carried out with caution.

Uncertainty regarding the number of workers participating in the informal economy is widespread. Though some researchers are comfortable expressing a clear view (Willis, 2009, for example),³²¹ others express scepticism regarding the reliability of these numbers (Neves *et al*, undated;³²² Muller, 2003;³²³ Essop & Yu, 2008).³²⁴ A number of researchers express a conviction that the number of participants in the informal economy is under-reported (Muller, 2003; Essop & Yu, 2008).³²⁵ While rates of informality may be increasing (Blaauw, 2011),³²⁶ some express the view that this may be at least attributable to improved levels of detection (Valodia, 2007).³²⁷

Others suggest that any quest to separate workers into formal and informal is inappropriate as employment dynamics are much more complex than might be suggested by such an approach:³²⁸

“in much the same way as the controversial concept of a ‘second economy’ [...] the moniker of the informal sector potentially invokes an overstated dualism. It overlooks the manner in which formal and informal are intertwined, and the manner in which the precarious employment conditions associated with informality are increasingly to be found at the heart of ‘formal’ enterprises and economies. These are increasingly manifest in practices such as outsourcing, casualisation and contractualisation. Although the concept of the informal sector enjoys much continued usage it is a contested and imprecise concept that potentially obscures as much as it reveals.”

³²¹ Willis, G (2009), “South Africa's Informal Economy: A Statistical Profile”, Urban Policies Research Report No. 7, WIEGO (Women in Informal Employment: Globalizing and Organizing), April

³²² Neves, D, M Aliber, J Mogaladi & A du Toit (undated), “Self-employment in South Africa's Informal Sector: Prevalence, Prospects & Policy”, Institute for Poverty, Land and Agrarian Studies, University of the Western Cape

³²³ Muller, C (2003), “Measuring South Africa's Informal Sector: An Analysis of National Household Surveys”, Working Paper 03/71, Development Policy Research Unit, University of Natal, January

³²⁴ Essop, H & D Yu (2008), “The South African Informal Sector (1997 – 2006)”, Stellenbosch Economic Working Papers 03/08, University of Stellenbosch and the Bureau of Economic Research. The figures cited by Willis are striking for their variability, swinging from 3.96m in 2005 to 3.65m in 2007 and not necessarily reflecting absorption by the formal economy (see Blaauw, D, 2011, “The Informal Sector: An African Perspective”, Presentation prepared for the 2011 DTI Small Business Summit, 10-12 October, Bloemfontein).

³²⁵ Among the arguments put forward for this position are the points that (1) survivalist activities, surely informal in nature, are typically not regarded as work at all, (2) employment that is secondary to the main Source of income is frequently not adequately included in surveys (Muller, 2003, op. cit.), (3) informal-economy workers are more likely to work on a casual, seasonal or temporary basis and more likely to be undercounted as a result of this (Essop & Yu, 2008, op. cit.).

³²⁶ Blaauw, D (2011), “The Informal Sector: An African Perspective”, Presentation prepared for the 2011 DTI Small Business Summit, 10-12 October, Bloemfontein

³²⁷ Valodia, I (2007), “Informal Employment in South Africa”, School of Development Studies, University of KwaZulu-Natal, August

³²⁸ Neves *et al* (undated) 2

The apparently low levels of informality, in combination with the very high levels of unemployment, are described by Altman (2008)³²⁹ in terms of a paradox. In terms similar to those used by David Neves and his co-authors, Altman appeals for a more nuanced approach to the issue of informality:³³⁰

“What can be done about the informal sector?” is the wrong question as there is no sector. The purpose of any policy first needs to be identified.”

Rather more uncomfortably, she also asks questions about policy development that distinguishes between those working in the formal and informal economies, emphasising the continuum of survival strategies that lie between what are simplistically described as formal and informal economies. Some writers (Blaauw, 2011, for instance) have criticised the viewpoint that those working in the informal economy are in some sort of waiting room and that they will progress in time to the security of formality, pointing out that the number of workers in the informal economy is growing.

Others (Skinner & Rogan, 2019)³³¹ have questioned another aspect of this conventional wisdom that, in stressed economic circumstances, the informal economy absorbs workers that lose their formal economy jobs. They present data from after the 2008-09 that shows a relatively stable proportion of all workers occupied in the informal economy.

Regardless of their exact numbers, workers in the informal economy contribute significantly to overall economic output (Blaauw, 2011; Hovsha & Meyer, 2015)³³² and in complex ways to the social interaction and economies of communities (Sustainable Livelihoods Foundation, undated).³³³ This leads naturally to the next point.

Workers in the informal economy contribute significantly to economic activity. Derick Blaauw and his colleagues (Blaauw *et al*, 2006)³³⁴ related the anecdote of a group of workers who expressed the conviction that they were laid off their formal jobs and rehired informally so that the employer could avoid the cost associated with formal employment. Significant evidence exists of informally-employed individuals working in formally-registered organisations (Willis, 2009), contributing to the challenges of putting a number to informal-economy workers.

This forms part a complex fabric of linkages between the formal and informal economy (Altman, 2008; Davies & Thurlow, 2009,³³⁵ Neves *et al*, undated). Informal-employed workers cannot be considered as if they are a distinct group, separate from their peers in the formal economy (Valodia, 2007), not least because a number of them participate, over time and even simultaneously in both the formal and informal economies.

Davies & Thurlow (2009) provide an econometric view on the impacts of alternative policy approaches on the informal economy and propose a broad categorisation of informal-economy workers as follows:

- Informal producers who compete with formal producers in product markets;
- Informal traders who sell formal-economy products and charge a fixed transaction-cost margin;
- Workers who are informally employed in producing formal-economy products; and
- Informally-employed workers producing goods and services that are not produced by the formal economy.

While this does not necessarily help in the complex task of identifying and enumerating informal workers, it does help to explain why that task is inherently challenging. Formal and informal economy workers participate in an intricate inter-relationship of organisations and individuals and many of them work, over time and even on a daily basis, in both the formal economy and its informal counterpart, echoing the philosophical concerns expressed by some writers (Altman, 2008, Neves *et al*, undated) and the corresponding challenges of enumeration mentioned by others (Valodia, 2007).

³²⁹ Altman, M (2008), “Formal-informal Economy Linkages”, Employment Growth & Development Initiative, Human Sciences Research Council, April

³³⁰ Altman (2008) 28

³³¹ Skinner, C & M Rogan (2019), ‘The Informal Economy: Is Policy Based on Correct Assumptions?’, Econ3x3, accessed at <https://www.polity.org.za/article/the-informal-economy-is-policy-based-on-correct-assumptions-2019-02-19> on 13 June 2019

³³² Hovsha, J & A Meyer (2015), “The Informal Economy and Sustainable Livelihoods”, The Journal of the Helen Suzman Foundation, Vol. 75, April

³³³ Sustainable Livelihoods Foundation (undated), “Understanding South Africa’s Informal Economy”

³³⁴ Blaauw, D, H Louw & R Schenck (2006), “The Employment History of Day Labourers in South African and the Income they Earn: A Case Study of Day Labourers in Pretoria”, SAJEMS NS, Vol. 9, No. 4

³³⁵ Davies, R & J Thurlow (2009), “Formal-informal Economy Linkages and Unemployment in South Africa”, Centre for Poverty, Employment & Growth, Human Sciences Research Council, March

A number of reasons have also been suggested for the Altman (2008) “paradox” of the persistently small informal economy, among them barriers to entry in the formal economy that also impact the informal and the competitive power of the formal economy that squeezes out the informal (Valodia, 2007).

Informal-economy workers are widely dispersed but exist in greater numbers in rural areas. Informal work is neither an exclusively urban or rural phenomenon, but the majority of informal economy workers live in rural areas, where they also make up a larger proportion of the total work force (Willis, 2009; Skinner & Rogan, 2019), notwithstanding the tendency of many to seek work in the cities that is frequently informal in nature (Blaauw *et al*, 2006).

A roughly equal number of men and women are in the informal economy, but proportionally informal work contributes more to total employment among women than among men. In metro areas, women in informal employment are more likely than men to be wage earners, but the converse applies in non-metro areas (Willis, 2009).

While informal-economy workers operate in a large spread of occupations, significant groupings exist. Difficulties in identifying and enumerating informal-economy workers suggests that classifying them into occupational groups is also challenging. A number of authors have nevertheless summarised the information available (Essop & Yu, 2008; Blaauw, 2011; Willis, 2009; see [Table 15](#) and [Table 16](#)).

Significant differences are observed in occupational mix of men and women. A large percentage of men work in informal-economy positions of manual labour, on farms, for example, on building sites or in motor vehicle repair shops. In contrast, by far the largest proportion of women work in the trade sector, as vendors of food or other items on the street or in informal retail stores.

That informal-economy workers exist in such a variety of occupations has important implications for policy. It suggests, for example, that policy interventions claiming sweeping improvements to the state of the informal economy but focusing on entrepreneurship and small business, actually has a smaller impact on the livelihoods of those that work informally than is acknowledged (Skinner & Rogan, 2019).

Table 15: Most common occupations of men and women working in the informal economy

Male	% of total informal sector employment	Female	% of total informal sector employment
Farm-hands and labourers	14.4%	Street food vendors	30.5%
Bricklayers and stonemasons	10.3%	Street non-food vendors	13.5%
Street food vendors	8.4%	Spaza shop operator	6.0%
Street non-food vendors	5.8%	Tavern and shebeen operators	5.4%
Motor vehicle mechanics and fitters	4.3%	Hairdressers, beauticians and related workers	4.4%
Spaza shop operator	3.9%	Tailors, dressmakers and hatters	3.8%
Car, taxi and van drivers	3.8%	Bricklayers and stonemasons	2.8%
Painters and related workers	3.2%	Healer and sangoma	2.7%
Carpenters and joiners	3.1%	Personal care of children and babies	2.6%
Construction and maintenance labourers	2.2%	Shop salespersons and demonstrators	2.6%

Source: Essop & Yu (2018: 23)

Large numbers of informal-economy employees are working in homes. Though some of these may be unregistered domestic workers, others are carrying out a variety of work from their homes, garages or front yards, some of them working for businesses but based at home.³³⁶

³³⁶ Willis (2009) states that three-quarters of South Africa's 1.2 million home-based workers are informally employed, that a quarter of these are working from home for businesses and that less than a quarter of home-based workers are women.

Table 16: Largest economic sectors for informal employment

Trade	28.0%
Private household	27.1%
Construction	11.9%
Manufacturing	8.0%
Community & social	7.7%
Agriculture	7.3%
Transport	5.7%
Finance	4.3%

Source: Blaauw (2011); 2008 data

Many of these occupations are inherently tenuous. Essop & Yu (2008) state that some 25% of informal-economy employees work on a casual or season basis and a third in temporary occupations.

The observations of Gabrielle Willis (2009) suggest very poor security of employment. She states that almost three-quarters of informal-economy workers work in non-permanent positions.

A significant proportion of informal-economy workers are self-employed. Though self-employment is also much more common in the informal economy than in its formal counterpart (Essop & Yu, 2008), the self employed nevertheless forms a minority of all of those working informally (Willis, 2009).

Informal work is characterised by low and volatile earnings and considerable uncertainty. Without any doubt the average income of those working in the informal economy is low (Skinner & Rogan, 2019). Essop & Yu (2008) report such averages (in 2000 Rands) as follows:

- informal (employees) R 900
- informal (self-employed) R 1 000
- formal (employees) R 3 500
- formal (self-employed) R 8 000

The differences between the averages of workers in the formal and informal economies are stark. Willis (2009) describes average hourly earnings in the informal economy as lower than the corresponding formal-economy averages by a factor of 3 or 4. Only around half of informal-economy workers assessed in research of Essop & Yu (2008) describe wages as their primary income. Averages are nevertheless misleading.

A study of a group of Pretoria-based informal workers (Blaauw *et al*, 2006) illustrates the uncertainty of income for informal-economy worker. While earnings on average come in at less than the accepted minimum standard for a small household, cash coming in on a good month (averaging R1 187 in 2004 terms) is nearly three times the corresponding average income for a poor month (R402). The working conditions of this group are described as extremely challenging, undermining any notion that informal-economy workers typically choose their occupations to avoid the constraints and rules of formal employment (see also Skinner & Rogan, 2019, who describe the majority of informal economy employees as working long hours and under difficult conditions).³³⁷ Willis (2009) suggests that barriers to entry and mobility may inhibit the potential for informal-economy workers to move into activities with higher earnings potential. Informally-economy workers typically must resort to a range of strategies (Hovsha & Meyer, 2015) to get by.

³³⁷ The majority of the study group in the study by Blaauw and his colleagues (2006) originated outside of Gauteng and some of them outside of the country. They typically work for five or six, but sometimes seven days weekly, around one-quarter of them supplement their income through additional regular jobs and the large majority would prefer formal-economy employment to their current occupation.

Miriam Altman (2008) summarises the available information regarding the range of earnings of different groups of informal-economy workers (see [Table 17](#)). Though legitimate questions may be asked about why those working in community services, finance, mining and transport are considered (or consider themselves) to be informally-employed, they are in a much better position than their peers in other economic sectors, with more than half of them earning more than R2 500 monthly in 2004. In contrast, over 85% of those working in agriculture and more than 95% of household-based employees earned less than R1 000 in 2004. The construction-, manufacturing- and trade sectors are marked by considerable variation in earnings.

Women working in the informal economy typically earn less than their male counterparts, both overall and reckoned on an hourly basis (Willis, 2009).³³⁸

Table 17: Earnings distributions of informal-economy workers, 2004

Monthly wages	<1 000	- 2 500	>2 500
Agriculture	85.2%	4.7%	10.1%
Community	20.4%	10.7%	68.9%
Construction	58.0%	22.2%	19.8%
Finance	30.0%	15.5%	54.5%
Manufacturing	38.0%	23.6%	38.3%
Mining	10.1%	32.6%	57.4%
Households	95.7%	3.4%	0.9%
Transport	28.3%	16.7%	55.1%
Trade	56.0%	17.3%	26.7%

Source: Altman 2008; figures in 2004 rands

In conclusion, workers in the informal economy in South Africa form a large and disparate group, and utilise a variety of survival strategies. Earnings are very low on average but highly variable across occupations and in many instances, over time, and women earn less than men on average. Many of these workers receive income from a variety of sources and a number of them are employed in some way in the formal economy as well or, over time, work for periods in both the formal and informal economies.

³³⁸ Informal work also contributes more to total employment for women than for men (Willis, 2009)

Annexure 8: Criteria for Evaluating Design Alternatives

The tables that follow record the alternatives considered under each of the key elements of design and operational infrastructure of the scheme. Those elements are as follows:

- **Benefits:** categories to be offered, the formula defining the retirement benefit, the form in which the retirement benefit is payable, and benefits payable on death or disability prior to retirement,
- **Membership:** the form of the membership and contribution mandate.
- **Contributions:** the formula and parameters defining the contribution and the regularity of the contribution payment,
- **Incentives:** the forms that incentives may take,
- **Withdrawals:** the rules defining the potential for discretionary access to accumulated saving prior to retirement, and
- **Operational delivery:** the administrative backbone and the mechanisms available for contribution receipt and benefit payment.

In the material that follows, no conclusion on the balance of the advantages and disadvantages is attempted.

Benefits

The table below reflects on the key forms of benefit that might be considered for inclusion under the scheme. The tables that follow this one each consider the respective forms that each of these main benefit types may take.

Table 18: Main categories of benefits (Pros and Cons)

Main categories of benefits	PROS	CONS
Retirement benefits	• Central purpose of scheme • Improves social cohesion	• SOAGs render the benefit unattractive • Benefits broadly equal to contributions • Duplicates an existing benefit • Intangible long-term benefits detract • Incentive costs potentially high
Survivor benefits	• Enhances attractiveness of retirement saving to members • Attractive: benefits > contributions • Relatively easy to confirm eligibility	• Crowding out potential (mild) • Anti-selection possibility • Fraud risks • Administration costs • Income benefits expensive & complex
Disability benefits	• Valuable benefit to informal workers • Could enhance through conditions for benefit payment • Potential to utilize existing claims management experience	• Expensive as risks of disability high • Duplicates an existing benefit • Claims fraud risks • Claims management expensive • Challenges of definition • Credibility of system may be poor
Funeral benefits	• Simple definition Products well understood • Very attractive incentive potential Public-sector partnership possible • Potential for BBBEE development	• Crowding out potential • Potentially intensive administratively Fraud risks
Early (partial) access to saving	• Potential to render retirement saving more attractive • Could be used to clarify purposes	• Compromises retirement objectives • Adds administrative complexity • Adds to financial demands

Table 19: Retirement saving options (Pros and Cons)

Retirement saving options	PROS	CONS
Defined benefit	• Easy to communicate to members • Member appreciation higher • Unfunded promises avoid certain costs • Grandfathering possible	• Challenges of definition • Liability uncertainty • Funding concerns likely • Intangibility potentially detracts • Actuarial solvency v difficult to define • Does not lend itself to early access • Subject to abuse by members outside of the target group
Defined contribution	• System solvency easier to confirm • Beneficial investment potential • Tangibility potentially attractive • Early access easier to define	• Benefit uncertainty • Costs of management of assets • Administration costs potentially v high • Potential for misuse of assets • Public-sector investment potential • BBBEE outsourcing possible
Hybrid design	• Provides the opportunity to take the best of both sets of advantages • Potential to best meet the needs of participants at acceptable cost	• Potentially more difficult for participants to understand • May combine the disadvantages of both options • Potentially costly to the state • Could be abused by members outside of the target group • Potentially more difficult for participants to understand • May combine the disadvantages of both options • Potentially costly to the state • Could be abused by members outside of the target group
Guarantees	• Potentially enhance tangibility and attractiveness of benefits	• Financing challenges • Solvency difficult to confirm
Early (partial) access to saving	• Covered earlier; could be considered a design feature or a form of incentive	

Table 20: Retirement saving options (Pros and Cons)

Retirement saving options	PROS	CONS
Income	• Matches the purpose of the fund • Could be an enhancement to SOAG • Potentially easier to define under a DB structure • Continent spouse pension possible	• Could be small • More expensive to administer • Need to confirm event of death • Potentially difficult to explain conversion of DC accumulation • Unpopular on early death • Longevity risk to the fund • Potentially good conversion rates
Cash lump sum	• Cheaper to administer • More attractive to most members • Distinguishes the fund from SOAG	• Fails to meet purpose of fund • May not serve to address old age • poverty effectively
Fund accessible for controlled drawdown	• Unaffected by early death of recipient • Forms part of death estate • Recipient has some control on income	• Potentially difficult to understand • May be drawn down prematurely
Combination of options	• Potentially the best of all possibilities • May produce strong incentive effects	• Could be v difficult to understand May combine all disadvantages

Table 21: Spouse- and dependent benefits (on death prior to retirement) (Pros and Cons)

Spouse- and dependent benefits (on death prior to retirement)	PROS	CONS
Income	- Matches the purpose of the fund - Best fit to the likely needs of the beneficiary	- Expensive to provide benefits - Expensive to administer
Cash lump sum	- Cheaper to administer - More attractive to most beneficiaries - Akin to a life policy	- Provides only temporary relief - Financially demanding on the fund in the short-term
Waiver of premium	- No immediate financial cost to fund - Extends fund membership and participation - Closest to replacing member role in the fund	- Unlikely to be well understood or appreciated by beneficiary - Does not provide any immediate relief - May suffer adverse publicity, undermining the perceived value of the fund
Combination of options	- Potentially the best of all possibilities - Likely to improve attractiveness of fund membership	- Likely to be expensive, or provide only small benefits - Administratively intensive - Most significant crowding out effect

Membership and Contribution Arrangements

Table 22: Membership and Contribution Arrangements (Pros and Cons)

Membership and Contribution Arrangements	PROS	CONS
Compulsory membership for all	- Very large membership gained - Communication possibilities increased - No adverse definition of informal employment created	- Difficult to justify if no incentives - Administratively v expensive - Sacrifices creation of special arrangement for informally employed
Compulsory membership for all informal-economy workers	- Cohesion of scheme enhanced - Communication options established	- Administratively expensive - Definitional challenges - Discrimination perceptions - Incentive costs likely
Compulsory membership for specified group	- Provides appropriate pilot options - Could be used by group as part of membership drive - Could provide strong early insights	- May require heavy subsidies - Could involve high administrative expenditure - Will call for additional communication
Voluntary membership	- Strong cohesion or club effect possible - Potential for other financial and non-financial benefits from the club	- Incentive costs possible - May attract the wrong people
Membership linked to affiliation	- Could enhance attractiveness of joining industry or occupational affiliations - Creates economies of scale - Establishes a pilot phase - Stable group facilitates DB approach	- May fragment industry groupings if not seen as attractive - May require incentives - May systematically exclude unaffiliated workers
Compulsory contributions	Potentially maximises income	- Difficult to define contributions - Difficult to enforce compliance - May still require incentives - Could discourage membership

Membership and Contribution Arrangements	PROS	CONS
Voluntary contributions	• Retains voluntary nature of scheme • May enhance the quality of member activity and interaction • May improve membership numbers, since no obligation to contribute	• May fail to attract active participation • May require significant incentives or early access to funds

Contributions

Table 23: Formula for contribution level (Pros and Cons)

Formula for contribution level	PROS	CONS
Flat minimum contribution	- Meets administrative scale thresholds - Facilitates flat incentive	- Difficult to define equitably - Might have to be set at very low level
Minimum contribution as percentage of earnings	- Stronger rationale for savings plan - More equitably conceived	- Difficult to define earnings - Could be prohibitively small - Members might resist the earnings information that this gives away - Temptation to misrepresent earnings
No minimum contribution	- Enhances attractiveness of scheme - Seen as fairer and could use incentives to motivate higher payment	- Administrative challenges and unit cost - Incentives for all payment levels more difficult to justify
Employer co-contribution	- Enhances the level of savings - Facilitates early withdrawals	- Introduces problems for self-employed - May encourage evasion
Government co-contribution	- Valuable incentive to participate - Strong opportunity to establish fairer system of retirement incentives - Potentially the lowest per-unit administration cost	Unknown, potentially high cost to state
Contribution expressed as % of earnings w/o min	Encourages appropriate behaviour	Not clear how the benefit might be realized in practice

Table 24: Regularity of contribution payment (Pros and Cons)

Regularity of contribution payment	PROS	CONS
Mandatory monthly payment	- Better for member saving plan - Facilitates scheme-level financial planning and budgeting	- Inappropriate where income uncertain - May mitigate against joining scheme
Facility to pay weekly	Easier for members to manage budgets	Increases administration costs
Option to pay whenever	Recognises uncertainty of earnings	Increases administration costs
Minimum periodical payment	- Puts a value to membership by ensuring activity - Helps to meet administration costs - Could be based on any period	- Unreasonably demanding - Could discourage membership

Table 25: Incentive Arrangements (Pros and Cons)

Incentive Arrangements	PROS	CONS
Offer access to other benefits	- Overall package more attractive - Option to make explicit a portion of the contribution used for benefits	- Costs of other benefits must be met - Compromises retirement offering - Some crowding out - Complicates administration - Further overlaps grant system
Offer other benefits free	- Potentially attractive to members - Options for BBBEE development through outsourcing - Could be structured to encourage	- Crowds out private- and public-sector alternatives - Could dilute social grants benefits - Needs to be funded - Complicates administration - Dilutes potential other incentives like
Government co-contribution	- Potentially attractive to members - Potentially limited to accounting entry - May be seen as equitable - Enhances explicit retirement saving - Could facilitate partial withdrawals - Could be limited (through tax records) to those earning below threshold	- Cost strains government finances - Difficult to motivate - Adds to administrative complexity - If not explicit, could contribute to funding challenges
Access to other state benefits	- Automatic membership of other arrangements potentially attractive - Potentially for administrative stream-lining with e.g. UIF - Access to other Dept of Labour initiatives potentially attractive	- Increases administrative complexity - Cross-financing arrangements need definition
Early (partial) access to saving	Covered earlier; could be considered a design feature or a form of incentive	
Offer choice of non-cash incentives	- Potentially attractive to members - Could improve member engagement	- Complicates administration - Potentially adds confusion

Table 26: Withdrawals and Vesting (Pros and Cons)

Withdrawals and Vesting	PROS	CONS
No early access	- Retains integrity of retirement saving - Reduces costs of administration - Enhances certainty of asset management and increases returns	- Unattractive to members - Worse than private-sector alternatives - Postpones all access to age potentially not linked to slowdown of work
Proportional access	- Sound rationale - Could be coordinated with employer or state co-payments	- Compromises long-term saving - Complicates administration and member communication - Rationale compromised if coordination with co-payments does not exist
Access for specified purpose	Helps to meet emergency needs	- Administratively complex - Potentially unfair
Early access limited to own contributions	Sound rationale	Administratively complex, particularly in DB case
Automatic vesting after x years	Applies equitably to all sources of contribution	- Add to administrative complexity - Demands member communication - No distinction between own contributions and co-payments

Delivery Mechanism**Table 27: Administrative backbone (Pros and Cons)**

Administrative backbone	PROS	CONS
UIF	• Infrastructure already in place, for contributions, benefits & investment • Automatic registration to UIF possible • Potential for incentives via UIF benefits • Facilitates employer contributions • Could enhance UIF compliance rates	• Payment infrastructure not ideal
New pension fund	• Dedicated arrangements within sound governance • Pension fund supervision • Trustee oversight	• Significant set-up costs • Contribution-collection facilities not necessarily ideal
Existing fund	• Pension fund supervision • Trustee oversight • Administrative infrastructure exists • Investment management in place	• Contribution-collection facilities not necessarily ideal • May be difficult to fit into existing arrangements
Alternative standalone arrangement	• Tailored to meet specified needs • Ongoing administration potentially cheaper	• Needs dedicated administration skills • Set-up costs potentially very high

Table 28: Contribution receipt (Pros and Cons)

Contribution receipt	PROS	CONS
Debit order only	• Administratively efficient • Allows better financial planning • May permit better benefits • Probably lowest set-up costs	• Requires bank account • Requires certainty of income • Unlikely to be attractive to members
Mobile money only	• Convenient for members • Minimum member requirements need to be met	• May require higher set-up expenditure • May practically exclude some members
Cash only	• Convenient for some members	• Calls for a network of receiving points • Administratively intensive and costly
Member choice	• More attractive to members • Incentives could be used to facilitate administratively efficient options	• Administratively challenging and expensive
Choice at industry level	• Administratively efficient • Members of a community more likely to support a stipulated approach	• Could introduce disagreement between members of a group

Table 29: Benefit payment (Pros and Cons)

Benefit payment	PROS	CONS
Cash only	• Could be convenient to members	• Requires extensive customer-facing infrastructure • Introduces personal security risks • Adds to administrative expenditure
Direct into bank account	• Electronic payments most efficient • Improves levels of financial inclusion	• New bank account required for some
Direct into mobile wallet	• Efficient electronic payments	• Infrastructure needs to be established • Minimum requirements of members
Member choice	• Increases member buy-in	• Adds to administrative expenditure

Annexure 9: Analysis of Alternative Benefit Structures

The discussion that follows analyses the qualities of four alternative benefit structures. The evaluation includes qualitative commentary and a rating of the extent to which the scheme meets the potential advantages of that criterion and overcomes the corresponding disadvantages. The content of the annexure concludes with a summary of the analysis. Here, the ratings are tabulated alongside one another to show the relative strengths of the prototypes considered. The annexure closes with a summary of the lessons learned through the process.

Note that quantitative modelling has not been the primary tool utilised to evaluate the pros and cons of each of the alternatives set out in the discussion that follows. The reason for this is that the complexity of the analysis and enormous number of assumptions characterising such modelling undermines the usefulness of such an approach. The trade-offs involved in evaluating a pair of alternatives, let alone a much larger set, are of such a nature that financial modelling tends to confuse issues or inappropriately misrepresent these trade-offs.

Such complexity is exacerbated in the case of the arrangement under consideration here, where the variation in member behaviour prior to retirement is subject to almost infinite variation and where the available metrics describing the possible outcomes are intuitively difficult to grasp. Intuition is challenging because the metrics themselves depend on a number of underlying assumptions and frameworks, not least of which is the stable-income mindset that is typically brought to a discussion of retirement benefits, that clearly does not apply here and that is very difficult to shake off.

A final reason for the limited benefits of modelling as a means to identify the most appropriate approach to designing the benefits of the scheme is that modelling tends to be trumped by ideology. If somebody is convinced that a defined benefit arrangement is preferable to its defined contribution counterpart, then no amount of modelling is likely to persuade him or her otherwise; in fact, a principle-based approach that evaluates the trade-offs involved is likely to be more helpful.

For these reasons, the method of evaluation utilised instead a stepwise approach to the overall attributes of each of the candidates under consideration. The ultimate aim of this process is not to choose the best of these candidates but to allow the process to shed light on those features of the scheme that, thanks to the insights provided through consideration of each of the options, are shown to be desirable for the group concerned. These insights are summarised in the last part of the discussion which follows, referred to as *“lessons learned through the process”*. Modelling was nevertheless carried out on each of these alternatives.

I. Simple Defined Contribution

The first model considered for evaluation is the approach recommended for informal-economy workers in the policy paper that describes the National Social Security Fund (the NSSF), a straightforward defined contribution arrangement:³³⁹

“An administratively simple low-cost arrangement would benefit self-employed or informal sector workers [...]. Such a fund would be run on a defined-contribution basis and without Government underwriting. It could also be a default destination for supplementary contributions made through automatic enrolment. Where an employer cannot enrol employees in an occupational fund, they would instead be enrolled in the default fund.”

Design

The key rationale for this design is its simplicity and the fact that it has been conceived as a supplementary arrangement for voluntary participation. In formulation and in the benefits provided, this scheme is not consistent with the corresponding arrangement provided to formal-economy workers, potentially raising concerns of equality against constitutional stipulations.³⁴⁰

³³⁹ IDTT (2012) 28

³⁴⁰ The arrangement for formal-sector workers in the proposed NSSF is a career average defined benefit scheme, largely as described and assessed in further discussion in this Appendix, where its appropriateness to informal-economy workers is considered.

This design is similar to that of existing counterparts in other countries. A number of international arrangements targeted at workers in the informal economy are also structured as simple defined contribution schemes, without smoothing of benefits and without supporting risk benefits.

The text in the IDTT paper is not explicit on the design of the savings arrangement, and does not mention any supporting insurance. It is interpreted, for the purposes of this analysis, as suggesting an uncomplicated defined contribution arrangement without incentives. A contribution subsidy is indeed proposed for those contributing to the NSSF itself, but part of the justification for that subsidy is to:³⁴¹

“[...] encourage formalization of employment, and contribute more broadly to protecting decent terms and conditions of work”

This suggests that such a subsidy was viewed as a means to attract members to formality of employment and full membership of the NSSF and was not considered for members of the informal economy. However, such an approach may also raise concerns of inequality at constitutional level.

No mention is made in the text of options at retirement, whether accrued savings must all be taken in the form of (regular) income or whether, alternatively, some may be withdrawn as cash at retirement or, for that matter, prior to retirement. Emphasis on the simplicity of the arrangement, and the notion that employees not enrolled in occupational funds could instead be enrolled to this fund, as a default, suggests that a design close to existing defined-contribution private-sector funds is most likely.

We have assumed, for this purpose, along the lines of the current legislative framework applicable to pension funds, that:

- No access to accumulated saving is granted prior to retirement;
- One-quarter of savings accumulated to the date of retirement may be taken as a lump sum; and
- The balance, subject to some practical minimum, must be converted to a lifetime annuity.

A controlled drawdown approach is possible but unlikely to be permitted as accumulated member credits are, in many cases, not expected to be large and funds are likely under the circumstances, to be drawn down to exhaustion relatively quickly.

No insurance arrangements are considered under this model, following our best understanding of the text of the IDTT proposals.

The administrative infrastructure is not discussed by the IDTT but, as the arrangement is envisaged as an extension to the NSSF, it is likely that similar arrangements are to be utilised. It is assumed that an extension to the NSSF is developed or a new defined contribution social security scheme established for this purpose.

Mechanisms for contribution collection and benefit payment are also not considered by the IDTT. It is assumed that similar operational approaches are to be made available for the envisaged defined-contribution fund as for the NSSF. This suggests that (contribution and benefit) payment options suited to workers in the formal economy are likely, with the possibility of alternative, more flexible means developed on top of this to assist members who need this flexibility.

Concerning the payment of benefits, as long as bank accounts are created for beneficiaries at the time of delivery of the benefit, payment into bank accounts is likely to be the most effective and most helpful to members. However, other options, including mobile options, could also be considered.

³⁴¹ IDTT (2012) 23

Assessment

Table 30: I Benefits – Main categories of benefits (Commentary and Rating)

Benefits: Main categories of benefits	Commentary	Rating
Retirement benefits	Provides good focus on the retirement benefit, but the lack of incentives may contribute to poor take-up and ultimate inadequacy of benefit.	3
Survivor benefits	The absence of risk benefits may render the arrangement unpopular and subject to challenge on the basis of its inequity against the corresponding scheme available for formal-economy workers.	1
Disability benefits		1
Funeral benefits		1
Early (partial) access to saving	Partial withdrawals are not mentioned by the IDTT, further undermining the likely attractiveness of the arrangement.	1

The simplicity of the defined contribution arrangement is undermined by the absence of supporting benefits, potentially raising concerns of inequality vis-à-vis formal-economy counterparts and claims that policymakers need to do more to address an economic system that stimulates informal-economy employment rather than condemning its participants to second-class citizenship in the scheme that is introduced.

Table 31: I Benefits – Retirement saving options (Commentary and Rating)

Benefits: Retirement saving options	Commentary	Rating
Defined benefit	This is a defined contribution arrangement, so it offers none of the benefit certainty of the defined benefit scheme, but addresses some of the difficulties that a defined benefit arrangement would present in this space.	1
Defined contribution	Solvency of a pure defined contribution arrangement is much easier to confirm, but no protection against investment risk is offered. The assets themselves must be invested, which is not cost-free, but the potential for allocation to assets with long-term social benefit may be realised.	3
Hybrid design	The opportunity to provide an optimal balance of the advantages of both defined benefit and defined contribution has not been taken.	1
Guarantees	Guarantees are not free of cost, but at low level could be provided in a way that benefits members at relatively low fiscal strain. That opportunity has also been missed here.	2
Early (partial) access to saving	Covered earlier, so not repeated as part of the analysis at this point.	

This discussion does not take a view on the advantages of a defined benefit arrangement over its defined contribution counterpart. It rates the combination down somewhat on the basis that none of the advantages of the certainty offered by a defined benefit plan have been built into the benefit structure.

Table 32: I Benefits – Form of retirement benefit (Commentary and Rating)

Benefits: Form of retirement benefit	Commentary	Rating
Income	The benefit is provided in the form of income. The level of income could be rather low, on average, as it depends on voluntary <i>ad hoc</i> contributions and would need to be subject to a minimum on the grounds of administrative constraint.	2
Cash lump sum	Paying a portion of the retirement benefit as a cash lump sum potentially enhances the attractiveness of the arrangement to members, though having to wait until retirement dampens that advantage.	3

Benefits: Form of retirement benefit	Commentary	Rating
Fund accessible for controlled drawdown	Drawdown is not mentioned as a possibility by the IDTT but may be a practical solution where amounts accumulated are small.	1
Combination of options	A conventional combination of a lifetime annuity and a cash lump sum is regarded as the simplest to implement and understand, but may not be particularly popular.	2

The possibility of allowing a living annuity drawdown arrangement is considered poor on the basis that it would undermine income security in retirement. On the other hand, where small amounts are accumulated, some practical approach may need to be granted to avoid the payment of income in very small slices. A conventional combination of lump sum and income is regarded as the most appropriate to this scheme.

Table 33: I Benefits – Spouse- and dependent benefits (on death prior to retirement) (Commentary and Rating)

Benefits: Spouse- and dependent benefits (on death prior to retirement)	Commentary	Rating
Income	No benefit payable on death prior to retirement, so none of these arguments need be considered.	1
Cash lump sum		
Waiver of premium		
Combination of options		

This represents perhaps one of the most serious disadvantages of this benefit structure against its alternatives, which provide some form of spouse's protection on death before retirement.

Table 34: I Membership and contribution arrangements (Commentary and Rating)

Membership and contribution arrangements	Commentary	Rating
Compulsory membership for all	The model proposed strongly suggests both membership and contributions on a voluntary basis, simplest from an administrative point of view but least likely to result in large membership, particularly in the absence of incentives of any kind.	2
Compulsory membership for all informal-economy workers		
Compulsory membership for specified group		
Voluntary membership		
Membership linked to affiliation		
Compulsory contributions		
Voluntary contributions		

Simplicity of the strictly voluntary arrangement represents probably its key advantage, but the outcome in terms of contributions made and benefits ultimately received may be poor.

Table 35: I Contributions – Formula for contribution level (Commentary and Rating)

Benefits: Main categories of benefits	Commentary	Rating
Flat minimum contribution	The ethos of voluntary membership extends to the contribution level as well, likely also to be subject to the discretion of members though, for practical purposes, subject to a minimum Rand amount. The flexibility afforded to prospective members may enhance the attractiveness of the offering.	3
Minimum contribution as percentage of earnings		
No minimum contribution		
Employer co-contribution		

Benefits: Main categories of benefits	Commentary	Rating
Government co-contribution		
Contribution expressed as % of earnings w/o min		

No formula is envisaged for contributions, giving members flexibility but potentially limiting the contributions that may be expected under the arrangement.

Table 36: I Contributions – Regularity of contribution payment (Commentary and Rating)

Contributions – Regularity of contribution payment	Commentary	Rating
Mandatory monthly payment	The completely flexible nature of the contribution regime renders the probability of regular contributions rather low. That flexibility should be regarded as an advantage from the point of view of the member, but a disadvantage from the perspective of the expected volume of saving and assets built up in the fund.	3
Facility to pay weekly		
Option to pay whenever		
Minimum periodical payment		

No mandate is placed on contributions, giving members complete flexibility but potentially reducing the effectiveness of the system in mobilising retirement saving.

Table 37: I Incentive arrangements (Commentary and Rating)

Benefits: Main categories of benefits	Commentary	Rating
Offer access to other benefits	No incentives are provided, best for the fiscus, but least attractive to members.	1
Offer other benefits free		
Government co-contribution		
Access to other state benefits		
Early (partial) access to saving		
Offer choice of non-cash incentives		

The simplicity of the scheme and the absence of incentives is best for government finances, but on the basis of international and local experience, is least likely to work in terms of attracting members and most likely to be challenged on the basis of inequality compared with formal-economy workers.

Table 38: I Withdrawals and vesting (Commentary and Rating)

Withdrawals and vesting	Commentary	Rating
No early access	No early access to retirement saving is anticipated simplifying the design of the system, but reducing its attractiveness to potential members whose circumstances suggest an acute need for access to savings.	1
Proportional access		
Access for specified purpose		
Early access limited to own contributions		
Automatic vesting after x years		

No withdrawal of accumulated saving is anticipated. Early access to saving represents a useful way to differentiate this arrangement from its formal-economy counterpart and make it more attractive to potential members from the

informal economy. (Outside of the scope of this study, participation by members registered to the NSSF could be free of incentives.)

Table 39: I Administrative backbone (Commentary and Rating)

Administrative backbone	Commentary	Rating
UIF	An extension to the NSSF is expected to be reasonably efficient, taking advantage of economies of scale, even if it needs to be established as a separate fund.	3
New pension fund		
Existing fund		
Alternative standalone arrangement		

Reasonable integration with the corresponding arrangements established under the NSSF is likely to be achieved because the fund is envisaged as an extension to the NSSF

Table 40: I Delivery mechanism – Contribution receipt (Commentary and Rating)

Delivery mechanism: Contribution receipt	Commentary	Rating
Debit order only	The details of the infrastructure considered appropriate for contribution collection are not clear. As the scheme is envisaged as voluntary in nature and aimed at informal-economy workers, however, it needs to utilise all available formal mechanisms like debit orders and permit some flexibility for cash and electronic contributions by other means.	2
Mobile money only		
Cash only		
Member choice		
Choice at industry level		

That this is not specifically designed as an arrangement for informal-economy workers and should provoke some concern about the flexibility of its contribution-collection arrangements. Use of mobile money and other convenient mechanisms should form a specific part of the specification of infrastructure.

Table 41: I Delivery mechanism – Benefit payment (Commentary and Rating)

Delivery mechanism: Benefit payment	Commentary	Rating
Cash only	Benefit payment needs to be considered from the perspective of member needs. Payment into bank accounts may be appropriate for the majority of members, bearing in mind the relatively large amounts involved (larger at least than the corresponding size of contributions), as long as new bank accounts are opened for members who do not have such facilities.	2
Direct into bank account		
Direct into mobile wallet		
Member choice		

Typical formal-economy approaches may be sufficient, even for informal-economy workers and their beneficiaries, as long as minimum actions are taken in support of recipients, like opening bank accounts.

A straightforward defined contribution arrangement is indicated by the IDTT as an appropriate arrangement for workers participating in the informal economy who wish to save for retirement. An assessment of the pros and cons of this approach suggests that the absence of incentives to contribute, along with the lack of guarantees and flexible

arrangements, or early access to accumulated saving may render this framework less effective at mobilising savings than the alternatives.

II. Smoothed Defined Contribution with Risk Benefits

The second option is based on the publication of the Department of Social Development (DSD, 2014),³⁴² specifically for the scheme aimed at informal-economy members.

Design

This is a defined contribution arrangement with the following modifications:

- Contribution levels are flexible in the hands of the member rather than dependent on some specified or actual earnings, but government matches these contributions.
- Investment returns are smoothed from year to year, so that members themselves do not bear all of the risk of return fluctuations. This, on the one hand, facilitates the potential to allocate assets to investment classes with higher volatility but also greater potential for returns in the long term. On the other hand, the plan depends on holding back a proportion of the investment performance in good years in order to finance shortfalls in years with negative performance. The long-term outcome should be positive for members.
- Three quarters of accumulated savings must be applied to purchasing a lifetime annuity at retirement, on terms that are guaranteed by the government, and the remaining quarter may be taken as a cash lump sum.
- The annuity purchased at retirement is guaranteed for five years, providing protection to dependents in the event of early death, and increases at the rate of price inflation for the duration of payment.
- On death after retirement, an income of 25% of the corresponding full pension amount is applied to support the surviving spouse and children.
- On death prior to retirement but more than three years after joining, a multiple of 1.5 times contributions paid in the previous three years is due to survivors. On the assumption that contributions paid are equivalent to 10 percent of income, this death benefit, is equivalent to 45 percent of annual earnings. A lump-sum funeral benefit equal to R10 000 is paid in addition. On death prior to retirement less than three years after joining, the value of the accumulated retirement account is payable to survivors.
- * On disability before retirement but more than three years after joining the scheme, an annual income equal to 3 times contributions paid in the previous three years is due, payable until age 65 (despite eligibility for social grants at age 60), plus a contribution of 10% of that pension to the member's retirement account. This is generous. Assuming contributions actually paid of 10 percent of earnings, this disability benefit is equivalent to the just under 100% of earnings prior to the disability. If disability occurs less than three years after joining the scheme, only the value of the accumulated retirement account is payable.

It is recommended that the fund is constituted under the Pension Funds Act and the oversight of a board of trustees. It is further recommended that it is administered either by the UIF, the South African Social Security Agency or a private-sector entity. The level of flexibility to members regarding the payment of contributions is not clear in the proposals. As the fund is established explicitly for informal-economy members, however, administration is assumed to be structured around their needs, suggesting high levels of flexibility and access.

Assessment

Table 42: II Benefits – Main categories of benefits (Commentary and Rating)

³⁴² DSD (2014), "Department of Social Development: Inclusion of informal workers in the reform of retirement provision in South Africa", Consolidated Report, prepared by Oxford Policy Management in partnership with Callund Consulting

Benefits: Main categories of benefits	Commentary	Rating
Retirement benefits	The design is focused on the provision of retirement benefits. Though the absence of a mandate on contributions may undermine the extent of the saving, the government match should enhance the volumes. Protection against volatility enhances the security of the expected retirement benefit.	4
Survivor benefits	Survivor benefits at a reasonable level are provided for. The provision of these benefits in proportion to contributions is a helpful incentive to participate.	4
Disability benefits	A generous disability benefit plus an explicit contribution to retirement benefits is helpful.	4
Funeral benefits	The proposed funeral payment is also meaningful, even if it is available in full only three years after joining the fund.	4
Early (partial) access to saving	No early access to benefits is included in the design of the scheme.	1

The design combines smoothed investment returns and a guaranteed annuity rate with reasonable benefits on death or disability prior to retirement (though only after three years' membership).

Table 43: II Retirement saving options (Commentary and Rating)

Retirement saving options	Commentary	Rating
Defined benefit	This is defined contribution arrangement, but the smoothing of returns and guaranteed annuity rates offer features that bear some resemblance to a defined benefit scheme.	2
Defined contribution	The design provides the flexibility of as-and-when contributions but protects members against some of the volatility of returns.	4
Hybrid design	The design provides elements of both defined benefit and defined contribution arrangements.	4
Guarantees	Limited guarantees are provided, covering the annual growth in the account and the annuity rate, not the absolute level of income due in retirement.	3
Early (partial) access to saving	Covered earlier.	

Leaning towards defined contribution, the design provides a degree of protection against investment and annuity fluctuations while providing an element of hybrid retirement benefits.

Table 44: II Benefits – Form of retirement benefit (Commentary and Rating)

Benefits: Form of retirement benefit	Commentary	Rating
Income	Most of the benefit must be taken in the form of an income, which helps to achieve the core objectives of the system, though benefits may be small in those instances in which a significant level of total contributions has not been paid.	4
Cash lump sum	One-quarter of the accumulated saving is payable in the form of a lump sum at retirement, potentially increasing the attractiveness of the system to participants, though at the cost of undermining the core objective of providing income in retirement.	3
Fund accessible for controlled drawdown	Controlled drawdown is not available under this scheme.	1
Combination of options	A combination is available, though in practice, small accumulated amounts are likely to be payable as a lump sum, perhaps at the option of the member.	2

The approach to the form of benefit is consistent with the corresponding approach applying to members of private-sector retirement funds, striking a balance between enforcing a pension receivable only as an income and permitting some access in the form of a lump sum.

Table 45: II Benefits – Spouse- and dependent benefits (on death prior to retirement (Commentary and Rating)

Benefits: Spouse- and dependent benefits (on death prior to retirement)	Commentary	Rating
Income	Benefits on death prior to retirement are available only in the form of an income if death occurs after 3 years of joining and do not include waiver-of-premium benefits (effectively ongoing contributions to retirement savings) in addition.	4
Cash lump sum		
Waiver of premium		
Combination of options		

The risk under this arrangement is that the surviving spouse is not in a good position to save for retirement, but the benefit is nevertheless sound in providing income to the survivor.

Table 46: II Membership and contribution arrangements (Commentary and Rating)

Membership and contribution arrangements	Commentary	Rating
Compulsory membership for all	Membership of the scheme is entirely voluntary, as is the payment of contributions. Although other aspects of the benefit structure are better geared to attracting new members (the smoothed returns, death benefits and contribution subsidy), this particular feature does not promote membership in significant numbers.	2
Compulsory membership for all informal-economy workers		
Compulsory membership for specified group		
Voluntary membership		
Membership linked to affiliation		
Compulsory contributions		
Voluntary contributions		

Except for the incentives indicated elsewhere for this option, no special arrangements are proposed to attract members. It is difficult to predict the combined impact of a mix of factors on the likely membership of the scheme.

Table 47: II Contributions – Formula for contribution level (Commentary and Rating)

Contributions: Formula for contribution level	Commentary	Rating
Flat minimum contribution	Contribution levels are at the discretion of members, though a Rand minimum probably has to be applied to manage administration costs. The incentives provided in the form of the death and disability benefits, which depend on the level of contribution paid, and the matching government co-contribution, may provide material incentives to improving the level of contributions paid. The flexibility to members may also enhance the attractiveness of the arrangement.	3
Minimum contribution as percentage of earnings		
No minimum contribution		
Employer co-contribution		
Government co-contribution		
Contribution expressed as % of earnings w/o min		

No formula appears to be proposed for the level of contributions, in absolute terms or relative to earnings. The flexibility of the arrangement, which may increase attractiveness, needs to be weighed against the disincentive

effects of the absence of mandate, but members are incentivised to contribute by the added contingent death- and disability benefits that they would receive, as well as the matching government co-contribution.

Table 48: II Incentive arrangements (Commentary and Rating)

Incentive arrangements	Commentary	Rating
Mandatory monthly payment	Neither a minimum periodic contribution nor a maximum term between payments is proposed. Notwithstanding the attractiveness of the flexibility, the risk remains that the level of contributions from members is low.	3
Facility to pay weekly		
Option to pay whenever		
Minimum periodical payment		

No constraints appear to be envisaged regarding the frequency of contributions, again enhancing flexibility but potentially at the risk of active participation by members.

Table 49: II Incentive arrangements (Commentary and Rating)

Incentive arrangements	Commentary	Rating
Offer access to other benefits	A matching government co-contribution is proposed generous to members but potentially demanding on the fiscus.	4
Offer other benefits free		
Government co-contribution		
Access to other state benefits		
Early (partial) access to saving		
Offer choice of non-cash incentives		

This is a very attractive benefit to members. The risk regarding such an arrangement is that fiscal costs prove greater than expected, in which case a cap on the subsidy may be required.

Table 50: II Withdrawals and vesting (Commentary and Rating)

Withdrawals and vesting	Commentary	Rating
No early access	No early access to retirement saving is anticipated simplifying the design of the system, but reducing its attractiveness to potential members whose circumstances suggest an acute need for access to savings.	1
Proportional access		
Access for specified purpose		
Early access limited to own contributions		
Automatic vesting after x years		

No early withdrawals appear to have been provided for. Though a number of other incentives are provided, the absence of early access represents potentially a deep disincentive on active participation in the arrangement.

Table 51: II Administrative backbone (Commentary and Rating)

Administrative backbone	Commentary	Rating
UIF	A number of alternatives are considered without a firm recommendation being settled on, except that registration of the fund under the Pension Funds Act is regarded as appropriate rather than establishing a social security scheme.	3
New pension fund		
Existing fund		
Alternative standalone arrangement		

Options have been considered but firm conclusions are not drawn. A robust administrative infrastructure is assumed.

Table 52: II Delivery mechanism – Contribution receipt (Commentary and Rating)

Delivery mechanism: Contribution receipt	Commentary	Rating
Debit order only	No comments are passed on the options for contributing to the fund.	2
Mobile money only		
Cash only		
Member choice		
Choice at industry level		

Flexibility of contributions is critical in an arrangement with completely flexible and voluntary contributions.

Table 53: II Delivery mechanism – Benefit payment (Commentary and Rating)

Delivery mechanism: Benefit payment	Commentary	Rating
Cash only	Not considered.	2
Direct into bank account		
Direct into mobile wallet		
Member choice		

Options for paying benefits in a variety of forms are also not considered.

This arrangement combines smoothed defined contribution benefits with generous, contribution-linked death- and disability benefits and subsidised contributions. It appears to provide a good balance of pros and cons. No special efforts are proposed to attract members in large numbers.

III. Career Average Defined Benefit

The third option is based on the model of contributions and benefits applying to the NSSF itself. This is difficult to achieve for informal-economy workers, because it is built around earnings floors and ceilings, which requires reliability of earnings. It is included with the objective of providing consistent terms for formal and informal economy workers through the NSSF. This would be beneficial on the basis that a high proportion of South Africans spend time working in both formal and informal economy occupations, sometimes simultaneously.

Design

The NSSF proposals have the following characteristics, some of which need to be modified (as indicated by the bracketed comments after the descriptions) to facilitate participation by informal economy workers:

- Contributions are payable of 12 percent of income between a stipulated income floor and a ceiling. Of this 2 percent of income is paid to the UIF and the balance of 10 percent to the NSSF. (Requiring informal-economy workers to contribute to the UIF is unrealistic as the rules of the fund are currently structured around formality of employment. For the purposes of this exercise, that contribution is ignored and informal-economy workers are assumed to contribute 10 percent of income to the fund. Even so, it may well be that a contribution of 10 percent is not realistic for many if not most informal economy workers.)

- The floor and ceiling are respectively set at approximately R15 500³⁴³ and the current level of the UIF ceiling, R178 464. Contributions are payable only in respect of earnings falling between this lower and upper limit. (Defining contributions for informal-economy participants in respect of earnings above an income threshold appears unrealistic as they seldom have a stable income over the course of the year. This serious challenge to implementation must be allowed for in the system of incentives.)
- Lower-income members are supported through the mechanism of a government subsidy covering all or part of their contributions. (This is being done or considered in a range of comparative jurisdictions, despite difficulty experienced in practice to verify income of informal-economy members, and the need to avoid gaming by participants. An arrangement of roughly equivalent value is assumed to be provided to these members.)
- Pension benefits take the form of a career average defined benefit. (This is similar in practice to smoothed defined contribution arrangements but is also difficult to apply under the circumstances as incomes must be inferred from contributions and gaming is possible through the payment of higher contributions as retirement approaches – which may need to be controlled via mechanisms such as averaging income over a number of years/contributions.)
- The paper is silent on whether a part of the benefit may be taken as a lump sum, but stresses the calculation of the overall replacement ratio, suggesting that the lump sum is either not anticipated, or that it is expected to reduce the targeted replacement ratio if it is taken. (For the purposes of this analysis, it is assumed that a lump sum is not payable as a substitute for some of the income otherwise claimable.)
- Benefits on death prior to retirement are based on the salary of the worker and the number of dependents at the time of death and are payable for a limited time to surviving spouses and until the age of 18 in the case of child dependents. (This is workable for informal economy workers if the problem, of inferring the salary can be resolved, but the benefit could only be linked to the inferred earnings at the time of the most recent contribution or aggregated over the last number of months or years. Gaming is theoretically possible.)
- Though the discussion document is silent on the matter, a contingent spouse's pension on death after retirement is assumed to be payable.
- Benefits on disability prior to retirement are based on the income of the worker at the time of disability. (This also creates the problem of inferring the salary. Gaming is again possible, though surely not very likely unless the disability claim is itself fraudulent, always a risk.)
- Recipients of disability benefits are eligible for a retirement income when they reach the age of retirement and their dependents to a survivors' benefit on death prior to that age.
- A flat-rate funeral benefit is also payable on death at any time.

No information is provided regarding the administrative arrangements expected to apply to the members of the NSSF. Judging from other parts of the document, a state-run entity akin to the UIF with contributions payable by employers on behalf of their workers appears to be most likely. While it makes sense to have informal-economy members participate in the same scheme, special arrangements would need to be made to accommodate contributions by these members.

It is assumed for the purposes of this analysis that multiple channels are available for contributions, not unlike the UIF, but that this does not extend to mobile-money infrastructure. Benefits are assumed payable into bank accounts that are opened for the member or beneficiary if not in existence at the time of the payment.

Even with the modifications proposed to accommodate informal-economy workers, it remains unclear whether they can realistically be included under an arrangement of this type. As the benefits on the lines of consistency of approach are significant, however, the assessment is carried out below with comments passed, where relevant, on challenges of implementation.

Assessment

Table 54: III Benefits – Main categories of benefits (Commentary and Rating)

³⁴³ This has been adjusted upwards from the R13 000 income cited in IDTT (2012), approximately in proportion to the corresponding change in the UIF ceiling.

Benefits: Main categories of benefits	Commentary	Rating
Retirement benefits	Retirement benefits are well provided for under this arrangement, on a hybrid basis that shares risks. Though salary needs to be inferred from contributions, this is possible under an arrangement like this which is likely to provide benefits similar to those of a smoothed DC system.	4
Survivor benefits	Survivor benefits are payable, but depend on salary at the time of death, which is undefined for informal-economy workers. While gaming by members is possible, the opposite is more likely as earnings typically fall during periods of illness prior to passing away.	2
Disability benefits	Disability benefits are also based on inferred salary at time of death. Apart from the problem of an ill-defined salary, gaming is considered less likely than for the corresponding death benefits, except in instances of fraudulent claims.	3
Funeral benefits	A flat-rate funeral benefit is provided.	5
Early (partial) access to saving	Early access to saving is not considered.	1

The difficulty of inferring the salary from the contributions is not necessarily a hindrance in the case of retirement benefits, but could be problematic where death and disability benefits are concerned and contributions are infrequently paid.

Table 55: III Benefits – Retirement saving options (Commentary and Rating)

Benefits: Retirement saving options	Commentary	Rating
Defined benefit	Theoretically defined with reference to income, these benefits are in practice related to contributions payable, but with significant funding risks resulting from mismatches of benefit and contribution and from the potential of member gaming.	3
Defined contribution	Benefits are related to the corresponding level of contributions paid by members, but without the clarity of the link that a simple defined contribution arrangement provides.	2
Hybrid design	The result is a hybrid design that includes elements of DB and DC, but risks combining the worst features of the respective designs rather than the best. Benefits are indeed defined, but opaquely rather than clearly. Funding risk nevertheless, remains. And, while the investment risk that characterises DC arrangements has been mitigated, it has been replaced by a different type of uncertainty.	2
Guarantees	Guarantees are provided at the cost of high levels of financial risk but, to the potential detriment of members, they are opaquely defined.	2
Early (partial) access to saving	Early access to saving is not anticipated.	1

The retirement benefit combines well the corresponding advantages of defined-benefit and contribution arrangements, and is flexible to informal-economy workers without fixed income who are able to pay only from time to time. However, it lacks the attractiveness of allowing early access to saving, which is important for informal economy workers.

Table 56: III Benefits – Form of retirement benefit (Commentary and Rating)

Benefits: Form of retirement benefit	Commentary	Rating
Income	The clear focus of the benefit structure is on income in retirement.	5
Cash lump sum	It is assumed that a cash lump sum is not available as a substitute to income.	1
Fund accessible for controlled drawdown	Controlled drawdown is not an option under this arrangement.	1
Combination of options	A combination of options does not appear to be available under this scheme.	1

The focus on retirement income is sound, but the absence of alternatives may reduce the attractiveness of the scheme to those who pay contributions on a voluntary basis.

Table 57: III Benefits – Spouse- and dependent benefits (on death prior to retirement) (Commentary and Rating)

Benefits: Spouse- and dependent benefits (on death prior to retirement)	Commentary	Rating
Income	An income benefit is payable to the surviving spouse for a limited period and to each child until age 18, independent of the contribution-paying period. The benefit is not available in any other forms.	3
Cash lump sum		
Waiver of premium		
Combination of options		

The benefit is payable in the form of an income, which is most appropriate to protect the interests of survivors, but for a limited time only. Costs are managed through the provision of limited benefits, the philosophical rationale being that the scheme helps the surviving spouse through a period of adjustment not a working lifetime of lost earnings. This contrasts the generosity of the corresponding death benefits under the smoothed defined contribution arrangement and retains appropriate focus on the retirement benefits.

Table 58: III Membership and contribution arrangements (Commentary and Rating)

Membership and contribution arrangements	Commentary	Rating
Compulsory membership for all	As the scheme is not designed for low-income workers, no comment is passed on whether membership should be entirely voluntary or whether elements of mandatory participation and contributions might be considered. It is assumed to be entirely voluntary.	2
Compulsory membership for all informal-economy workers		
Compulsory membership for specified group		
Voluntary membership		
Membership linked to affiliation		
Compulsory contributions		
Voluntary contributions		

On the basis that membership of and contributions to the scheme are regarded as voluntary, this aspect of the scheme is treated consistently with other alternatives. Contribution flexibility may render the scheme slightly more attractive to those who are inclined to participate in any case, but it could dampen overall participation in comparison with alternatives that provide higher levels of incentives.

Table 59: III Contributions – Formula for contribution level (Commentary and Rating)

Contributions: Formula for contribution level	Commentary	Rating
Flat minimum contribution	Contribution levels are assumed to be at the discretion of the member, even if a contribution percentage is specified, since it is practically difficult to enforce an	3
Minimum contribution as percentage of earnings		
No minimum contribution		

Contributions: Formula for contribution level	Commentary	Rating
Employer co-contribution	alternative. A Rand floor may need to be imposed to manage unit administration costs.	
Government co-contribution		
Contribution expressed as % of earnings w/o min		

Member flexibility potentially limits the contribution levels expected in aggregate under the arrangement.

Table 60: III Contributions – Regularity of contribution payment (Commentary and Rating)

Contributions: Regularity of contribution payment	Commentary	Rating
Mandatory monthly payment	Flexibility in the hands of members may render the scheme more attractive but potentially dampens the total volume of contributions payable.	3
Facility to pay weekly		
Option to pay whenever		
Minimum periodical payment		

The absence of mandate may put downward pressure on the total contributions payable to the arrangement.

Table 61: III Incentive arrangements

Incentive arrangements	Commentary	Rating
Offer access to other benefits	Though the clear intention is to provide financial support to lower-income members working in the formal economy, a parallel approach may be difficult to apply consistently to those working in the informal economy, who seldom enjoy reliable incomes. Some incentive arrangement is assumed to apply to this scheme in the interest of equitable treatment, though how it would work in practice is not clear. Such an incentive would play a very large part in encouraging participation and active contributions.	5
Offer other benefits free		
Government co-contribution		
Access to other state benefits		
Early (partial) access to saving		
Offer choice of non-cash incentives		

Though practical concerns exist regarding the manner in which incentives might be provided, a material subsidy, equivalent in some way to the corresponding financial support considered appropriate for formal economy members, would be a powerful incentive to participate and a strong tool for redistribution.

Table 62: III Withdrawals and vesting (Commentary and Rating)

Withdrawals and vesting	Commentary	Rating
No early access	No early access appears to be anticipated for the NSSF scheme.	1
Proportional access		
Access for specified purpose		
Early access limited to own contributions		
Automatic vesting after x years		

The description of the scheme appears to make no provision for early access to benefits.

Table 63: III Administrative backbone (Commentary and Rating)

Administrative backbone	Commentary	Rating
UIF	The delivery of administration is expected to be reasonably efficient, as it builds on the corresponding backbone of the NSSF. How well it caters for the specific needs of informal-economy workers, however, is not clear.	3
New pension fund		
Existing fund		
Alternative standalone arrangement		

Administration is expected to be effective, though it may not automatically meet the specific needs of informal-economy workers.

Table 64: III Delivery mechanism – Contribution receipt (Commentary and Rating)

Delivery mechanism: Contribution receipt	Commentary	Rating
Debit order only	Informal-economy workers have special needs regarding contribution payment as they are much less likely than their formal-economy counterparts to manage a system of regular contributions and typically need a wider range of options to facilitate unscheduled payments.	2
Mobile money only		
Cash only		
Member choice		
Choice at industry level		

Flexibility to meet the specific needs of informal-economy workers may be limited in the absence of special initiatives to cater to these needs.

Table 65: III Delivery mechanism – Benefit payment (Commentary and Rating)

Delivery mechanism: Benefit payment	Commentary	Rating
Cash only	Retirement benefits that are payable in the form of an income, are most likely to be paid into a bank account, opened for the purpose if necessary. This is probably the most appropriate arrangement because it helps recipients to manage these payments. Death and disability benefits paid into bank accounts without option of an alternative, may be less convenient for informal-economy workers.	2
Direct into bank account		
Direct into mobile wallet		
Member choice		

Some effort should be made, in the event that the NSSF were modified for informal-economy workers to ensure flexible mechanisms of delivery to informal-economy members.

The logic that the NSSF should be expanded for the benefit of informal-economy workers is based primarily on the argument that anything other than this would be unfair to these workers and subject to possible challenge. Implementation along the lines proposed by the IDTT would clearly be very difficult, however, premised largely on the construct of a fixed income. It would need to be subject to considerable modification to be rendered appropriate for informal-economy workers who, largely, do not have fixed incomes. If this could be achieved, however, it could also prove beneficial to these workers. Finally, the construct of death benefits payable in the form of income for a limited period to help the surviving spouse through a period of adjustment frees up resources for application to retirement saving.

IV. Modified Final Salary Defined Benefit

The last option in this set of four is not considered in any policy papers but is included here for completeness. This is a final salary defined benefit arrangement that is modified for application to informal-economy workers with variable earnings.

Design

With challenges in the definition of earnings, this is not easy to implement but it must be a final salary scheme if it is to distinguish itself sufficiently from the career average arrangement proposed under the previous option.

Even so, since strictly-defined final salary schemes introduce substantial opportunities for manipulation by members without fixed incomes, benefits need to be established with care. A benefit based on average earnings over a period of years prior to retirement, say three or five, is proposed. The analysis below assumes a five-year period. Since earnings are difficult to define, they need to be inferred from the contributions actually paid by members, assuming an appropriate contribution rate. A maximum income, for this purpose, that bears some reference to, for example, the old age grant, may be appropriate to manage the risk of gaming in the years prior to retirement. It is tempting to base eligibility for benefits on a minimum number of contributions, but as the final-salary formula is based on an accrual of benefits anyway this is not considered necessary. A minimum contribution level may nevertheless be required to avoid the payment of paltry amounts for most of the working life of members and then much larger contributions during the period used to define the benefit.

Benefits in retirement are proposed payable primarily in the form of an income, with a proportion of the notional value at retirement also payable as a lump sum, at the option of the member. This proportion is intended to improve the attractiveness of the scheme, but should be kept relatively low, say 20 percent of the total value of the pension to avoid providing incentives for gaming in the years prior to retirement. A dependent's pension on death after retirement is regarded as appropriate.

Death and disability benefits are available, contingent on the respective events occurring prior to retirement. The benefits themselves are also difficult to define in advance, because they are typically defined in terms of the pre-event earnings of the member on the basis that this best replaces the financial loss experienced (by the member on disability and by their dependents on death). This is challenging under circumstances in which earnings are seldom specified and members are not contractually mandated to pay contributions. On the other hand, fraud and attempted suicide aside, few members choose to submit death or disability claims, so the costs of funding these benefits should be manageable with an appropriate specification of the benefit and prudently established sets of assumptions. The intrinsic remaining problem is that the income of the member is not known at the time of the claim and can only be inferred from the corresponding level of contributions.

In summary, death and disability benefits are

- expressed in pre-determined language, but
- based on inferred earnings at the time of the claims event, which can only be determined on the basis of contributions actually paid, and
- are supported by the provision of a lump-sum funeral benefit to offset the expected costs of a funeral.

Incentives are assumed to take the form of contribution subsidies on a sliding scale. Again, as earnings are typically not defined, this scale cannot be defined in terms of income but can only be related to the contributions actually made to the fund, averaged over a period of five years. It is proposed, for the purposes of this arrangement, that:

- Contributions must be above a stipulated minimum, not only for operational viability but to manage the risk of gaming,
- Contributions up to the level of a specified first tier are matched by a subsidy on a one-to-one basis, and
- Contributions from the first tier to the corresponding second tier are matched by a subsidy at a level of half of the contribution in excess of the first tier.³⁴⁴

A disadvantage of this approach is that it incentivises members not to contribute at levels in excess of the first tier and, when they do choose to contribute at above the first tier, not above the second tier. This could be addressed by modifying the incentive arrangement to apply not to each contribution but to the total contributions paid over a specified period, say one year. This encourages regular, even contributions by members.

³⁴⁴ The tiers could, for example, be linked to the corresponding levels of the social grants. If the first tier is equal to half the level of the old age social grant and the second tier 1.5 x that level, then the total subsidy due by the state is limited to the level of the grant, intuitively consistent with the corresponding commitment to grant recipients.

Administration is assumed to be provided by a public-sector entity or registered retirement fund. Since the scheme is established specifically for informal-economy workers, it would be in a good position to meet the specific needs of these members. Convenience of contribution-payments is assumed to be high, with mobile money and other flexible payment methods easily available to members.

Assessment

Table 66: IV Benefits – Main categories of benefits (Commentary and Rating)

Benefits: Main categories of benefits	Commentary	Rating
Retirement benefits	The scheme is focused on the provision of a retirement benefit related to the level of earnings immediately prior to retirement. These earnings may only be inferred from the corresponding level of contributions and the potential for gaming is significant.	3
Survivor benefits	Survivor and disability benefits are calculated on the basis of contributions paid, as a (poor) proxy for income earned. A positive aspect of this design feature is that it incentivises contributions into the scheme.	3
Disability benefits		
Funeral benefits		
Early (partial) access to saving	No early access to accumulated savings is anticipated.	1

The arrangement promises to pay reasonable benefits across all types, but suffers from complexity and uncertainty relating to the challenges of definition. This is likely to undermine the confidence of members in the level of benefits due at any time.

Table 67: IV Benefits – Main categories of benefits (Commentary and Rating)

Benefits: Main categories of benefits	Commentary	Rating
Defined benefit	Theoretically defined with reference to income, these benefits are in practice related to contributions payable, but with significant funding risks resulting from mismatches of benefit and contribution and from the potential of member gaming.	3
Defined contribution	Benefits are related to the corresponding level of contributions paid by members, but without the clarity of the link that a simple defined contribution arrangement provides.	2
Hybrid design	The result is a hybrid design that includes elements of DB and DC, but risks combining the worst features of the respective designs rather than the best. Benefits are indeed defined, but opaquely rather than clearly. Funding risk nevertheless, remains. And, while the investment risk that characterises DC arrangements has been mitigated, it has been replaced by a different type of uncertainty.	2
Guarantees	Guarantees are provided at the cost of high levels of financial risk but, to the potential detriment of members, they are opaquely defined.	2
Early (partial) access to saving	Early access to saving is not anticipated.	1

The scheme theoretically provides defined benefit pension income. Since no information is available on earnings prior to retirement, however, and contributions themselves must be used as proxies for earnings, the benefit has elements of defined contribution arrangements, with the additional risk that members take advantage of the benefit

formula by making disproportionately larger contributions in the years immediately prior to retirement. This introduces significant funding risk.

Table 68: IV Benefits – Form of retirement benefit (Commentary and Rating)

Benefits: Form of retirement benefit	Commentary	Rating
Income	Retirement benefits are due primarily in the form of income, which is broadly appropriate.	4
Cash lump sum	A cash lump sum is available, but is limited so that income in retirement is not unduly eroded by the lump sum, where elected by members. Opacity of the method for converting retirement income to a lump sum which, on grounds of equity, changes with financial and demographic circumstances at the time, may further undermine the credibility of the scheme in the eyes of members.	2
Fund accessible for controlled drawdown	Controlled drawdown is not available under this proposal, which combines only income and a cash lump sum.	1
Combination of options	The cash lump sum is available in combination with pension income at the election of the member.	2

The available combination of income and lump sum is helpful but slightly undermined by the opacity of the conversion rates. Perhaps the best way to overcome this problem while not permitting undue cross-subsidy is to determine and publicise the conversion factors on a regular basis but limit changes to an appropriate frequency, say once a year.

Table 69: IV Benefits – Spouse- and dependent benefits (on death prior to retirement) (Commentary and Rating)

Benefits: Spouse- and dependent benefits (on death prior to retirement)	Commentary	Rating
Income	Spouse- and dependent benefits on death prior to retirement are available. The quantum of benefits is not easily determined or communicated because the income of the member is undefined. On the positive side, however, is the alignment of interests: benefits are determined on the basis of some relationship to contributions made, incentivising active participation in the fund by its members.	2
Cash lump sum waiver of premium		
Combination of options		

Death benefits are available but not easily calculated as they are likely to depend on contributions paid. This nevertheless offers opportunities for alignment with member interests.

Table 70: IV Membership and contribution arrangements (Commentary and Rating)

Membership and contribution arrangements	Commentary	Rating
Compulsory membership for all	Mandatory membership has not been considered, but a minimum contribution in excess of the corresponding level required for administrative viability may adversely impact take-up. Benefits depend directly on the contributions payable, which provides an element of incentivisation, though the tilt in the benefit formula towards contributions paid in the last few years of working age introduces an element of financing risk to the scheme.	2
Compulsory membership for all informal-economy workers		
Compulsory membership for specified group		
Voluntary membership		
Membership linked to affiliation		
Compulsory contributions		
Voluntary contributions		

No mandate on either membership or contributions are anticipated.

Table 71: IV Contributions – Formula for contribution level (Commentary and Rating)

Contributions: Formula for contribution level	Commentary	Rating
Flat minimum contribution	Apart from a likely Rand floor, for operational reasons, no limitations are placed on the contributions relative to earnings. As the benefit formula depends on earnings, however, income is implicitly inferred from contributions, without any attempt to ratify this income.	3
Minimum contribution as percentage of earnings		
No minimum contribution		
Employer co-contribution		
Government co-contribution		
Contribution expressed as % of earnings w/o min		

No formula is utilised to specify the level of the contribution payable.

Table 72: IV Contributions – Regularity of contribution payment (Commentary and Rating)

Contributions: Regularity of contribution payment	Commentary	Rating
Mandatory monthly payment	No requirements are placed on the regularity or frequency of contributions to the fund.	3
Facility to pay weekly		
Option to pay whenever		
Minimum periodical payment		

Flexibility of contribution payment is provided to members.

Table 73: IV Incentive arrangements (Commentary and Rating)

Incentive arrangements	Commentary	Rating
Offer access to other benefits	Incentives take a number of forms. (1) Explicit government subsidy of contributions is anticipated, encouraging active participation by members. (2) The benefit structure encourages contributions, both in the long term for pension benefits and, in the shorter term, in the formulation of the level of benefits on death prior to retirement. The danger of gaming in the years running up to retirement is a risk implicit in the structure of benefits.	4
Offer other benefits free		
Government co-contribution		
Access to other state benefits		
Early (partial) access to saving		
Offer choice of non-cash incentives		

Incentives are applied both at the level of the contribution and in the manner in which benefits are formulated.

Table 74: IV Withdrawals and vesting (Commentary and Rating)

Withdrawals and vesting	Commentary	Rating
No early access	No provision is made in the structure of benefits for early access to benefits.	1
Proportional access		
Access for specified purpose		
Early access limited to own contributions		
Automatic vesting after x years		

No early access is anticipated.

Table 75: IV Administrative backbone (Commentary and Rating)

Administrative backbone	Commentary	Rating
UIF	Though details have not been considered, the opportunity exists to establish an administrative backbone that aptly meets the needs of informal-economy members while retaining appropriate levels of efficiency.	4
New pension fund		
Existing fund		
Alternative standalone arrangement		

As the administrative infrastructure is to be developed specifically for this scheme, the potential exists for it to be established in the interests of members, while meeting efficiency goals.

Table 76: IV Delivery mechanism – Contribution receipt (Commentary and Rating)

Delivery mechanism: Contribution receipt	Commentary	Rating
Debit order only	Details on contribution mechanisms have not been specified but there is every reason to expect that contribution collection could be organised to include administrative options in the interests of members, including mobile money collection, for example.	4
Mobile money only		
Cash only		
Member choice		
Choice at industry level		

Member-centric options are realistically expected.

Table 77: IV Delivery mechanism – Benefit payment

Delivery mechanism: Benefit payment	Commentary	Rating
Cash only	Mobile money alternatives are less urgently needed in the case of benefit payments, which are larger on average, than contribution receipts, but may be provided if the system facilitates a range of contribution-payment alternatives.	4
Direct into bank account		
Direct into mobile wallet		
Member choice		

Likely to form part of the delivery mechanism.

Some elements of this plan would be difficult to design and financial risks are likely to exist. Nevertheless, the possibility of a final salary arrangement for informal-economy workers should not be ruled out without reasonable consideration.

Summary of Analysis

The table that follows puts the plans considered thus far alongside one another and summarises the attributes of each, using the ratings proposed earlier alongside a summarising comment for each.

Table 78: Summary of Analysis

	Simple DC	Smoothed DC	Career Average DB	Final-Salary DB
Benefits				

	Simple DC	Smoothed DC	Career Average DB	Final-Salary DB
Main categories				
Retirement benefits	3	4	4	3
	Poor incentives	Good focus	Sound focus	Gaming possible
Survivor & disability benefits	1	4	3	3
	No benefits	Incentivised	Salary definition	Income inferred
Early access to saving	1	1	1	1
	Not indicated	Not proposed	Not proposed	Not proposed
Retirement saving options				
Defined benefit	1	2	4	3
	Pure DC	Smoothing	Fundamental	Theoretical
Defined contribution	3	4	3	2
	No protection	Smoothed DC	Shared risk	Tenuous link
Hybrid design	1	4	4	2
	No risk sharing	Good features	Strong sharing	Some elements
Guarantees	2	3	3	2
	None	Annuities	With complexity	Financial risk
Form of retirement benefit				
Income	2	4	5	4
	Probably low	Income focus	Clear focus	Primary focus
Cash lump sum	3	3	1	2
	Good incentive	Available	Not indicated	Opaque basis
Controlled drawdown	1	1	1	1
	Not available	Not available	Not provided	Not considered
Combination of options	2	2	1	2
	Income & cash	Income & cash	Not available	Income & cash
Survivor benefits (death before retirement)	1	4	3	2
	None payable	Income	Income only	Complex
Membership and contribution arrangements	2	2	2	2
	None payable	Voluntary	Voluntary	Voluntary
Contributions				
Formula for contribution level	1	4	3	2
	None payable	Income	Income only	Complex
Regularity of contribution payment	2	2	2	2
	Poor incentives	Voluntary	Voluntary	Voluntary
Contributions				
Formula for contribution level	3	3	3	3
	Flexible	Flexible	Flexible	Flexible

	Simple DC	Smoothed DC	Career Average DB	Final-Salary DB
Regularity of contribution payment	3	3	3	3
	No mandate	No mandate	No mandate	No mandate
Incentives & vesting				
Incentive arrangements	1	4	5	4
	None offered	Co-contribution	With complexity	Lots of forms
Withdrawals	1	1	1	1
	None available	None available	None available	None provided
Delivery mechanisms				
Administrative backbone	3	3	3	4
	Efficiency likely	Alternatives	Efficiency likely	Focused
Contribution receipt	2	2	2	4
	Limited flexibility	No comments	Limited flexibility	Bespoke
Benefit payment	2	2	2	4
	Limited flexibility	Not considered	Limited flexibility	Bespoke
Summary comment	Simple, but inequitable and inadequate	Effective, with limited guarantees	Good benefits, but unworkably complex in form	Possible but opaque with funding risk

Lessons Learned through the Process

The table that follows works systematically through each of the criteria used to assess alternative designs. For each of these criteria, one or two lessons are put forward and their implications discussed.

Table 79: Insights gained from analysis

DESIGN FEATURE	INSIGHTS GAINED FROM ANALYSIS
Benefits	
Main categories	
Retirement benefits	The scheme should focus unambiguously on the provision of retirement benefits that are clearly understood by members and include protection against risks of various kinds.
Survivor & disability benefits	Survivor and disability benefits should be provided, but fit for purpose and at reasonable cost, to avoid compromising the primary focus, which is saving for retirement. A (flat-rate) funeral benefit should also be available.
Early access to saving	If early access to saving can be provided, efficiently, clearly and without unduly compromising other objectives, it should be seriously considered, perhaps addressing the demand for cash at retirement at the same time.
Retirement saving options	
Defined benefit (DB)	DB would be attractive, but is exceedingly difficult to provide transparently and safely in the absence of stable earnings. Since earnings are more commonly simply not available among workers in the informal economy, a proxy for (determining) income must be found to fit in to an earnings-related DB model. That calls for assumptions regarding the relationship between the contributions received and the earnings that permitted the payment of those contributions.
Defined contribution (DC)	Member accounts provide a more direct link of contributions to benefits, but do not automatically include some form of protection against the risks to which members are exposed.

DESIGN FEATURE	INSIGHTS GAINED FROM ANALYSIS
Hybrid design	A scheme with a balance of the features of DB and DC is attractive. Such a combination could combine the tangibility of DC with elements of the protection of DB arrangements.
Guarantees	Smoothing of annual returns (taking a part of the returns in good years and subjecting returns in poor years to a floor of zero) and fixing annuity conversion rates on an annual basis may need fiscal support in the short-term but should not incur substantial risk over time.
Form of retirement benefit	
Income	On macro- and microeconomic grounds, Income in retirement should be regarded as the primary benefit of the arrangement. A minimum income threshold might be considered necessary on the grounds of administrativeviability. Below this level the benefit would be paid as a lump sum. This threshold should be set as low as possible to avoid providing contribution disincentives to members in the pursuit of the cash at retirement.
Cash lump sum	A partial lump sum benefit at retirement could be made available, but not in addition to any facility providing early access to saving. A single fund for early access calls upon the member to choose between liquidity while working and cash on reaching retirement and improves the prospects for the worker of receiving a meaningful income in retirement.
Controlled drawdown	Subject to the early access facility indicated above, a controlled drawdown option is not considered appropriate in light of the policy focus on retirement benefits, but that part of the retirement benefit available as cash at retirement may be left in that account after retirement and withdrawn as required.
Combination of options	In summary, income in retirement in combination with a lump-sum option or early access from a single fund should be available but only as part of a broader scheme to provide early access to savings.
Survivor benefits (death before retirement)	Survivor benefits on death before retirement should be paid as an income, but should be set at the lowest total value reasonably regarded as sufficient to meet minimum requirements of income security for the surviving spouse or children, as reflected for the NSSF by the IDTT. Any death benefit with a total value below this should be paid as a lump sum rather than an income.
Membership and contribution arrangements	None of the prototype schemes include any initiatives to attract members to the scheme by pre-enrolling them or by collecting contributions through membership associations or affinity groups. Initiatives such as these must be explored with care in consultation with representative stakeholders.
Contributions	
Formula for contribution level	It is difficult to conceive of an arrangement in which, at the level of national mandate, contributions could be mandated, either as a percentage of income or as a Rand amount. This arrangement is underpinned, in other words, by voluntary contributions. Options should nevertheless be explored to encourage active member participation. This could take the form of scheme-wide incentives. But incentives may also be provided through local membership-based communities, with whom the Department should engage in depth prior to finalising the design.
Regularity of contribution payment	
Incentives & vesting	
Incentive arrangements	Incentives are proposed in the areas of contribution subsidies, early access to accumulated saving and membership club benefits. Benefit incentives, in other words, bonuses on attaining a specified level of saving, are not regarded as appropriate to this scheme, as the cost is regarded as exceeding the potential incentive benefit. Thresholds such as these can also distort the behaviour of members and may be seen to be to the detriment of members who are unable to contribute at the required higher level. Grandfathering, the provision of benefits that members have not accrued by virtue of their contributions, is also not regarded as appropriate in a framework in which it is not clear, under either a DC or DB structure, how such a benefit might be clearly defined.
Withdrawals	
Delivery mechanisms	
Administrative backbone	The administrative system must be suitable to informal-economy members, utilising a range of cost-effective mobile- and electronic money-transfer channels. Members are to be provided regular, helpful information, in a format convenient to them, regarding their contributions and access to savings. The cost of risk benefits is funded from contributions, but the cost of administration is separately covered by government. The scheme may fall under either social-security or pension-fund law, but must be subject to the highest standards of governance with the support of independent oversight.
Contribution receipt	
Benefit payment	

Annexure 10: Modelling: Methodology & Assumptions**Table 80: Modelling: Methodology & Assumptions**

South African population projected to 2065	Projections from the 2008 AIDS model of the Actuarial Society of South Africa (ASSA) was used to derive the projected female/male population and the projected female/male deaths for each year by age.																																																								
Informal-economy employed population projected to 2065	Informal-economy workers form a sub-set of the South African population. To derive the projected number of individuals in the informal economy, the distribution by age of the modelled population was developed with reference to Statistics South Africa’s Labour Force Survey and the age make-up of the total population. In order to project the set of informal-economy workers into the future, it was assumed that the ratio of these workers to the total population at each age would remain constant over the period, so that the number of individuals in the informal economy could be derived from the projection of the total South African population.																																																								
Participation in the scheme	Participation over age was modelled stochastically, using a triangular distribution with the following parameters (and linear interpolation for ages in-between): <table><tr><td>Age last birthday</td><td>Minimum participation</td><td>Median participation</td><td>Maximum participation</td></tr><tr><td>18</td><td>0.5%</td><td>1%</td><td>10%</td></tr><tr><td>59</td><td>20%</td><td>50%</td><td>80%</td></tr></table> Gradual take-up to the above participation rates is modelled from 2020 until 2028, to reflect increasing awareness over time, until participation in the system reaches maturity. In each year the minimum level for the triangular distribution is at 25% of the median and the maximum at 125% of the median. <table><tr><td>Year</td><td>Minimum participation</td><td>Median participation</td><td>Maximum participation</td></tr><tr><td>2020</td><td>2020</td><td>10%</td><td>12.5%</td></tr><tr><td>2021</td><td>2021</td><td>20%</td><td>25.0%</td></tr><tr><td>2022</td><td>2022</td><td>30%</td><td>37.5%</td></tr><tr><td>2023</td><td>2023</td><td>40%</td><td>50.0%</td></tr><tr><td>2024</td><td>2024</td><td>50%</td><td>62.5%</td></tr><tr><td>2025</td><td>2025</td><td>60%</td><td>75.0%</td></tr><tr><td>2026</td><td>2026</td><td>70%</td><td>87.5%</td></tr><tr><td>2027</td><td>2027</td><td>80%</td><td>100.0%</td></tr><tr><td>2028</td><td>2028</td><td>90%</td><td>100.0%</td></tr><tr><td>2029+</td><td>2029+</td><td>100%</td><td>100%</td></tr></table>	Age last birthday	Minimum participation	Median participation	Maximum participation	18	0.5%	1%	10%	59	20%	50%	80%	Year	Minimum participation	Median participation	Maximum participation	2020	2020	10%	12.5%	2021	2021	20%	25.0%	2022	2022	30%	37.5%	2023	2023	40%	50.0%	2024	2024	50%	62.5%	2025	2025	60%	75.0%	2026	2026	70%	87.5%	2027	2027	80%	100.0%	2028	2028	90%	100.0%	2029+	2029+	100%	100%
Age last birthday	Minimum participation	Median participation	Maximum participation																																																						
18	0.5%	1%	10%																																																						
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Year	Minimum participation	Median participation	Maximum participation																																																						
2020	2020	10%	12.5%																																																						
2021	2021	20%	25.0%																																																						
2022	2022	30%	37.5%																																																						
2023	2023	40%	50.0%																																																						
2024	2024	50%	62.5%																																																						
2025	2025	60%	75.0%																																																						
2026	2026	70%	87.5%																																																						
2027	2027	80%	100.0%																																																						
2028	2028	90%	100.0%																																																						
2029+	2029+	100%	100%																																																						
Income of participants in the scheme	Income was assumed as set out in in Section 4, with annual price inflation adjustment. [Note: To ensure that the uneven progression of income over age does not unduly influence the results, cumulative smoothing over age was used. The average income within an age band was derived by dividing the total earnings up to that age by the total number of respondents up to that age.																																																								
Contribution rates for participants in the scheme	All participants are assumed to contribute to the scheme at the same rate. This is numerically equivalent to modelling the average rate of contribution among those contributing at the time, weighted by the earnings of all contributors. Contribution rates were assumed to increase over age. These rates were modelled stochastically, using a simple triangular distribution with the following parameters (and linear interpolation for ages in-between): <table><tr><td>Age last birthday</td><td>Minimum contribution %</td><td>Median contribution %</td><td>Maximum contribution%</td></tr><tr><td>18</td><td>2.5%</td><td>5.0%</td><td>7.5%</td></tr><tr><td>59</td><td>2.5%</td><td>7.5%</td><td>15.0%</td></tr></table> Projections were carried out at time intervals of one year. No assumptions were therefore called for regarding the frequency with which contributions were made. Also, contributions made were assumed always to be larger than any minimum contribution required under the rules of the scheme. [This implies that participants with low earnings made contributions less frequently than monthly where necessary to avoid falling foul of the minimum-contribution threshold.]	Age last birthday	Minimum contribution %	Median contribution %	Maximum contribution%	18	2.5%	5.0%	7.5%	59	2.5%	7.5%	15.0%																																												
Age last birthday	Minimum contribution %	Median contribution %	Maximum contribution%																																																						
18	2.5%	5.0%	7.5%																																																						
59	2.5%	7.5%	15.0%																																																						
Split of contributions towards risk & savings	80% of [own + subsidy] contributions are allocated towards the participant’s individual savings, with the balance 20% of contributions going towards the overall risk pool (from which all risk benefits will be paid). This proportion is assumed altered in future following actuarial review.																																																								
Savings withdrawals	For modelling purposes, it was assumed that participants make no withdrawals from the accessible portion of their accumulated savings. This is not considered a realistic assumption, but is used to show the spread of the total accumulation that would be obtained in the absence of these withdrawals, which would reduce such an accumulation proportionally.																																																								

Economic assumptions	Price inflation was assumed at 6% per annum Smoothed investment return, net of asset management costs, was assumed at 7.5% per annum
Risk benefit assumptions	<u>Death before age 60</u>: Mortality was assumed in line with the 2008 AIDS model published by the ASSA, averaged across the South African population on an age- and gender-distinguished basis, without distinction for HIV status. For the dependent's <i>benefit</i>, the number of children per participant was determined with reference to the Total Fertility Rates published by Statistics South Africa in the 2018 mid-year population estimates. To model this parameter stochastically, the 2018 variation by province was used to establish a triangular distribution as follows: minimum 2.04 / median 2.40 / maximum 2.89. Child mortality was ignored in the calculation. For the <i>spouse's benefit</i>, the mortality of the partner was ignored For the <i>funeral benefit</i>, a return of the member's own contributions was modelled (with the Government subsidy portion going to the general risk pool to support the cost of providing death- and disability benefits). <u>Disability before age 60</u>: Total and permanent disability, with the inability to perform any work, was assumed as the benefit trigger (e.g. quadriplegia). As such the duration for the disability payments runs from date of disablement until retirement from the scheme. To model this parameter stochastically, the incidence hereof at each age was assumed as a percentage of the number of deaths at that age as follows: minimum 10.5% / median 21% /maximum 31.5% <u>Death after age 60</u>: Mortality per ASSA's 2008 AIDS model, to derive the monthly pension that a member will be able to buy with the accumulated savings amount.
Cost of administration of the scheme	It was assumed that there will be an annual drop-off of 5% from active participation in the scheme. This allows for the likelihood that the number of records being administered at a point in time will be more than the number of active participants at that time. Furthermore, it was assumed that the annual cost to administer each member record will be R300 in 2020. This is roughly 75% of the average equivalent in the insurance industry (accounting for the scale benefits of this scheme) and consistent with the cost per member derived from the UIF's 2018 financial statements (R2.1 billion administration expense for circa 8 million members, inflation adjusted to 2020).

Annexure 11: Modelling: Supporting Detail

This annexure provides more detail on the following salient aspects of supporting detail:

1. Projected South African population between the ages of 18 and 59
2. Projected number of workers in the South African informal economy (ages 18-59 & thus potential participants in the scheme)
3. Projected number of participants in the scheme (ages 18-59)
4. Projected penetration of the targeted population
5. Projected contribution by participants to the scheme (in R'm, nominal money terms)
6. Projected number of member records being administered | Pre-retirement
7. Projected number of member records being administered | Post-retirement
8. Projected cost of the scheme's administration (R'm, nominal money terms)
9. Projected assets under management in the savings pool (R'm, nominal money terms)
10. Projected net asset value of the risk pool (R'm, nominal money terms)
11. Projected total cost to Government | Contribution subsidy & administration cost combined (R'm, nominal money terms)
12. Projected number of pre-retirement risk claims
13. Projected capitalised value of pre-retirement risk claims (R'm, nominal money terms)
14. Replacement factors | Retirement at 60 versus retirement at 65 (after participating in the scheme throughout working life)
- 15.

Projected South African population between the ages of 18 and 59

Table 81: Projected South African population between the ages of 18 and 59 (Male)

Male	2020	2025	2030	2035	2040	2045	2050	2055	2060	2065
18-24	3 599 891	3 481 994	3 398 587	3 402 388	3 401 527	3 369 928	3 307 894	3 227 458	3 154 905	3 100 627
25-34	4 704 053	4 823 975	4 849 987	4 694 993	4 629 734	4 643 690	4 636 624	4 586 887	4 498 626	4 396 114
35-44	3 683 032	4 073 677	4 218 513	4 343 789	4 369 136	4 238 130	4 193 017	4 216 628	4 219 048	4 181 403
45-54	2 470 357	2 721 799	3 071 669	3 427 446	3 573 128	3 695 815	3 725 032	3 624 090	3 598 808	3 630 378
55-59	1 662 850	1 757 340	1 893 371	2 085 836	2 384 898	2 679 097	2 807 316	2 922 819	2 954 530	2 887 177
Total	16 120 184	16 858 785	17 432 127	17 954 452	18 358 423	18 626 660	18 669 883	18 577 882	18 425 917	18 195 698

Table 82: Projected South African population between the ages of 18 and 59 (Female)

Female	2020	2025	2030	2035	2040	2045	2050	2055	2060	2065
18-24	3 604 625	3 487 190	3 400 265	3 401 214	3 398 000	3 364 320	3 300 481	3 218 470	3 144 473	3 088 862
25-34	4 712 271	4 854 217	4 894 407	4 739 195	4 667 718	4 676 795	4 665 018	4 610 322	4 517 094	4 409 788
35-44	3 737 837	4 049 114	4 197 962	4 362 982	4 408 017	4 275 288	4 221 771	4 238 332	4 233 585	4 188 456
45-54	2 855 651	2 974 816	3 170 426	3 456 287	3 635 285	3 807 957	3 857 254	3 748 630	3 711 066	3 733 670
55-59	2 271 291	2 350 166	2 381 992	2 443 169	2 626 659	2 886 605	3 054 156	3 224 378	3 274 476	3 191 642
Total	17 181 676	17 715 502	18 045 052	18 402 847	18 735 679	19 010 965	19 098 680	19 040 132	18 880 694	18 612 418

Table 83: Projected South African population between the ages of 18 and 59 (Female) (Total)

Total	2020	2025	2030	2035	2040	2045	2050	2055	2060	2065
18-24	7 204 517	6 969 184	6 798 852	6 803 603	6 799 527	6 734 249	6 608 375	6 445 928	6 299 378	6 189 489
25-34	9 416 324	9 678 192	9 744 394	9 434 188	9 297 452	9 320 485	9 301 642	9 197 209	9 015 720	8 805 902
35-44	7 420 869	8 122 791	8 416 475	8 706 771	8 777 153	8 513 418	8 414 788	8 454 960	8 452 633	8 369 859
45-54	5 326 009	5 696 615	6 242 095	6 883 732	7 208 413	7 503 771	7 582 286	7 372 720	7 309 874	7 364 047
55-59	3 934 142	4 107 506	4 275 363	4 529 005	5 011 556	5 565 701	5 861 471	6 147 197	6 229 006	6 078 819
Total	33 301 860	34 574 287	35 477 179	36 357 300	37 094 102	37 637 625	37 768 563	37 618 014	37 306 611	36 808 116

Projected number of workers in the South African informal economy (ages 18-59 & thus potential participants in the scheme)**Table 84: Projected number of workers in the South African informal economy (ages 18-59 & thus potential participants in the scheme) (Male)**

Male	2020	2025	2030	2035	2040	2045	2050	2055	2060	2065
18-24	116 065	112 264	109 575	109 698	109 670	108 651	106 651	104 058	101 718	99 968
25-34	665 270	682 230	685 909	663 989	654 760	656 733	655 734	648 700	636 218	621 720
35-44	726 301	803 336	831 898	856 603	861 602	835 767	826 871	831 527	832 004	824 580
45-54	485 289	534 683	603 413	673 303	701 922	726 023	731 763	711 933	706 967	713 168
55-59	119 675	124 102	139 578	151 827	179 690	193 992	197 829	208 621	203 022	198 752
Total	2 112 600	2 256 616	2 370 373	2 455 420	2 507 643	2 521 166	2 518 847	2 504 839	2 479 928	2 458 188

Table 85: Projected number of workers in the South African informal economy (ages 18-59 & thus potential participants in the scheme) (Female)

Female	2020	2025	2030	2035	2040	2045	2050	2055	2060	2065
18-24	93 311	90 271	88 021	88 046	87 963	87 091	85 438	83 315	81 400	79 960
25-34	533 923	550 006	554 560	536 973	528 875	529 903	528 569	522 371	511 808	499 650
35-44	570 473	617 980	640 697	665 883	672 756	652 499	644 331	646 859	646 134	639 247
45-54	378 062	393 839	419 736	457 581	481 279	504 139	510 666	496 285	491 312	494 304
55-59	93 575	93 230	98 106	99 505	112 603	121 783	126 527	134 514	130 886	127 605
Total	1 669 344	1 745 326	1 801 120	1 847 988	1 883 475	1 895 415	1 895 531	1 883 344	1 861 539	1 840 766

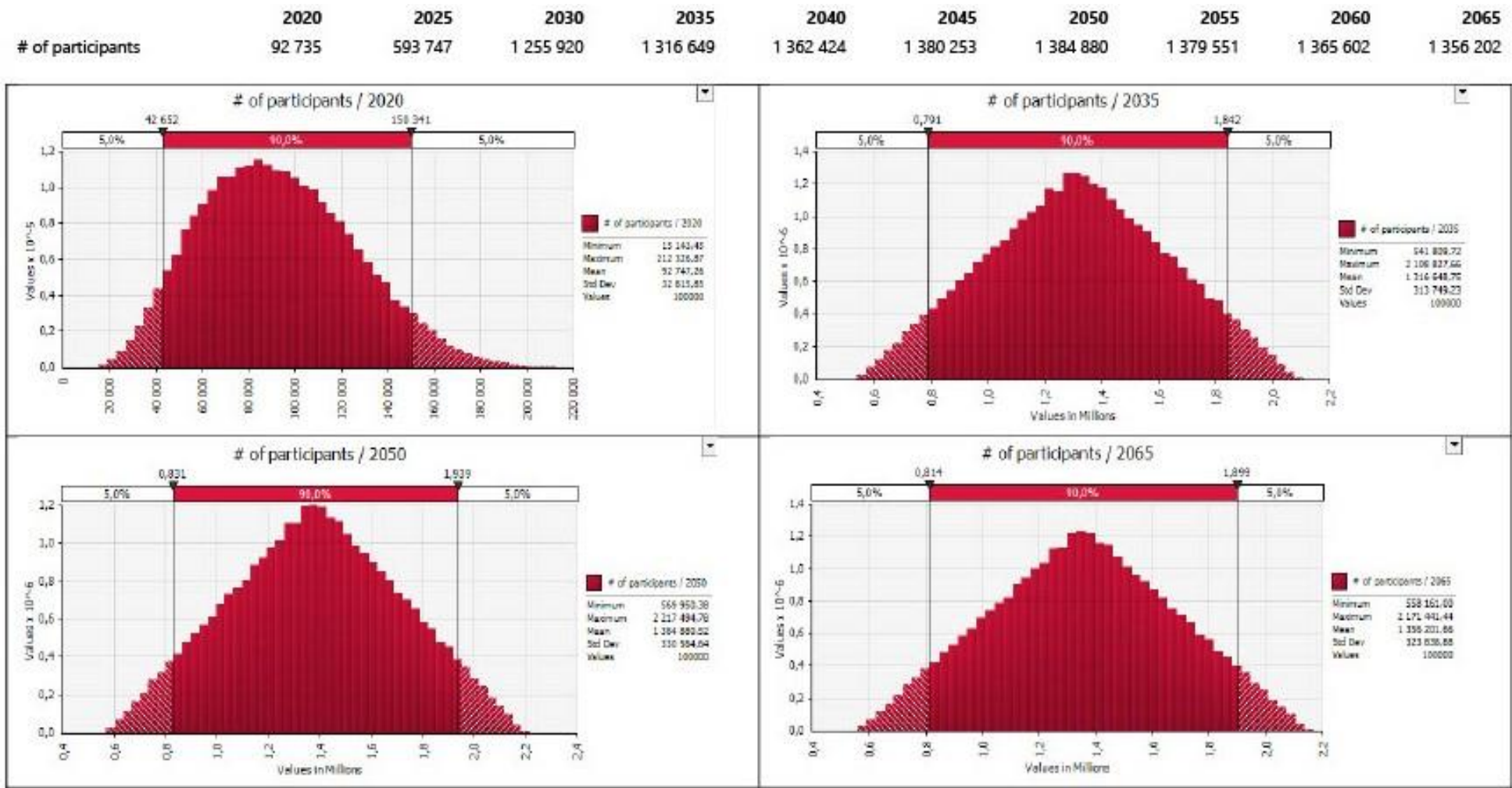
Table 86: Projected number of workers in the South African informal economy (ages 18-59 & thus potential participants in the scheme) (Total)

Total	2020	2025	2030	2035	2040	2045	2050	2055	2060	2065
18-24	209 377	202 535	197 596	197 743	197 632	195 742	192 089	187 373	183 118	179 928
25-34	1 199 193	1 232 236	1 240 469	1 200 962	1 183 634	1 186 637	1 184 303	1 171 072	1 148 026	1 121 370

35-44	1 296 773	1 421 316	1 472 596	1 522 486	1 534 358	1 488 266	1 471 202	1 478 385	1 478 138	1 463 827
45-54	863 351	928 522	1 023 149	1 130 885	1 183 201	1 230 162	1 242 428	1 208 218	1 198 278	1 207 473
55-59	213 250	217 332	237 684	251 332	292 293	315 774	324 356	343 135	333 908	326 357
Total	3 781 944	4 001 942	4 171 493	4 303 409	4 391 119	4 416 581	4 414 378	4 388 183	4 341 468	4 298 955

Projected number of participants in the scheme (ages 18-59)³⁴⁵

Figure 15: Projected number of participants in the scheme (ages 18-59)

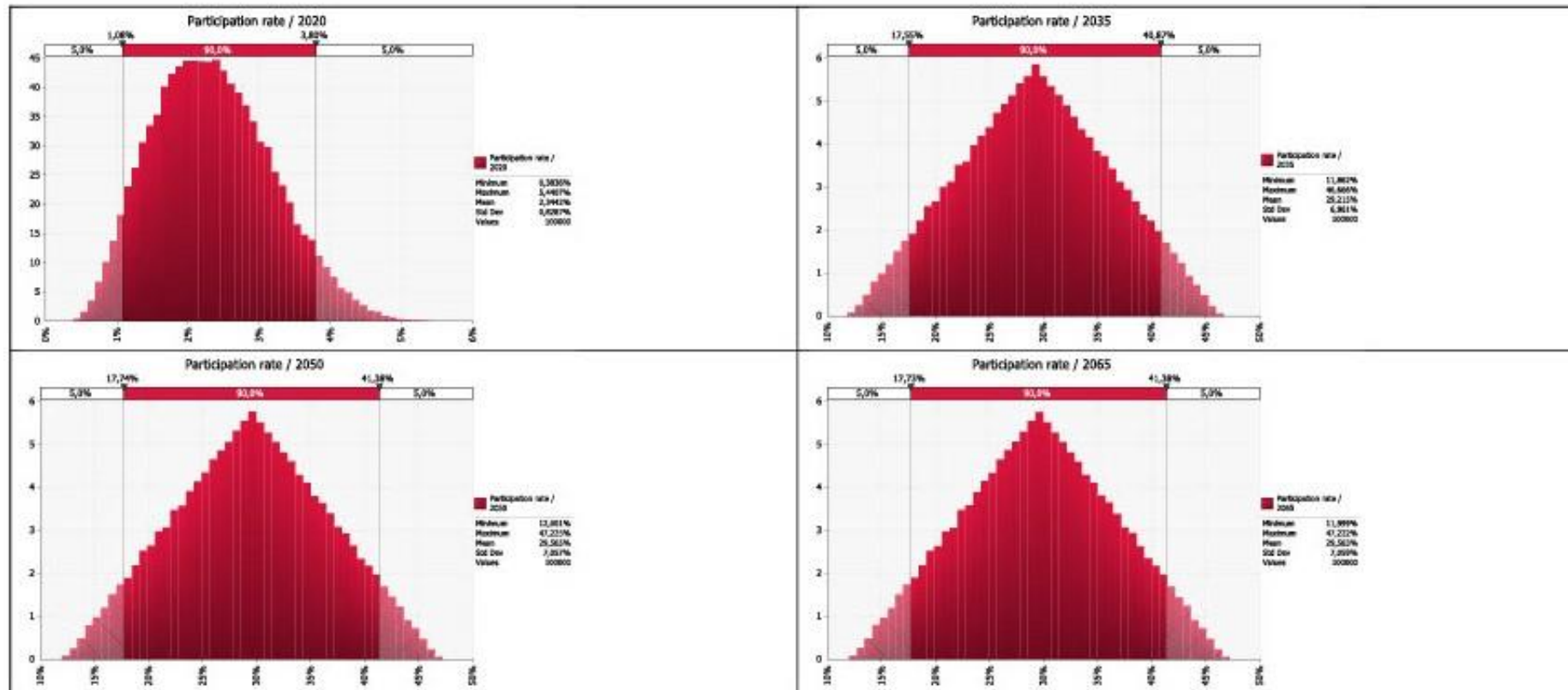


³⁴⁵ The table shows the theoretical mean for each year, whereas the mean in each graph is the sample mean, as observed from the 100 000 runs that was performed. The sample mean will approach the theoretical mean as more and more runs are performed. The same comment applies to the pages that follows in this Appendix, but in the interest of brevity this note is not repeated each time.

Projected penetration of the targeted population

Figure 16: Projected penetration of the targeted population

	2020	2025	2030	2035	2040	2045	2050	2055	2060	2065
# of participants	92 735	593 747	1 255 920	1 316 649	1 362 424	1 380 253	1 384 880	1 379 551	1 365 602	1 356 202
Targeted population ³⁴⁶	3 781 944	4 001 942	4 171 493	4 303 409	4 391 119	4 416 581	4 414 378	4 388 183	4 341 468	4 298 955
Penetration rate	2%	14%	29%	29%	30%	30%	30%	30%	29%	30%

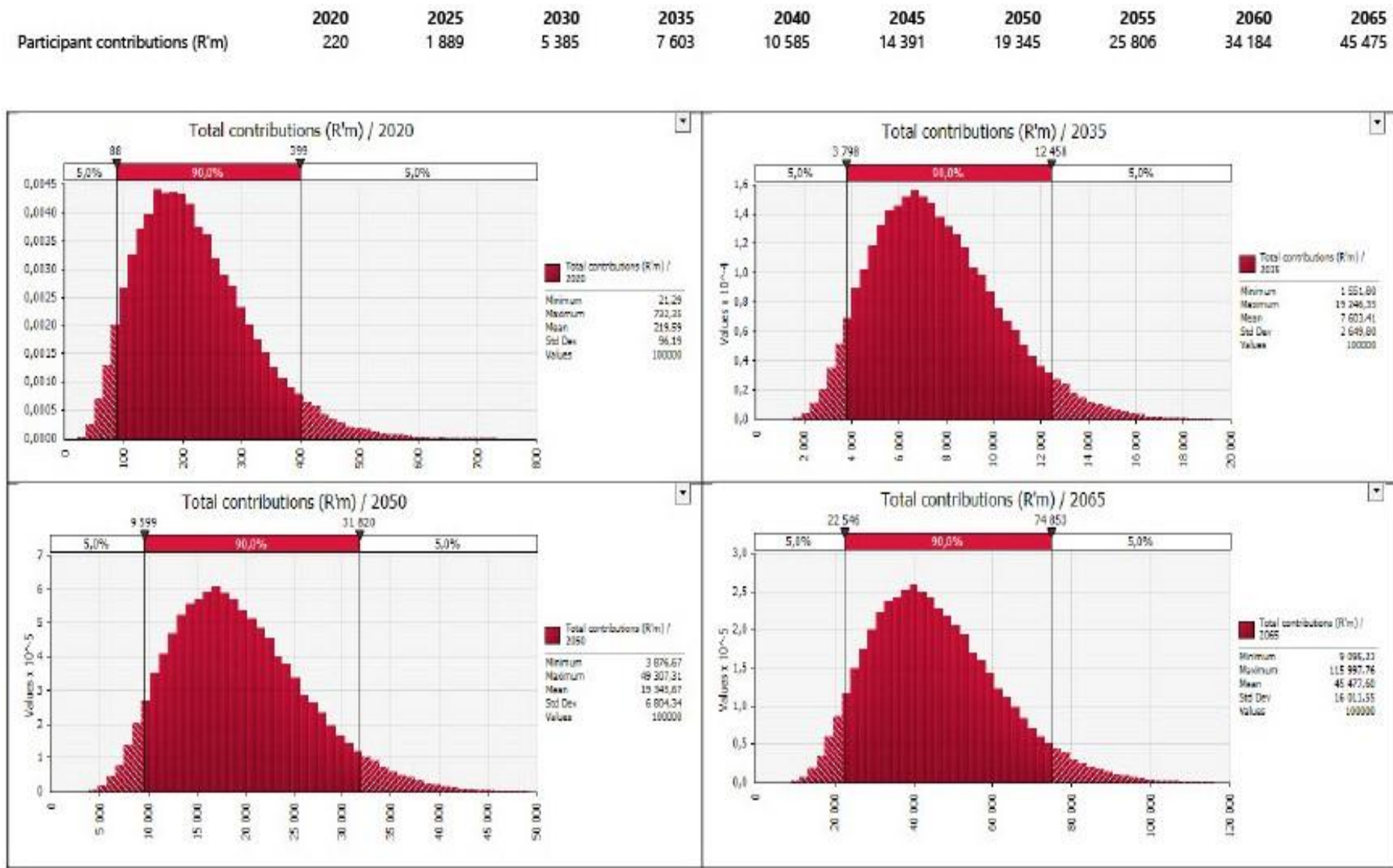


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³⁴⁶ Projected number of workers in the South African informal economy (ages 18-59 & thus potential participants in the scheme)

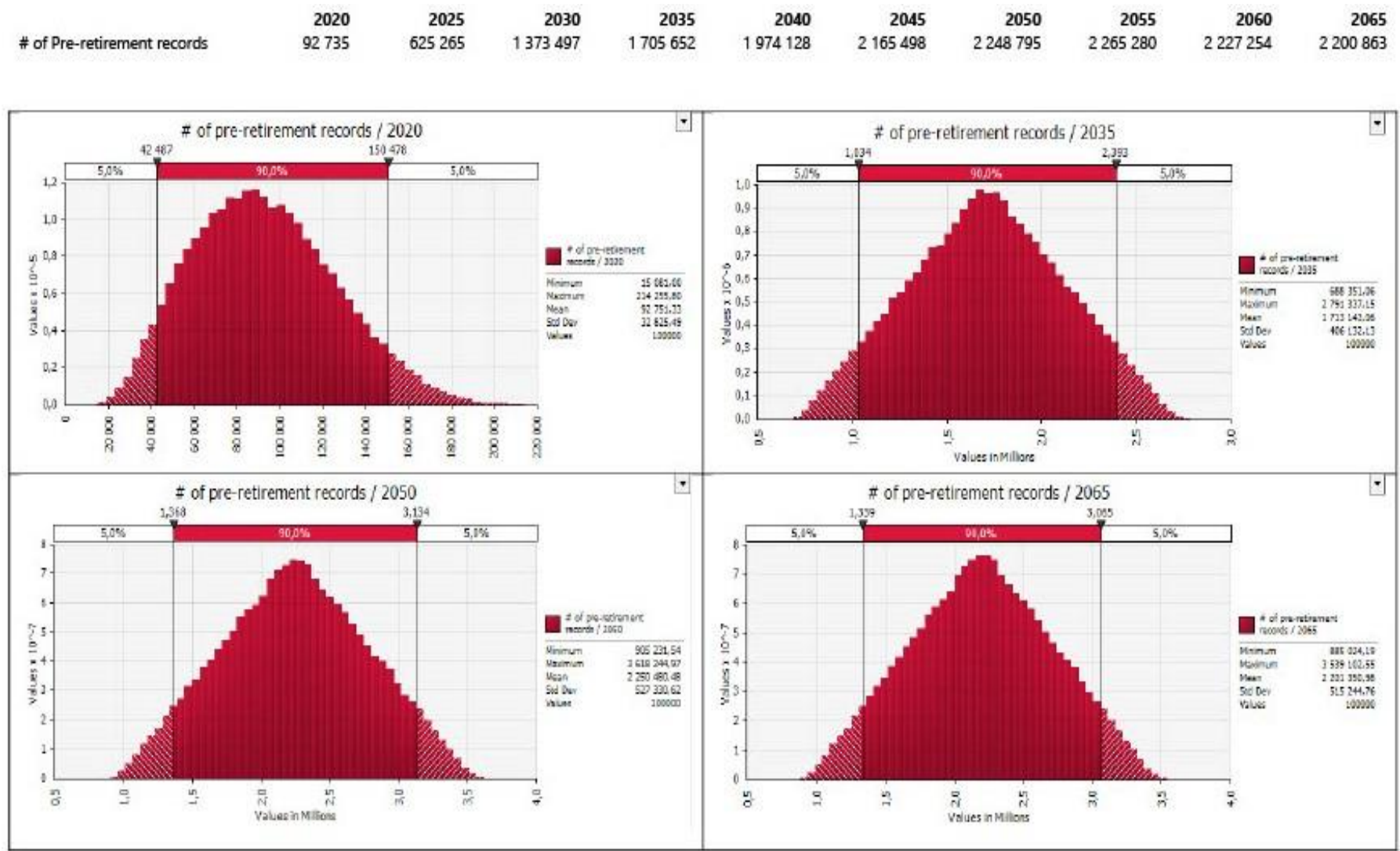
Projected contribution by participants to the scheme (in R'm, nominal money terms)

Figure 17: Projected contribution by participants to the scheme (in R'm, nominal money terms)



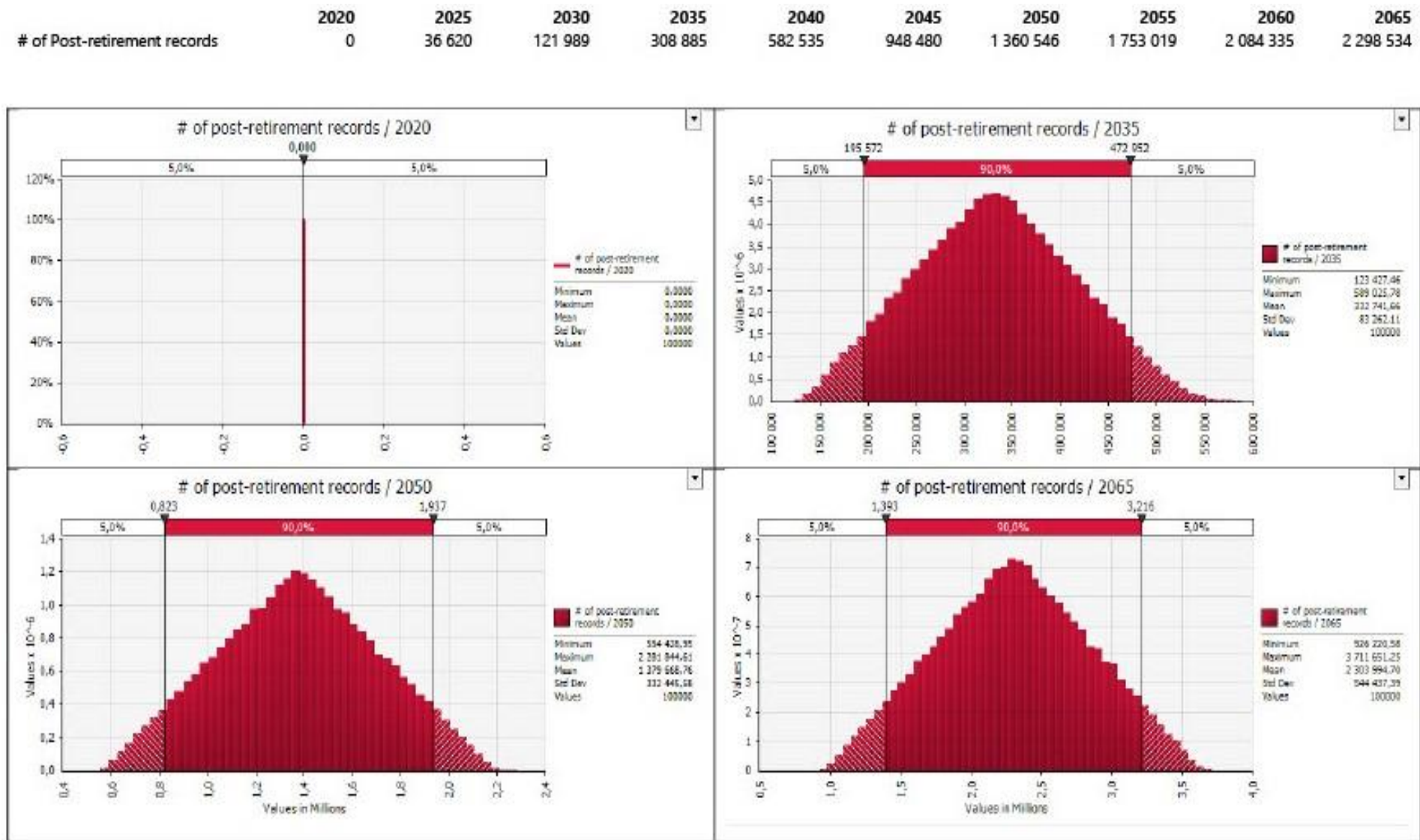
Projected number of member records being administered | Pre-retirement

Figure 18: Projected number of member records being administered | Pre-retirement



Projected number of member records being administered | Post-retirement

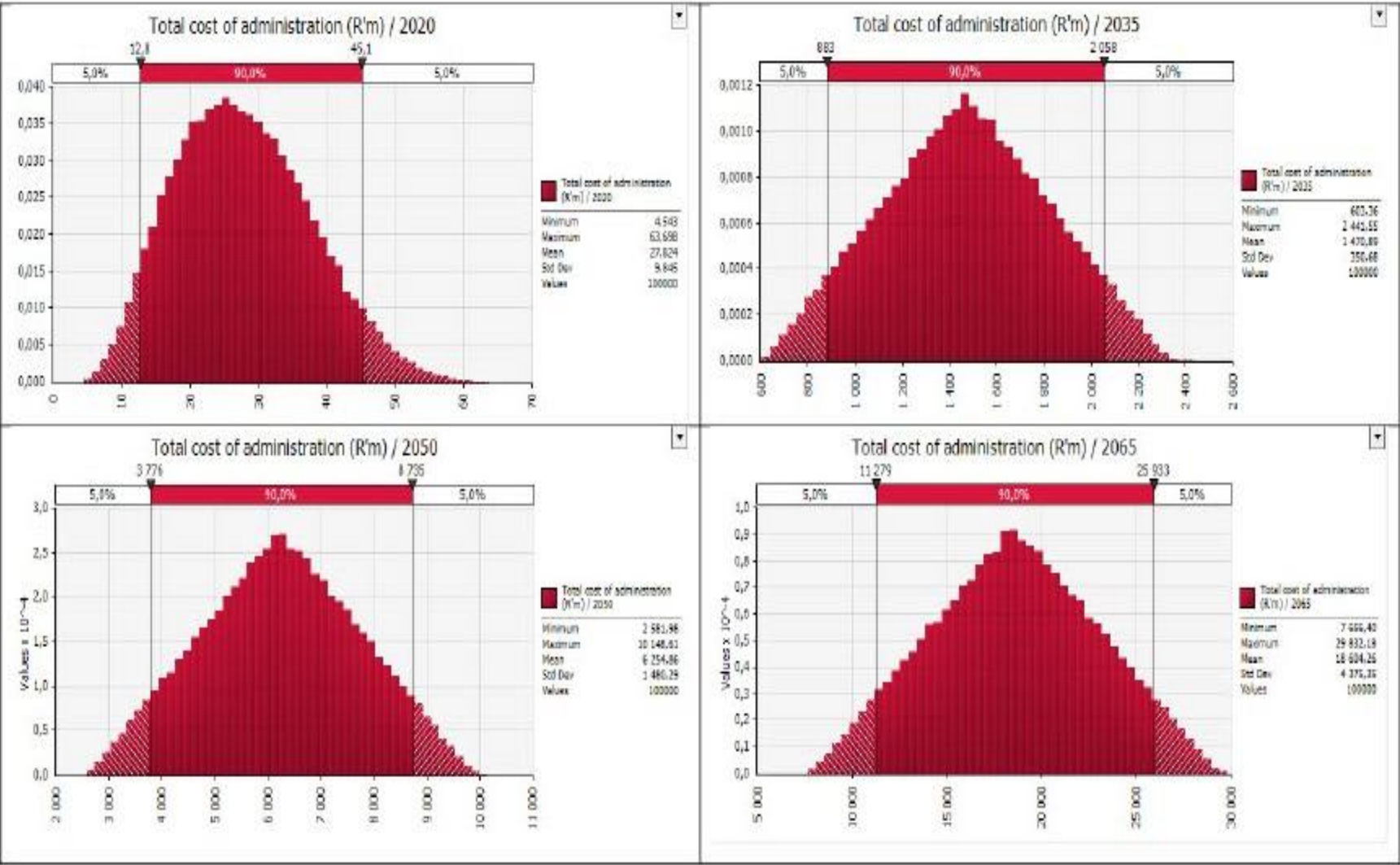
Figure 19: Projected number of member records being administered | Post-retirement



Projected cost of the scheme's administration (R'm, nominal money terms)

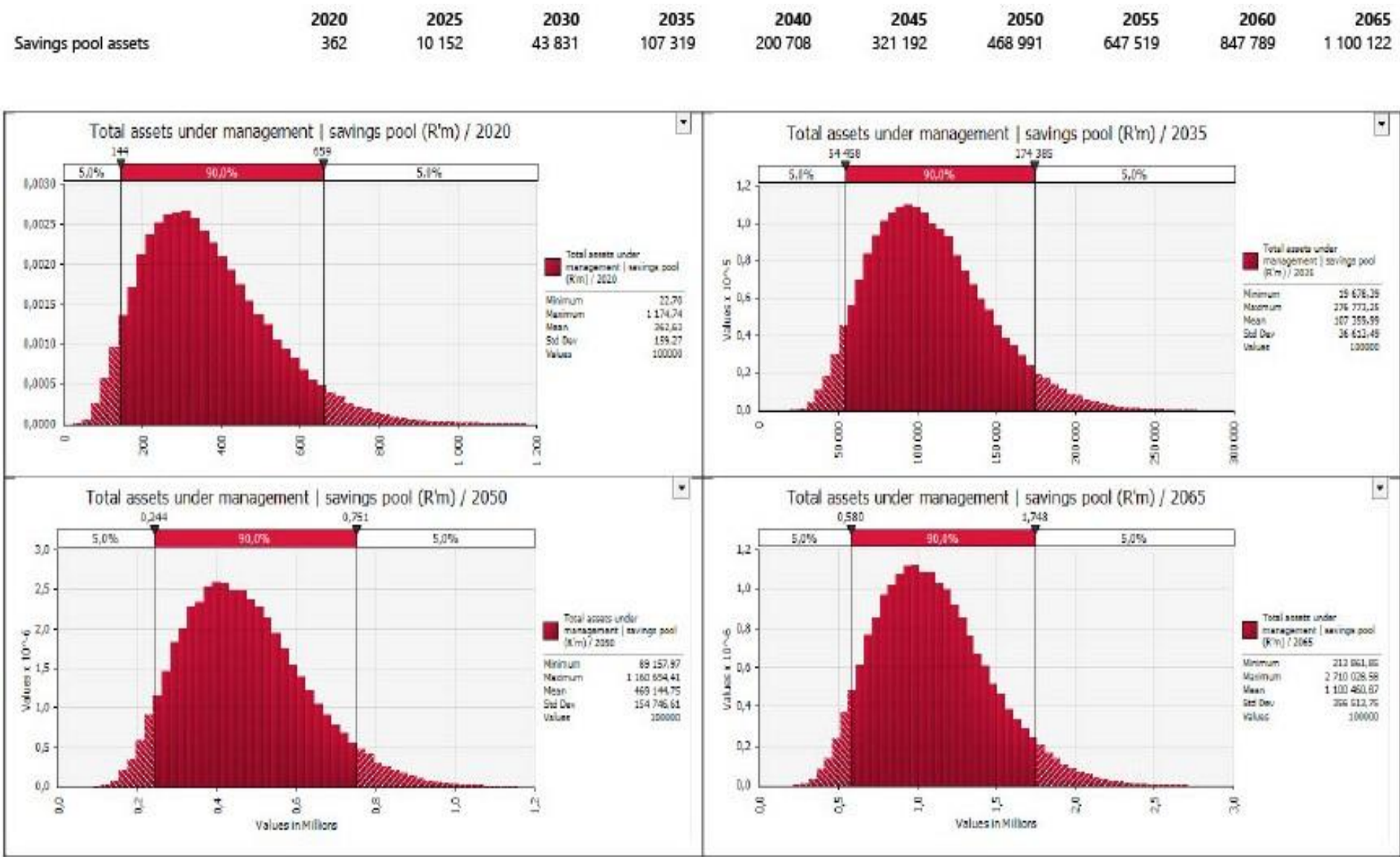
Figure 20: Projected cost of the scheme's administration (R'm, nominal money terms)

	2020	2025	2030	2035	2040	2045	2050	2055	2060	2065
Cost of scheme administration	28	266	803	1 448	2 460	4 009	6 219	9 265	13 304	18 580



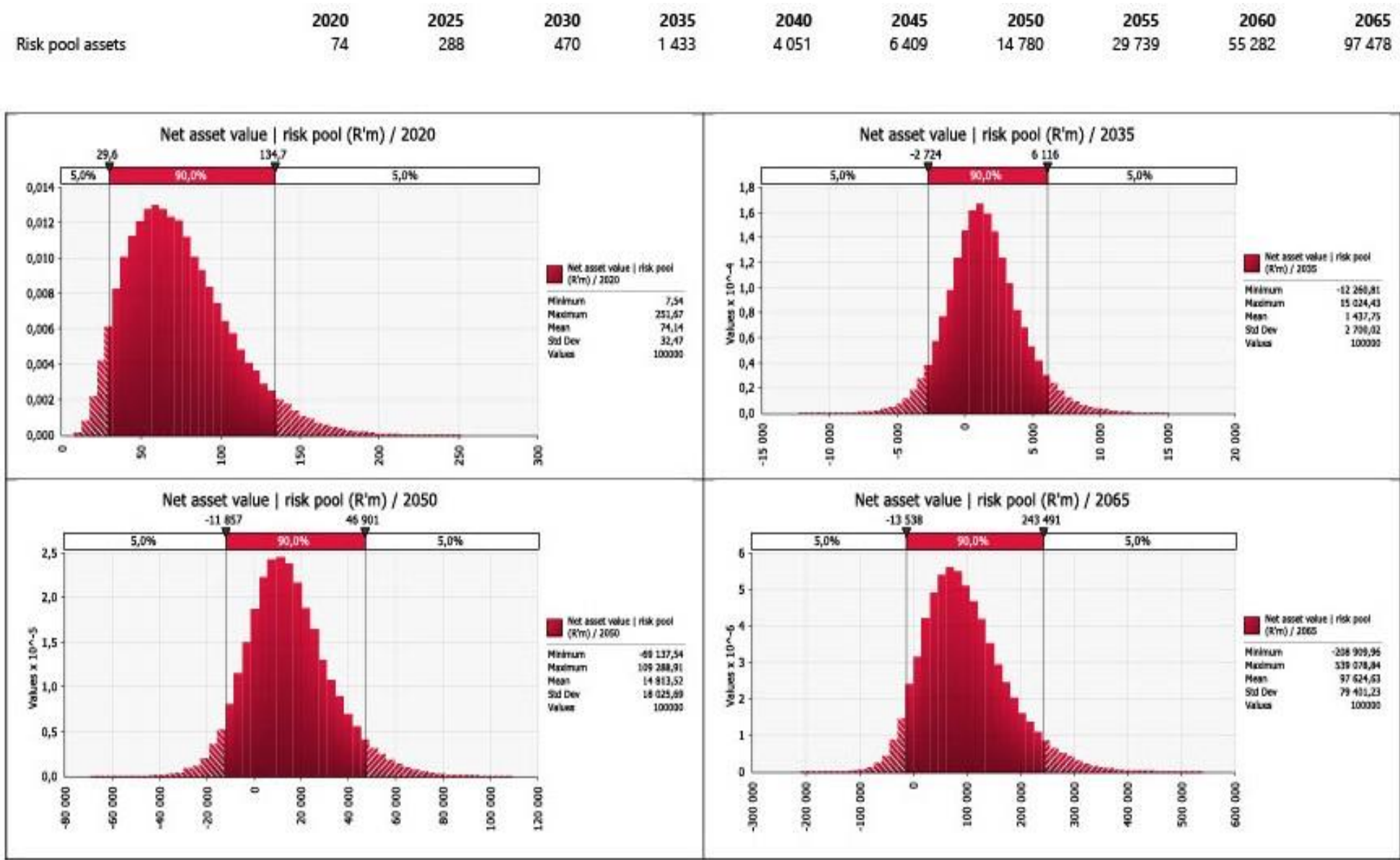
Projected assets under management in the savings pool (R'm, nominal money terms)

Figure 21: Projected assets under management in the savings pool (R'm, nominal money terms)



Projected net asset value of the risk pool (R'm, nominal money terms)

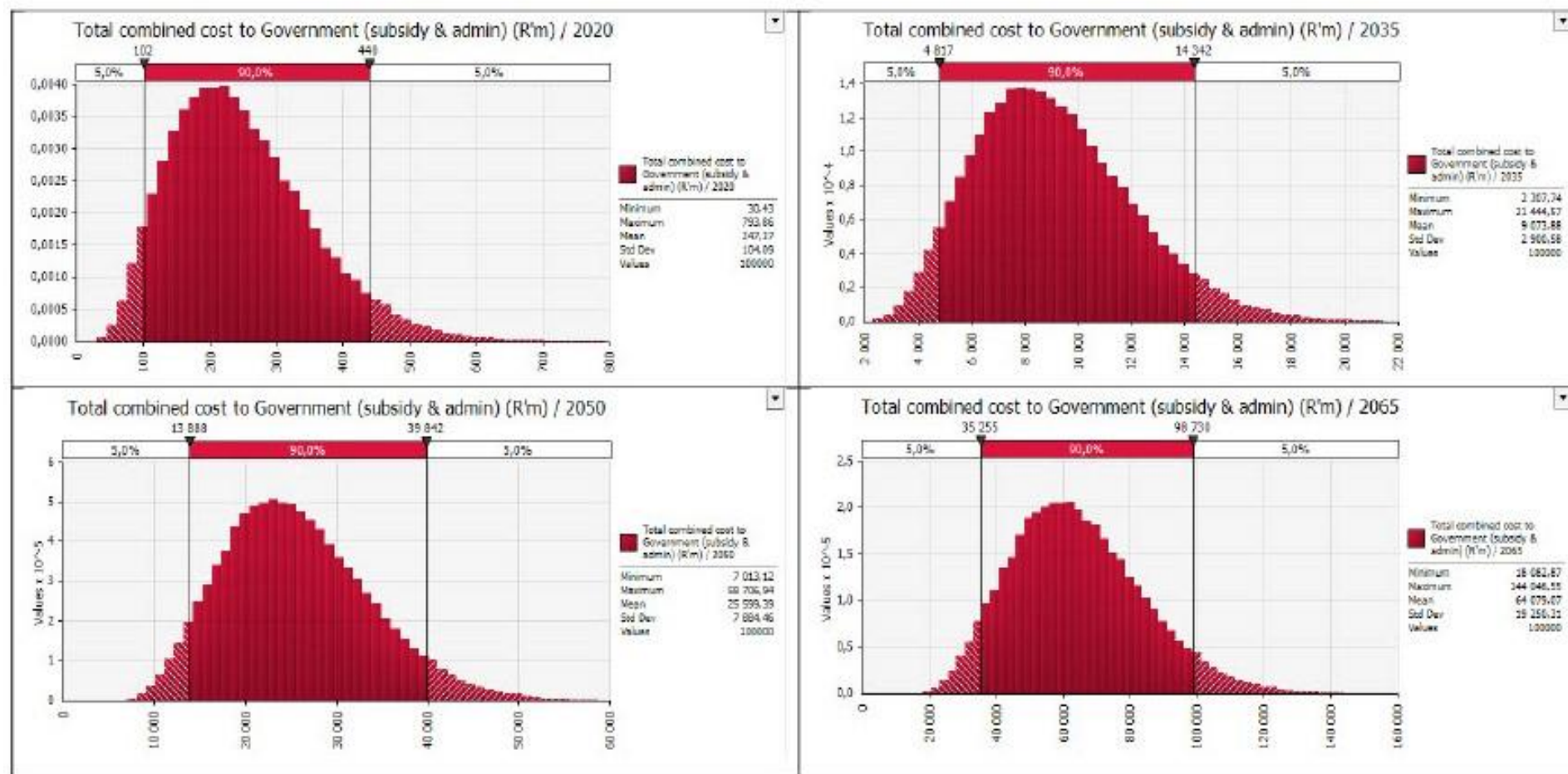
Figure 22: Projected net asset value of the risk pool (R'm, nominal money terms)



Projected total cost to Government | Contribution subsidy & administration cost combined (R'm, nominal money terms)

Figure 23: Projected total cost to Government | Contribution subsidy & administration cost combined (R'm, nominal money terms)

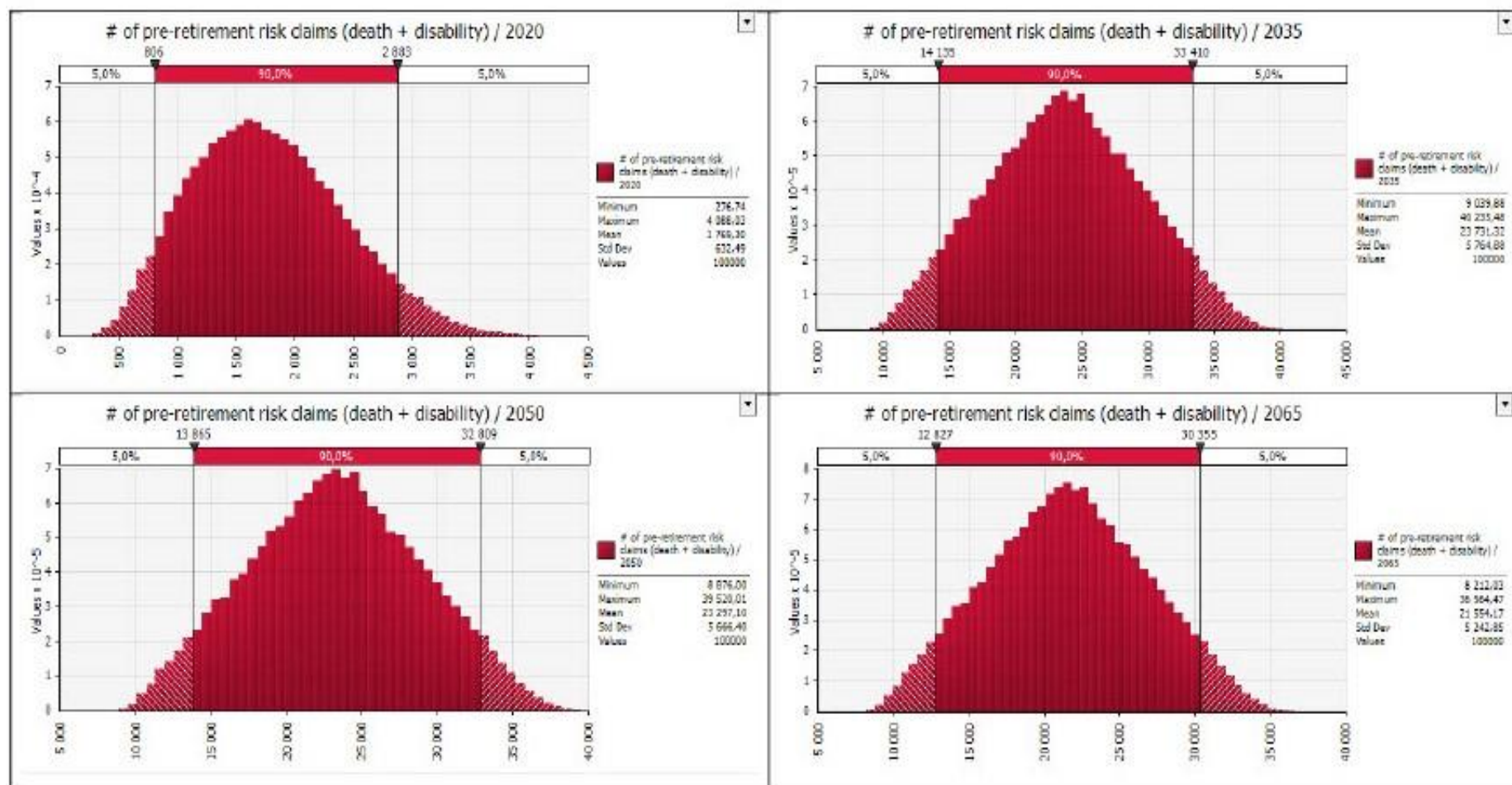
	2020	2025	2030	2035	2040	2045	2050	2055	2060	2065
Total cost to Government	247	2 155	6 188	9 051	13 044	18 400	25 564	35 072	47 488	64 055
Contribution subsidy as % of total cost	89%	88%	87%	84%	81%	78%	76%	74%	72%	71%
Scheme administration as % of total cost	11%	12%	13%	16%	19%	22%	24%	26%	28%	29%



Projected number of pre-retirement risk claims

Figure 24: Projected number of pre-retirement risk claims

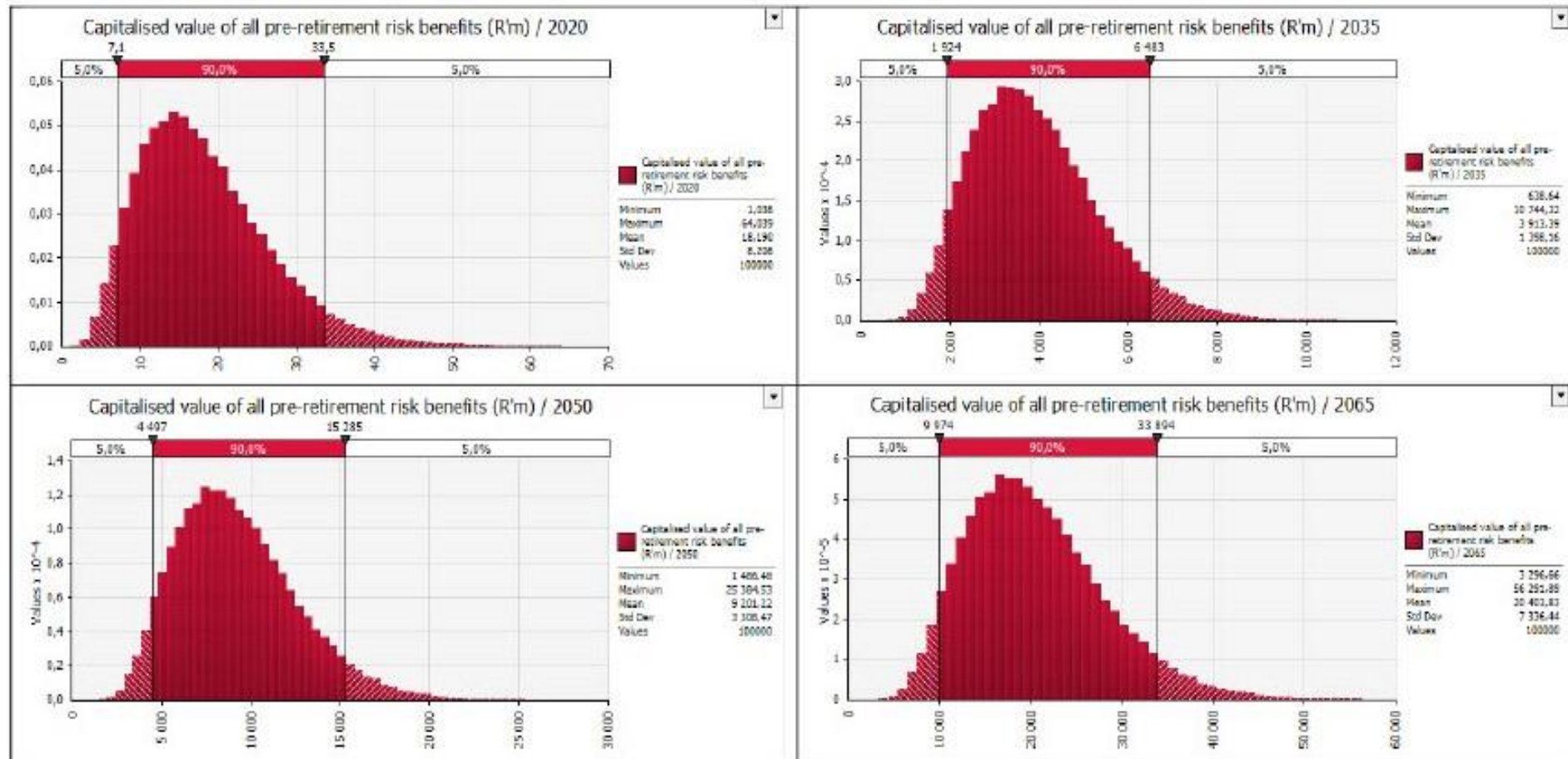
	2020	2025	2030	2035	2040	2045	2050	2055	2060	2065
Number of deaths	1 463	9 416	19 751	19 625	19 761	19 591	19 266	18 818	18 253	17 824
Number of disabilities	306	1 970	4 133	4 106	4 135	4 099	4 031	3 937	3 819	3 730
Total number of risk claims	1 769	11 386	23 884	23 731	23 896	23 690	23 297	22 756	22 072	21 554



Projected capitalised value of pre-retirement risk claims (R'm, nominal money terms)

Figure 25: Projected capitalised value of pre-retirement risk claims (R'm, nominal money terms)

	2020	2025	2030	2035	2040	2045	2050	2055	2060	2065
Return of contributions	2	171	807	1 080	1 465	2 055	2 569	3 360	4 356	5 694
Death pensions	10	485	1 370	1 835	2 488	3 489	4 362	5 704	7 396	9 668
Disability pensions	6	271	749	997	1 321	1 824	2 266	2 948	3 847	5 034
Total capitalised value	18	927	2 926	3 912	5 274	7 368	9 197	12 012	15 600	20 395

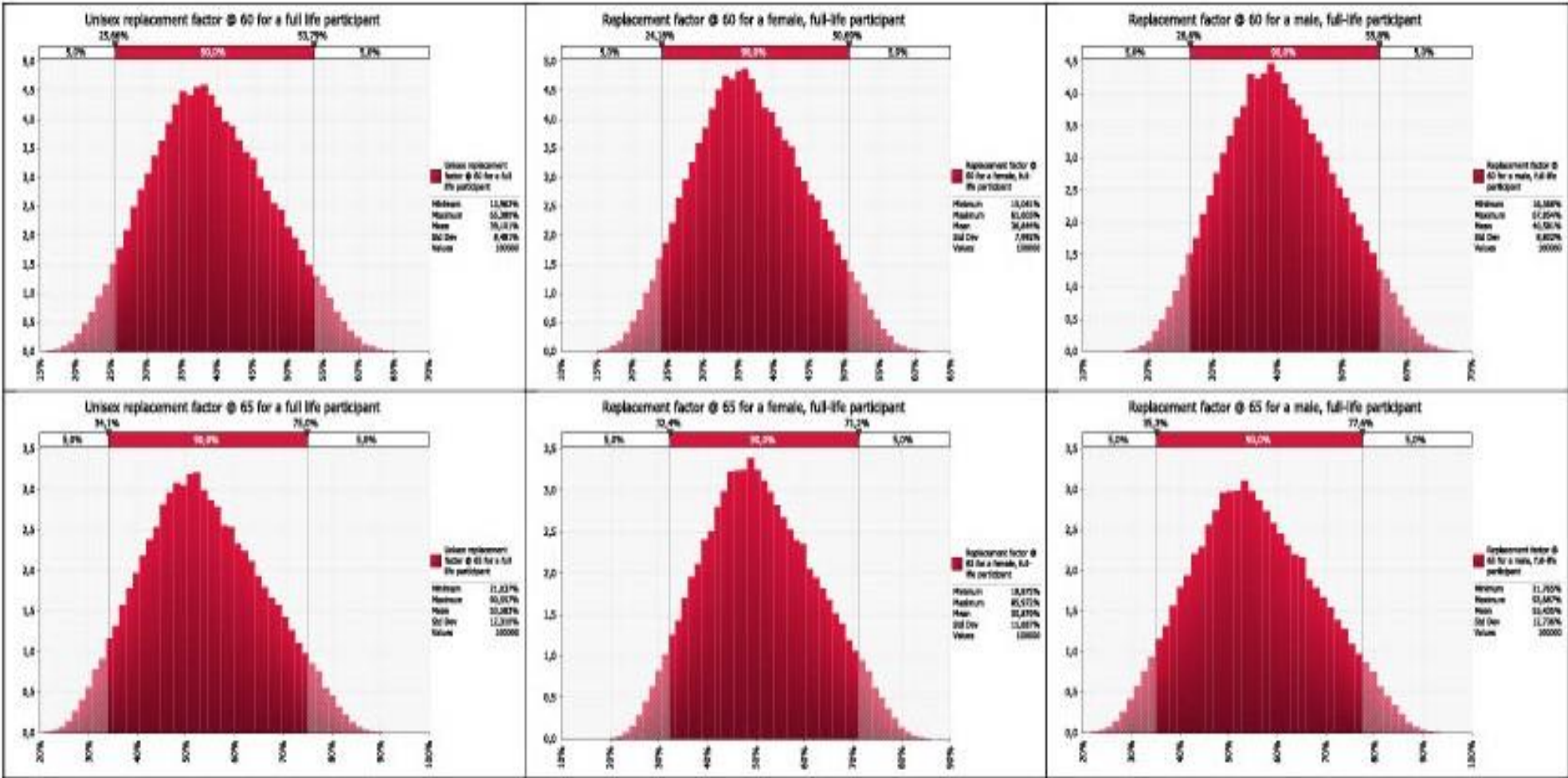


Replacement factors | Retirement at 60 versus retirement at 65 (after participating in the scheme throughout working life)

Figure 26: Replacement factors | Retirement at 60 versus retirement at 65 (after participating in the scheme throughout working life)

Retirement @ age 60 Retirement @ age 65

If unisex rates are used for all retirees	39%	54%
If gender specific rates are used Female retiree	37%	51%
If gender specific rates are used Male retiree	41%	55%



Annexure 12: Key Sensitivities**The targeted split between risk and savings**

A key design decision relates to the targeted split between the portion of contributions allocated to risk benefits and the [balance] portion being invested towards retirement savings. The allocation towards retirement savings, culminates in the eventual replacement rate at retirement. As such the replacement ratio can be used as the key indicator that shows the effect of allocating less to savings.

The table below shows the sensitivity of the projected replacement rates (for whole life participants on the scheme, who retire at age 60) to the proportion of contributions allocated to go towards retirement savings. This is shown in the table on three bases: [1] The proposed design, where 80% of contributions are targeted towards retirement savings, [2] sensitivity #1, where 70% of contributions go towards retirement savings and [3] sensitivity #2, where 60% of contributions go towards retirement savings. As is evident, participants lose about 5% in replacement for every 10% less that goes towards savings (on unisex rates).

Table 87: Sensitivity of the projected replacement rates

	Proposed design 20%-80% risk/savings split	Sensitivity #1 30%-70% risk/savings split	Sensitivity #2 40%-60% risk/savings split
Unisex replacement @ 60	39%	34%	29%
Female replacement @ 60	37%	32%	28%
Male replacement @ 60	41%	36%	30%

The cost of enhancing pre-retirement death benefits

The proposed design allows for a 2-year pension to the spouse and to dependent (<18) children. In this section, two sensitivities are considered: [1] increasing the pension period to 5 years (for both spouse and children) and [2] increasing the pension period for spouses to 5 years and for children to only expire on their 23rd birthday. For modelling purposes, the way in which the pension amount is calculated (i.e. the benefit formula), was kept the same as in the proposed design. i.e. the results show the effect if the same amount is paid, just for longer.

Table 88: Considered sensitivities

	Effect on the risk pool	Effect on risk/savings split	Effect on replacement %
Proposed design 2-year spouse's pension 2-year children's pension	If contributions are split 20%-80% towards risk/savings, the risk pool is 68% certain to remain solvent up to 2065	Unisex replacement rate at age 60 is 39%	
Sensitivity #1 5-year spouse's pension 5-year children's pension	If contributions are still split 20%-80% towards risk/savings, the risk pool is 100% certain to go insolvent prior to 2065	38% of contributions must be allocated to risk to ensure the risk pool is as certain to remain solvent as in the proposed design	If contributions are split 38%-62% between risk/savings, the unisex replacement rate at 60 reduces to 30%
Sensitivity #2 5-year spouse's pension Child pensions to age 23		59% of contributions must be allocated to risk to ensure the risk pool is as certain to remain solvent as in the proposed design	If contributions are split 59%-41% between risk/savings, the unisex replacement rate at 60 reduces to 20%

Total Cost to Government

Government's financial commitment to the scheme is dual in nature, made up of [1] a contribution subsidy and [2] the cost of administering the scheme.

1. The financial cost of the contribution subsidy will mainly depend on the take-up of the scheme and the levels at which participants then contribute. These uncertainties have been allowed for in the modelling, as set out in **Annexure 10** (assumptions) and is reflected in the stochastic results shown in **Annexure 11**.
2. Other than take-up of the scheme, the cost of administration will depend on a number of additional factors, which will mainly be determined by finer implementation detail and the outcome of DSD negotiations with the various suppliers. To show the sensitivity of the cost to Government, the table below provides two additional sensitivities, being administrative cost in 2020 at [#1] R400/member/annum as well as [#2] R500/member/annum (versus R300).

Table 89: Modelled case: Cost = R300 in 2020

<i>Modelled case: Cost = R300 in 2020</i>	<i>2020</i>	<i>2055</i>	<i>2050</i>	<i>2065</i>
Contribution subsidy (R'm)	R220m	R7 603m	R19 345m	R45 475m
Cost of administration (R'm)	R28m	R1 448m	R6 219m	R18 580m
Total cost to Government (R'm)	R247m	R9 051m	R25 564m	R64 055m
Contribution subsidy as % of total cost	89%	84%	76%	71%
Scheme administration as % of total cost	11%	16%	24%	29%

Table 90: Sensitivity #1: Cost = R400 in 2020

<i>Sensitivity #1: Cost = R400 in 2020</i>	<i>2020</i>	<i>2055</i>	<i>2050</i>	<i>2065</i>
Contribution subsidy (R'm)	R220m	R7 603m	R19 345m	R45 475m
Cost of administration (R'm)	R37m	R1 931m	R8 292m	R24 773m
Total cost to Government (R'm)	R257m	R9 534m	R27 637m	R70 248m
Contribution subsidy as % of total cost	86%	80%	70%	65%
Scheme administration as % of total cost	14%	20%	30%	35%

Table 91: Sensitivity #2: Cost = R500 in 2020

<i>Sensitivity #2: Cost = R500 in 2020</i>	<i>2020</i>	<i>2055</i>	<i>2050</i>	<i>2065</i>
Contribution subsidy (R'm)	R220m	R7 603m	R19 345m	R45 475m
Cost of administration (R'm)	R46m	R2 414m	R10 365m	R30 966m
Total cost to Government (R'm)	R266m	R10 017m	R29 710m	R76 441m
Contribution subsidy as % of total cost	83%	76%	65%	59%
Scheme administration as % of total cost	17%	24%	35%	41%

Annexure 13: Comparison Against Alternative Designs

This section compares the proposed design with the alternatives set out in **Annexure 9**. This is done in respect of three key results of such any proposed benefit structure, being [a] the resulting replacement rates, [b] the extent of pre-retirement risk benefits and [c] the total cost to Government.

Modelling assumptions and methodology**Table 92: Modeling assumptions and methodology**

South African population projected to 2065	The same projections, as set out in Annexure 10 .
Informal-economy employed population projected to 2065	The same projections, as set out in Annexure 10 .
Participation in the scheme	While different benefit structures might appeal differently to the potential participants, the same extent of participation, as set out in Annexure 10 , was assumed for the alternative benefit structures. This allows total cost to Government to be sensibly compared across the alternatives.
Income of participants in the scheme	The same income assumptions and projections, as set out in Annexure 10 .
Contribution rates for participants in the scheme	Alternative 3 (career average defined benefit) was modelled as per the design. i.e. no contributions below the threshold and 10% contributions above it (up to the earnings ceiling). For the other alternative benefit structures, the same contribution assumptions, as set out in Annexure 10 were used.
Split of contributions towards risk & savings	In the proposed design, 80% of [own + subsidy] contributions are allocated towards the participant's individual savings, with the balance 20% of contributions going towards the overall risk pool (from which all risk benefits will be paid). For the alternative benefit structures, splits were chosen that would ensure a fair degree of certainty that the risk pool will stay financially sound throughout the period: 1. Alternative 1 (simple defined contribution): 100% of contributions to savings, since the alternative does not provide for any risk benefits. 2. Alternative 2 (defined contribution with risk): 82% of [own + subsidy] contributions to savings, the balance 18% to the risk pool 3. Alternative 3 (career average defined benefit): 77% of [own + subsidy] contributions to savings, the balance 23% to the risk pool 4. Alternative 4 (final salary defined benefit): 80% of [own + subsidy] contributions to savings, the balance 20% to the risk pool
Savings withdrawals Economic assumptions	Same as in Annexure 10 , no withdrawals assumed.
Risk benefit assumptions	Same underlying mortality and morbidity assumptions as set out in Annexure 10 . Furthermore, where risk benefits were mentioned, but without detail specification, the same structure, as in the proposed solution, was assumed.
Cost of administration of the scheme	Same per member per month assumption, as set out in Annexure 10 .

Table 93: Results | Replacement ratios (for retirement at age 60)

	Female	Male	Comment
Proposed design	37%	41%	
Alt 1: Simple defined contribution	23%	25%	38% worse overall than the proposed design, given the absence of Government subsidies
Alt 2: Defined contribution & risk	36%	38%	4% worse overall than the proposed design, mainly due to richer dependents' pensions after retirement
Alt 3: Career average defined benefit	36%	45%	4% better overall than the proposed design, mainly due to increase in Government subsidies

	Female	Male	Comment
Alt 4: Final salary defined benefit	28%	31%	23% worse overall than the proposed design, mainly due to allowance for gaming of the system

Table 94: Results | Capitalised value of pre-retirement risk benefits

<i>R'm, nominal money terms</i>	2020	2035	2050	2065	Comment
Proposed design	18	3 912	9 197	20 395	
Alt 1: Simple defined contribution	1	540	1 285	2 847	86% worse than the proposed design (only return of contributions on death)
Alt 2: Defined contribution & risk	4	3 409	7 959	17 655	13% worse than the proposed design
Alt 3: Career average defined benefit	19	4 103	9 591	21 268	5% better than the proposed design
Alt 4: Final salary defined benefit	18	3 912	9 197	20 395	Similar to the proposed design

Table 95: Results | Total cost to Government (administration + contribution subsidies)

<i>R'm, nominal money terms</i>	2020	2035	2050	2065	Comment
Proposed design	247	9 051	25 564	64 055	
Alt 1: Simple defined contribution	28	1 448	6 219	18 580	78% less than the proposed design; admin only, no subsidies
Alt 2: Defined contribution & risk	247	9 051	25 564	64 055	Similar to the proposed design; same admin same subsidies
Alt 3: Career average defined benefit	332	11 874	32 521	80 357	29% more than the proposed design due to higher subsidies
Alt 4: Final salary defined benefit	247	9 051	25 564	64 055	Similar to the proposed design; same admin same subsidies

Annexure 14: Representative Organisations

The list below sets out the organisations that work together as part of the NEDLAC Task Team on ILO Recommendation 204, which falls jointly under the Ministry of Labour and the ILO Decent Work Country Programme:

- Joburg Informal Traders' Platform (JITP), Johannesburg
- African Reclaimers' Organisation (ARO), Johannesburg
- South African Self-Employed Women's Association (SASEWA), Durban
- Community-based Health Workers' Network, Durban
- South African Informal Traders Association (SAITA), Cape Town
- South African Waste Pickers Association (SAWPA), Sasolburg
- South African Taxi Workers (SATWO, also known as Qina Mshayeli), Durban
- KwaZulu-Natal Fishermen's Forum, Durban
- Home-based workers including care workers, KwaZulu-Natal

Source: WIEGO, Women in Informal Employment: Globalizing & Organizing, a global network focused on securing livelihoods for the working poor, especially women, in the informal economy, www.wiego.org.