Extending Pension Coverage to the Informal Sector in Africa

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Abstract

The coverage of pension systems in the Africa region is limited to the small segment of the population in the formal sector. Coverage is thin partly because traditional contributory pension schemes are not responding to the needs of the informal sector. As a result, a large share of the region's adult population has no access to contributory pension schemes during their working lives. This means they will not be eligible for a pension. It also means the elderly coverage gap will persist in most countries. Expanding coverage to a larger group of workers is especially important because the elderly is now often cared for by their children. As the children move to cities, their ties to the elderly and home villages weaken. As a result, the elderly may be left behind with fewer resources.

An increasing number of governments in the region are examining initiatives to extend pension coverage to informal sector workers. This paper argues that informality represents distinctive issues in the provision of retirement income that cannot be addressed merely by extending conventional pension systems to these workers. Different solutions are needed to tackle the unique characteristics of this group, some members of which may have the potential to save, but not sufficiently to participate in traditional contributory pension systems. That the scheme does not rely on a formal employer-employee relationship is an important characteristic and contrasts with formal sector pension plans based on formal employment contracts pension scheme for the informal sector. This paper aims to provide recommendations on the main principles of a pension scheme for the informal sector.

**JEL Codes**: D80, G20, J10, J26, J46, J50, O17, O55

**Keywords**: informal sector, self-employed, extending pension coverage, characteristics of informal sector workers, pension product design, central administration platform, building blocks of an informal sector pension scheme, Kenya, Ghana, Rwanda, Benin, Uganda
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### Abbreviations and acronyms

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
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<tbody>
<tr>
<td>APY</td>
<td>Atal Pension Yojana (India)</td>
</tr>
<tr>
<td>ARCH</td>
<td>Insurance for Strengthening Human Capital Program (l’assurance pour le renforcement du capital humain) (Benin)</td>
</tr>
<tr>
<td>GDP</td>
<td>Gross Domestic Product</td>
</tr>
<tr>
<td>Ejo Heza LTSS</td>
<td>Ejo Heza Long-Term Savings Scheme (Rwanda)</td>
</tr>
<tr>
<td>MFI</td>
<td>Microfinance Institution</td>
</tr>
<tr>
<td>MNO</td>
<td>Mobile Network Operator</td>
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<tr>
<td>NPRA</td>
<td>National Pensions Regulatory Authority (Ghana)</td>
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<tr>
<td>NPS</td>
<td>National Pension System (India)</td>
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<tr>
<td>SSNIT</td>
<td>Social Security and National Insurance Trust (Ghana)</td>
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<tr>
<td>URBRA</td>
<td>Uganda Retirement Benefits Regulatory Authority</td>
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1. Introduction

Until a decade ago, pensions were not a key topic on the social policy agenda in most African countries.¹ The focus of policy makers in the region was mostly on how pension fund reserves can be best leveraged to contribute to development mainly through the financing of infrastructure projects. Only in recent years has the persistently low coverage of existing formal sector schemes led African governments to place greater emphasis on social protection as the primary goal of pension systems. Moreover, the growing fiscal burden of contributory schemes, particularly pension schemes for the public sector, prompted governments to introduce reforms to improve fiscal sustainability.²

The coverage of pension systems in the region continues to be limited to the small segment of the population in the formal sector. Despite the low coverage, African countries allocate significant resources to pensions. On average, countries in the region spend 1.7 percent of gross domestic product (GDP) on the provision of pensions to the elderly, although there is substantial variation. This number may seem modest relative to spending trends observed in more developed countries, but it is actually high relative to the share of the elderly population benefiting from the schemes, particularly contributory pension schemes. The average coverage of the elderly (people ages 60 and above) by contributory pension schemes is 11.6 percent, leading to a substantial gap in coverage among the elderly in the region, though with wide variations across countries.

Systems in several upper-middle-income countries in the region cover a larger share of the elderly through universal social pensions, but at high cost. For example, Mauritius and the Seychelles provide coverage to all elderly above the pension eligibility age, but allocate between 3 percent and 4 percent of GDP to universal pension programs. Experience in the region shows that, while universal social pension programs can be an effective way to improve coverage, they can be costly, thereby putting a significant fiscal burden on government budgets. Social pensions can be cost effective in middle-income countries if they are provided at the poverty line and indexed to inflation, but there has been a tendency to supply more generous benefits and make them increasingly more generous. Substantial increases in the value of benefits are typically observed before elections. In 2014, the basic retirement pension benefit in Mauritius was raised by almost 40 percent in advance of elections. Recently, a rise of 7 percent, almost quadruple the inflation rate, was announced by the Mauritian government in advance of the elections scheduled in 2019. The government of Seychelles raised the universal pension benefit to the level of 1 In this note, Africa refers to Sub-Saharan Africa and the countries of Sub-Saharan Africa.

² Several countries in the region have introduced reforms aimed mainly at improving fiscal sustainability and governance in pension systems. No doubt this is important from the perspective of achieving the major objective of reducing poverty among the elderly. But another reason why pension reform is vital in the region is because the cost of existing pension systems in most countries in Africa is often crowding out spending on other key areas, such as health, education, safety nets, and so on, that are also essential in poverty reduction. Given that the current participants in pension schemes represent a relatively privileged segment of the population, ensuring that these systems are fiscally sustainable and have adequate governance arrangements is even more important from an equity perspective.
of the minimum wage in 2017, a month before elections (World Bank 2016). Projections indicate that these programs may cost as much as 7 percent of GDP in some countries in the medium to long term and may not be affordable (Guven and Leite 2016).

As a result, extending pension coverage to the informal sector remains a challenge in Africa. Coverage is thin partly because traditional contributory pension schemes, which cushion the elderly against poverty in many developed countries, apply only to the formal sector, but this accounts for an especially small subset of the labor market in Africa. Most countries in the region have some sort of contributory pension program that has been inherited from colonial times or that has been established since independence. In such programs, participants pay contributions during their working lives in exchange for pension benefits during retirement. These systems, however, have been unable to extend coverage beyond the formal sector, which comprises employees in the public sector, state enterprises, and large private companies, resulting in stubbornly low pension coverage among the elderly in the region. A large share of the region’s adult population has no access to contributory pension schemes during their working lives. This means they will not be eligible for a pension. It also means the elderly coverage gap will persist in most countries. Expanding coverage to a larger group of workers is especially important because the elderly are now often cared for by their children. As the children move to cities, their ties to the elderly and home villages weaken. As a result, the elderly may be left behind with fewer resources. Even if there are transfers to the parents, the burden of household homemaking or caregiving is heavier when the elderly and their adult children are not coresidents, and it is especially difficult if the distances between these family members are great.

An increasing number of governments in the region are examining initiatives to extend pension coverage to informal sector workers. This paper argues that informality represents distinctive issues in the provision of retirement income that cannot be addressed merely by extending conventional pension systems to these workers. Different solutions are needed to tackle the unique characteristics of this group, some members of which may have the potential to save, but not sufficiently to participate in traditional contributory pension systems. Even if a scheme responding to the characteristics of the informal sector is implemented, some informal sector workers will not have the means to defer consumption for the sake of preparing for old age and may need subsidies.

The challenges involved in extending coverage to informal sector workers are recognized in the literature. Experts have been seeking ways to provide coverage to the informal sector. A common assessment by most is that pension schemes designed for the formal sector have not been successful in the informal sector. According to Gatti et al. (2014), adequate extension of coverage in the Middle East and North Africa is not likely to be achieved if efforts do not go beyond providing traditional social insurance, and social insurance coverage could be designed to be unconditional on a formal employment relationship among some workers, particularly the self-employed or workers with irregular earnings or irregular work patterns. Ribe, Robalino, and Walker (2012) recognize the challenges to expanding the coverage of contributory systems to the informal sector and rural agricultural workers in Latin America and the Caribbean. They argue that, to offer services to these workers, social insurance programs need to adopt appropriate
rules and systems for payment and contribution collection. *World Development Report 2019* argues that the Bismarckian model based on a formal employment contract is not appropriate for the informal sector and that rethinking this model is necessary (World Bank 2019). It emphasizes that a reformed system must ensure that low-income workers have access to effective risk management mechanisms and that traditional provisions of social protection based on steady wage employment, clear definitions of employers and employees, and a fixed point of retirement are becoming increasingly obsolete. Packard et al. (2019) propose a basic universal pension (social insurance) for all workers, including informal sector workers.

The World Bank’s policy framework proposes that the five-pillar approach to pension systems needs to be flexibly applied in defining the range of design elements to determine a pension system.¹ Country-specific conditions require a tailored, tactically sequenced implementation of the model, which will substantially define the range of feasible options (World Bank 2008). This note reflects the conviction that providing old-age support for all elderly should be the ultimate, noble objective that all countries should pursue. Consistent with the World Bank’s approach to take country-specific conditions into account in developing feasible options, it is argued in this regional note that, among low-income countries with limited resources, such as those in the Africa region, setting this as a short- or even medium-term goal may not be realistic. First, most African countries do not have the resources to provide old-age support to all elderly by providing universal social pensions or by heavily subsidizing contributions from individuals not currently contributing. It is probable that a majority of workers in the informal sector in these countries would need sizable subsidies to participate in a pension scheme even if the scheme is basic. Second, outreach is a challenge. To cover an entire population with universal insurance requires immense administrative capacity and enforcement. Most governments in Africa are still struggling with establishing national identification systems to help identify citizens. In many countries in the region, even formal sector pension institutions, which are often considered to have the most financial resources, do not have automated delivery systems. Paper-based records are not uncommon for contributors or ghost pensioners because the systems are not sufficiently robust. A mandatory basic insurance program is fiscally unaffordable in most countries in Africa.

¹ The five pillars proposed in the World Bank’s policy framework are (a) a noncontributory zero pillar consisting of a demogrant, social pension, or general social assistance, fiscal conditions permitting, to deal explicitly with the poverty reduction objective to provide all the elderly with a minimal level of protection; (b) a mandatory first pillar whereby contributions are linked, to varying degrees, to earnings, with the objective of replacing some portion of lifetime preretirement income; (c) a mandatory second pillar, typically an individual savings account, that is, a defined contribution plan; (d) a voluntary third pillar, which may take many forms (for example, individual savings for retirement, disability, or death; employer-sponsored benefit; a defined benefit, or a defined contribution), but is essentially flexible and discretionary, compensating for rigidities in the design of other schemes; and (e) a nonfinancial fourth pillar that includes access to informal support (such as family support), other formal social programs (such as health care or housing), and other individual financial and nonfinancial assets (such as home ownership and reverse mortgages, where available). In societies that have been able to achieve only limited coverage through mandatory first- and second-pillar schemes, developing well-supervised voluntary (third-pillar) schemes may effectively reach the informal sector and provide an efficient means to supplement and diversify benefits for higher-income groups.
and would also be difficult to implement because of the limited available administrative capacity. This noble idea may thus lose credibility from the get-go.  

This note proposes a gradual, more realistic approach whereby countries would be assisted in laying the foundations of a pension scheme for the informal sector that could potentially be scaled up to become a mandatory, universal system once the enabling environment, including the fiscal environment, is in place. The first step should involve a voluntary pension scheme that would offer informal sector workers access to services to allow them to save for old age. Subsidies and incentives may be needed to reach scale and reduce costs, but universal subsidies may not be affordable. That the scheme does not rely on a formal employer-employee relationship is an important characteristic and contrasts with formal sector pension plans based on formal employment contracts. This note aims to provide recommendations on the main principles of a pension scheme for the informal sector. Initial steps would include instituting the infrastructure for the operationalization of the scheme and testing the behavioral nudges that would be used to encourage informal sector workers who are able to do so to defer consumption to save for old age. In countries that have a social pension, the social pension could be designed such that those who have contributed to the proposed informal sector scheme will always receive higher benefits than those who have not contributed, thus reducing the disincentives to contribute. 

Against this background, section 2 presents information on trends in and the breadth of informality in Africa, and section 3 provides analysis on the existing coverage of contributory pension schemes in the region. Section 4 discusses the characteristics of the informal sector as these relate to the pension coverage gap. Section 5 focuses on the building blocks of an informal sector pension scheme. Initiatives of governments in Africa to extend coverage to informal sector workers and the lessons learned from these experiences are examined in section 6. Section 7 investigates ways to respond to the pension needs of informal sector workers. Section 8 concludes with recommendations. 

2. Informality in Africa 

The debate on the definition of the informal economy is ongoing. According to Medina, Jonelis, and Cangul (2016), there is no standard definition of the informal economy in the literature. Terms such as shadow economy, black economy, and unreported economy have been used to define it. The Transition from the Informal to the Formal Economy Recommendation of the International Labour Organization describes the informal economy as all economic activities among workers and economic units that are not covered or are insufficiently covered by formal

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4 African countries vary in terms of available and potential revenues and administrative infrastructure. This means that some governments in the region could be more ambitious and choose to provide subsidies for participation in a basic universal contributory pension scheme.

5 The voluntary schemes suggested in this note cannot be expected to provide pensions equal to an adequate formal sector pension. By setting aside money for old age, people will be more well off than if they had not saved at all. However, there may be circumstances in which they may be as well off as they would have been if they had contributed to a formal sector scheme, depending on the amount of the contributions they make in the informal sector pension scheme.
arrangements. According to the recommendation guidelines, employees are considered to have informal jobs if their employment relationship is not subject to national labor legislation, income taxation, social protection, or entitlement to certain employment benefits (ILO 2018). *World Development Report 2019* identifies a person as an informal worker if that person does not have a contract, social security, or health insurance and is not a member of a labor union (World Bank 2019).

Regardless of the definition, the informal sector is large and persistent in Africa. The informal economy in Africa is the largest in the world. It also exhibits significant heterogeneity across the region. Thus, the level of informality ranges from 20 percent to 25 percent of GDP in Mauritius, Namibia, and South Africa to a high of 50 percent to 65 percent in Benin, Nigeria, and Tanzania (figure 1). According to the African Development Bank, the informal sector contributes about 55 percent to Africa’s GDP and employs 80 percent of the labor force (AfDB 2013).

**Figure 1. The informal Economy, Average GDP Share, Sub-Saharan Africa, 2010–14**

[Image of bar chart showing the percentage of GDP for different countries in Sub-Saharan Africa between 2001–2014.]


In the *Regional Economic Outlook* on Sub-Saharan Africa, the International Monetary Fund (IMF 2017) estimates the size of informal employment in the region. According to the analysis, the informal economy accounts for 30 percent to 90 percent of total nonagricultural employment. Figure 2 shows the size of the informal economy in Africa in terms of country groups over five-year intervals in 1991–2014. Although there was a gradual decline overall, as was apparently the case globally, low-income countries experienced a gradual increase. While international experience indicates that the share of the informal economy declines as the level of development increases, most economies in Africa are likely to have large informal sectors for many years to come.

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6 “Transition from the Informal to the Formal Economy Recommendation, 2015 (No. 204),” International Labour Organization, Geneva
Chen (2001) estimates that 93 percent of the newly created jobs in Africa during the 1990s were part of the informal sector. Comparing the performance of the formal and informal sectors in terms of job creation, Xaba, Horn, and Motala (2002) find that employment in the formal sector is stagnant at best or falling sharply, while the informal sector is experiencing dazzling growth. Steel and Snodgrass (2008) emphasize the weak access of informal actors to social services. The services of concern are those with direct impact on productivity, such as infrastructure, capital education, health care, and social security. Governments should therefore focus less on legalizing the informal sector than on creating a level playing field for agents of formal and informal sector workers (Benjamin 2014).

Filmer and Fox (2014) project the change in the structure of employment that implies substantial growth in nonagricultural employment. The projected structure of employment in 2020 shown in figure 4 is not much different from the structure in 2010 shown in figure 3. Agricultural employment is expected to decline among all country groups. Yet, the share of industrial wage jobs in total employment will rise from 2.3 percent to only 3.2 percent. This is below other developing regions because these jobs are being created from such a small base. The agricultural sector, which typically provides informal employment, will therefore continue to be the largest sector in terms of employment (Filmer and Fox 2014).
3. Existing contributory pension schemes in Africa

Most countries in Africa have a contributory pension program. In some countries, the schemes are only available to civil servants or public sector employees. In others, pension coverage reaches beyond the public sector to include formal private sector employees. In most countries, the contributory pension schemes for the public and private sectors are separate. Of the 47 countries on which information is available, 6 have a contributory pension scheme for the public sector only; 27 have separate pension schemes for public and private sector employees; and 11
have integrated pension schemes for public and private sector employees (figure 5). Several countries, mostly upper-middle-income countries, have social pension programs that are designed as universal or means tested.

**Figure 5. The Structure of Contributory Pension Schemes in Africa**

![Diagram showing the structure of contributory pension schemes in Africa](source: Based on data of Pensions Data (database), World Bank, Washington, DC, http://go.worldbank.org/8KO0DUVDS0.)

The design of the contributory schemes in Africa vary, but they are dominated by pay-as-you-go defined benefit programs. Most pension schemes for formal private sector employees are designed as pay-as-you-go defined benefit schemes whereby contributions from current workers are used to pay the benefits of current pensioners. Of the 38 pension schemes in the private sector, 31 are pay-as-you-go defined benefit programs, and 4 are provident funds. The governments of Malawi and Nigeria converted their defined benefit schemes to defined contribution schemes. The government of Ghana is the only one in the region that opted for a hybrid defined benefit and defined contribution scheme.

The pay-as-you-go defined benefit design dominates among public sector pension schemes as well. Of the 33 pension schemes in the public sector, 29 are designed as defined benefit programs. While most of these schemes are financed on a pay-as-you-go basis, pension schemes in Namibia, South Africa, and Swaziland are fully funded defined benefit schemes. Botswana, Kenya, Lesotho, and Mauritius have defined contribution pension schemes for public employees.

Regardless of structure and design, the coverage of contributory pension schemes in the region are persistently low. Figure 6 presents the coverage rates of private sector schemes in the countries on which data are available. The average coverage is 11.6 percent of the population.

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7 See Abels and Guven (2016) for more detail.
8 See Guven and Leite (2016) for a detailed discussion.
9 The 11 integrated schemes are considered under the 38 schemes in the private sector.
ages 60 and above, but the variation across countries is wide. While Mauritius provides pension coverage to 63.0 percent of the elderly, Ethiopia provides coverage to only 0.1 percent.

Figure 6. Coverage of Contributory Private Sector Schemes, % of Population Ages 60+

![Graph showing coverage of contributory private sector schemes for different countries.]

Source: Based on data of Pensions Data (database), World Bank, Washington, DC, http://go.worldbank.org/8KO0DUVDS0.

The coverage of the elderly through contributory pension schemes is not expected to improve. Though there is variation across the region, an average of only 10.6 percent of the working-age population is participating in contributory pension schemes (figure 7). Typically, in countries with relatively higher incomes, such as Mauritius and the Seychelles, a higher share of the population contributes to pension schemes, while, in most countries in the region, pension schemes receive contributions from only a small share of the working-age population. In more than half the countries on which data are available, less than 6 percent of the working-age population contribute to a formal pension scheme. In Ethiopia, Guinea-Bissau, and Tanzania, participation in the contributory pension schemes accounts for less than 2 percent of the working-age population. The low average coverage of the working-age population in most countries in the region means that few elderly will be eligible for a contributory pension benefit in the future.

Figure 7. Coverage of Contributory Schemes, % of Working-Age Population, Ages 15–59

![Graph showing coverage of contributory schemes for different countries.]

Source: Based on data of Pensions Data (database), World Bank, Washington, DC, http://go.worldbank.org/8KO0DUVDS0.
Africa is a young continent, but the share of the elderly in the population will rise. Figure 8, which illustrates population projections for the region, shows that Africa will age. Almost 9 percent of the population is expected to be age 60 or above by 2050. In all countries other than Niger (4 percent), the share of the elderly is expected to grow appreciably. The share is anticipated to nearly triple in Botswana, Cabo Verde, and Kenya. In Mauritius, the share is expected to reach 30 percent. However, viewing the elderly as a percentage of the population understates the growth in the number of elderly because, across Africa, the population is also expanding. Even in Niger, where the share of the elderly will remain unchanged, the population itself will more than triple by 2050, suggesting a substantial increase in the number of elderly (Schwarz et al. 2018).

Figure 8. Population Ages 60 or Above, 2015 and 2050

These demographic projections indicate that there will be even more elderly to worry about. The narrowing and more porous safety nets because of the changes in household structure and the migration of workers to urban areas for job opportunities mean that old-age poverty will become an even more pressing challenge for policy makers in the region. Innovative solutions to improve the coverage of the working-age population, the majority of which are active in the informal sector, need to be found now given that pension systems are designed to provide benefits in the medium to long term. Meanwhile, governments need to continue to reform pension systems in the formal sector. Some of these schemes are already in deficit, and some are projected to be in deficit in the future, which means they can potentially crowd out the fiscal space for other areas critical to poverty reduction.
4. The characteristics of informal sector workers

Most studies on the informal sector find that the informal sector workforce differs from the formal sector workforce (Benjamin 2014). Because of the distinct characteristics of the informal sector, formal sector pension schemes cannot respond to the needs of the informal sector. Many informal sector workers are not able or willing to finance formal sector social insurance benefits that do not meet their priority needs (van Ginneken 1999). The low coverage has been a challenge not only in Africa, but also globally. Even in countries in which the rate of informality is low, the coverage of the self-employed, self-employed farmers, agricultural workers, and other groups has been a challenge. The attempts of many governments worldwide to cover the self-employed by introducing presumptive income tranches to calculate contributions and pensions as if the workers were under a wage employment contract (with themselves as the employer) have not been successful. Understanding the characteristics of the informal sector is therefore important in designing pension schemes that will respond to the needs of these groups. This section examines the characteristics of the informal sector in Africa that are relevant to pension scheme design and implementation.

**The informal sector is heterogeneous.** The characteristics of informal sector workers are diverse. The sector employs a wide range of individuals, ranging from wage earners and the self-employed to domestic workers, although self-employment is a predominant characteristic. Small farmers, street vendors, small traders, porters, casual laborers, and artisans are all part of the informal sector. Chen (2012) classifies informal sector workers into two main groups and several subcategories, as follows: (1) the self-employed, including employers in informal enterprises, own-account workers in informal enterprises, and contributing family workers, and (2) the wage-employed, including employees in informal enterprises, casual laborers, paid domestic workers, industrial outworkers, and homeworkers. These two classifications and multiple subcategories reflect the heterogeneity of the informal sector.

According to Becker (2004), self-employment comprises a greater share of informal employment than wage employment in all developing countries. Self-employment represents 70 percent of informal employment in Africa. (If South Africa is excluded, the share is 81 percent.) Consequently, informal wage employment in the developing world constitutes 30 percent to 40 percent of the informal employment outside agriculture. Home-based workers and street vendors are two of the largest subgroups in the informal workforce. Taken together, they represent 10 percent–25 percent of the total workforce in developing countries (Becker 2004). A substantial portion of the large informal agricultural sector is represented by smallholder farmers (80 percent) who cultivate low-yield staple food crops on small plots with a limited use of inputs (WEF 2015).

In Africa, according to Chen (2017), employers represent only 2 percent of informal employment outside agriculture. Own-account workers—those who do not hire others—represent 53 percent. Contributing family workers represent 11 percent. A larger share of women informal workers (76 percent) than men informal workers (58 percent) are self-employed. Women are far more likely to be own-account workers or contributing family workers, while men are far more
likely to be employers. The International Labour Organization (ILO 2015) also finds that self-employment constitutes a greater share of informal employment (nonagricultural) than wage employment. Self-employment accounts for as much as 53 percent of nonagricultural employment in Sub-Saharan Africa.

According to Becker (2004), because the informal economy is heterogeneous in terms of capital invested, technology in use, adopted management practices, productivity, and net earnings, its players also constitute a heterogeneous group that join the informal economy for different reasons. According to Guilherme Reis, Angel-Urdinola, and Quijada Torres (2009), firms and workers participating in the informal sector may have preferred working in the sector or may have been excluded from the formal sector. Some formal sector firms hide transaction information to save on taxes and avoid requirements on the number of employees to save on social security contributions, while informal participants may pay some or no taxes, indicating that informality may be an attractive alternative. Firms may also choose to be in the informal sector to avoid labor regulations.

Perry et al. (2007) find considerable evidence that the informal sector is heterogeneous. Workers and firms that have been excluded from the formal economy are found alongside firms and workers that have opted out of formality on the basis of an implicit cost-benefit analysis. This shows that at least some informal sector actors have chosen to be in the sector. Specifically, some workers and firms, upon making implicit or explicit assessments of the benefits and costs of formality, choose to opt out of the formal sector. Given existing opportunities and constraints, they actually prefer informality. Informal employment does not only include disadvantaged workers rationed out of the formal sector, but also workers who choose to work in the sector based on comparative advantage or the more desirable nonwage characteristics of the sector (Gindling 1991; Maloney 2004). Fields (2005) argues that, indeed, these two informal labor types may coexist in the sector. He proposes that the sector consists of two distinct parts, an upper tier and a lower tier. The upper tier is competitive and consists largely of individuals who, given their endowments, expect to earn more than they would in the formal sector. The lower tier represents the involuntary part of the sector and is made up of individuals rationed out of the formal sector.

In a study covering seven capital cities in West Africa, Grimm, Knorringa, and Lay (2012) identify three groups of entrepreneurs instead of two: first, the well-known success stories or top performers; second, a group of constrained gazelles who share some characteristics with the top performers, such as in educational attainment, language skills, sectoral choice, and selected basic management abilities, but who are not yet successful; and, third, a group of survivalist entrepreneurs with fundamentally different characteristics. While the constrained gazelles and top performers share some similarities, the constrained gazelles, similar to the survivalists, possess little capital. Constrained gazelles earn a high marginal return on capital, which underscores their potential to become top performers.10 They are mainly constrained by the

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10 Grimm, Knorringa, and Lay (2012) find that the share of the constrained gazelles ranges from 28 percent (Benin) to 58 percent (Côte d’Ivoire).
business environment, that is, external constraints, such as the lack of access to capital, insurance, and productive infrastructure. Individual or internal constraints, such as educational attainment or business skills, are not the key restrictions on these businesses, which already exhibit financial literacy, keep books, and react flexibly to change in market conditions. The true survivalists lack these capacities. There is thus an argument for providing these constrained gazelles with credit, savings devices, and insurance to cover important household-related risks, such as health shocks and death. The authors suggest that a relatively small set of commonly observable characteristics, such as educational attainment, age, language skills, sectoral choice, and management practices, are probably sufficient to identify this group, which might be a crucial step toward differentiated policy making. They argue that, through such an approach, between a third and a half of all microentrepreneurs and small businesspeople could be expected to be able to make effective use of credit and savings devices. Given that, in most African countries, the availability of these services to the informal sector is limited, it may be worthwhile to start taking steps in this direction.

According to the International Labour Organization (ILO 2015), the share of women in informal employment in nonagricultural activities outnumbers the corresponding share of men in most countries in Africa on which data are available disaggregated by sex. In Africa, 74 percent of women’s employment (nonagricultural) is informal, in contrast with 61 percent among men. The rate of vulnerable employment, typically unpaid family work, was also considerably higher among women than men, 84.3 percent versus 70.1 percent, respectively, in Africa in 2014. Herrera et al.’s (2012) finding is consistent with this conclusion. In seven cities in their study, proportionally more women than men are in informal employment.

Not all workers in the informal sector are poor. Indeed, some informal sector workers are able to save. Country-specific analyses need to be carried out to help identify those informal sector groups able to save for old age. An analysis conducted on the informal sector in Benin that relied on household survey data indicates that 30 percent of the informal sector has a capacity to save that is nearly identical to the capacity in the formal sector (box 1).

**Box 1. Analysis of the Ability in the Informal Sector to Save for Old Age, Benin**

Analysis using the 2011 and 2015 rounds of the Integrated Modular Survey on Household Living Conditions was carried out to identify households in the informal sector in Benin for whom the short-term costs of deferring consumption to save for old age would be relatively small. These households would be more likely to participate in a voluntary pension scheme. The analysis classifies the households into four groups. At one end of the spectrum are households that are already participating in the formal sector (formal households). At the other end are the households below the poverty line. For these households, setting money aside for old age would imply costly deprivations in the short term and outweigh the benefits of receiving an income in old age.

Besides the level of income, the variability of income affects the short-term cost of contributions to a pension scheme. Households with volatile incomes are likely to favor liquid forms of savings from which they can easily withdraw if their incomes drop. A similar consideration arises with respect to expenditures. Households that are more vulnerable to costly economic shocks may be reluctant to set money aside in a long-term savings instrument. Thus, a further distinction between vulnerable and nonvulnerable informal households has been made. The latter have stable incomes and face low levels of economic uncertainty. Their savings capacity is likely to exceed their need for liquidity, and they may be willing to save for the long term. Meanwhile, vulnerable
households have volatile incomes or have large and unpredictable expenditure needs for which they must keep short-term liquid savings. Based on this classification, it emerges that, of all households in Benin, 30.9 percent fall into the nonpoor, nonvulnerable informal category.

The characteristics of informal nonpoor, nonvulnerable households. Informal nonpoor, nonvulnerable households are markedly poorer than formal households. Their median per capita consumption is around a third lower. The distribution of educational attainment among household heads in both groups is different. While 77 percent of the heads of formal households have at least some secondary education, the corresponding share is 21.5 percent among informal nonpoor, nonvulnerable households. The latter are also much more likely to be rural (53.9 percent versus 21.5 percent). Regarding financial inclusion, only 9.1 percent of informal nonpoor, nonvulnerable households have bank accounts, whereas the share among informal households is 47.1 percent. Furthermore, the former are much less likely to be literate or to own large durables. In all these dimensions, they look much more like poor, vulnerable households than like formal households. However, in contrast to these major differences in socioeconomic characteristics, informal nonpoor, nonvulnerable households report that they are able to save in proportions that are relatively comparable with the proportions among formal households (34.3 percent versus 47.8 percent).

The geographical and economic location of informal nonpoor, nonvulnerable households. Whether some areas of Benin defined either geographically or economically are more likely to contain large shares of informal nonpoor, nonvulnerable households was investigated using the classification described above. The analysis allowed a ranking of departments of Benin according to the highest and lowest shares of these households. Such a geographical distribution of vulnerability should be considered if the pension scheme is to be piloted or implemented sequentially across departments. The analysis shows that heads of informal nonpoor, nonvulnerable households tend to be more highly concentrated among small entrepreneurs, particularly those with fewer than five employees. Most establishments with more than 11 employees are formal. At slightly above 30 percent, the largest share of heads of these households is found among the self-employed, apprentices, and firm owners.

At the top of the industries in which these household heads are active is services, for example, health and social services, reflecting the lower risk of exposure to economic shocks and lower poverty rates associated with these industries. An exception is hospitality and commerce services, which are in the bottom half of industries among these heads of household. Textiles, construction, and export-oriented agriculture also feature, but at the top, whereas subsistence agriculture, fishing, and commerce are at the bottom. Because of their sheer size and despite the small shares of active households involved, these latter industries employ many members of informal nonpoor, nonvulnerable households.

An analysis conducted on occupations found similar patterns. Various, mostly urban, services are represented at the top (for example, mechanic, hairdresser, fabric salesman, domestic services, welder, driver), whereas professions tied to subsistence agriculture and crafts feature at the bottom (for instance, fisherfolk, basketmaker, and food peddler). However, in absolute numbers, farmers are at the top despite the relatively small shares of active informal nonpoor, nonvulnerable households involved in farming.

The representative household survey administered in 2011 and 2015 found that 30.9 percent of Beninese households are active in the informal sector. The members of such households are generally living above the poverty line, and they report that they do not face severe economic shocks. They say they are able to save in proportions that are comparable to households in the formal sector. These informal households are much more prevalent in some departments (for example, Alibori, Atacora, Borgou, Donga, and Oueme) than others (for instance, Couffo and Mono) and tend to be self-employed or work in small establishments with under five employees each. Urban services account for the employment of larger shares of these households and may be an appropriate place to start implementing the new old-age savings scheme. However, subsistence agriculture and related occupations still contain the largest pool of potential participants in absolute numbers among members of informal nonpoor, nonvulnerable households.

Source: Guven, Brodersohn, and Joubert 2018.
Informal sector workers may not have regular incomes or savings. The informal sector is typically characterized by lower incomes relative to the formal sector. Moreover, earnings among the self-employed, who account for a majority of the actors in the informal sector, are typically irregular and often unpredictable, meaning that financial planning is a challenge. The wage-employed in the informal sector typically have low incomes, and their employment is irregular, meaning that their incomes are also irregular. Thus, seasonal workers in the agricultural sector who are employed during a certain part of the year must rely, during the rest of the year, on the earnings thus gained. The same is true of farmers and their families who rely on the cultivation of their own land to generate income. They experience poor cash flow during the growing season and relatively large incomes following the harvest.

Africans rely on informal mechanisms for savings. About 60 percent of adults in Africa save money, but only 16 percent of these people use a financial institution to do so. The others rely on less secure methods, such as stuffing cash under a mattress or joining an informal savings club. One example of informal savings is a rotating savings and credit association, which pools member deposits and disburses the entire sum to a different member each week. About 70 million unbanked adults in the region use informal groups to save, including about 40 million women (Demirgüç-Kunt et al. 2015).

The share of the population that saves for old age is low in the region. According to the Findex survey, only 10.2 percent of individuals ages 15 or above saved for old age in 2017. Saving for old age is less common among the poorest 40 percent of the population, among whom only 7.5 percent of young adults save for old age. It is highly likely that most of these savings are accounted for by the formal sector through contributory pension schemes. Those who save through for old age account for an average 10.6 percent of the working-age population, though the share varies across countries (see above).

Informal workers are more susceptible to short-term shocks. Shocks are occasional or seasonal events that befall individuals, households, or communities and that have implications for consumption, expenditure patterns, and well-being. Idiosyncratic shocks affect a particular household or individual. Covariate shocks affect whole communities. Participants in the Informal sector are more vulnerable to shocks because of their generally lower incomes, lack of social protection, and limited savings available for coping. Health-related problems such as occasional, chronic, or terminal illness, unexpected disability, or death may have a significant impact on the lives of informal sector households, leading to reduced food expenditures or the obligation to tap into savings if these are available. According to the focus group analysis conducted in Benin, household agricultural producers pay significant amounts for health services only after they have postponed health care treatments until these are absolutely necessary. Typically, by the time household members visit a health care facility, the health problem has worsened and become difficult to treat (Guven, Brodersohn, and Joubert 2018). Ahmad and Aggarwal (2017) have

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studied the consequences for the welfare of households engaged in the informal sector of catastrophic expenditures following health shocks. They find that a sizable share of households (27 percent) engaged in the informal sector spend more on health care following shocks, a phenomenon that is associated with a trend toward greater poverty. Covariate shocks, such as floods and drought, may have a significant impact on the agricultural sector in Africa, which is largely informal. In the absence of access to formal social protection, formal financial institutions, and savings and physical assets that can be used as collateral, participants in the informal sector may not be able to implement common coping strategies. As a result, informal sector participants may turn to informal sources, including friends, relatives, or moneylenders. The lack of access to financing and credit leads to loans at higher interest rates, compromising future incomes with irreversible consequences.

**Individuals in the informal sector are difficult to reach.** Informality is both an urban and rural phenomenon in Africa. A large share of the economic activity in most African cities takes place on the streets. People make their livings as vibrant groups of traders selling a variety of products from fruits to clothes, crafts, gasoline, or services such as motorcycle taxis. In rural areas, most employment is in agriculture, which is characterized by informality. People in the agricultural sector may also be involved in nonagricultural activities to complement their earnings. These supplementary activities are also informal. In rural areas, outreach is a major challenge for service and social safety net providers. In the urban informal sector, while formal services are close to workers, outreach may still be complicated because individuals may not have stable jobs, may change jobs and locations frequently, and may lack appropriate documentation. Such individuals often do not own property and may have found shelter in locations without formal addresses, which makes contacting them difficult.

**Informal sector workers are organized.** Contrary to the general perception, informal sector workers in Africa are often well organized. A large number of informal sector workers from Senegal to Tanzania, Ghana to South Africa, and Benin to Kenya are members of worker associations. While such institutions vary across countries, they are typically organized around particular trades or activities to protect the rights of informal sector workers, provide training to members to improve their productivity, and help in finding financing, typically from microfinance institutions (MFIs). In the case of agricultural producers, the associations help market the output of members. The associations may be represented at all levels of administrative infrastructure in the country and therefore have the ability to conduct outreach and communication as well as act as trusted sources of information for members. They may be registered and officially recognized by governmental institutions. In Benin, for example, there are several national associations - federations and confederations - that are registered with the central government and receive financial support from the government to undertake activities. Because the size, purpose, and membership of these institutions vary across countries, there is a need to assess their size and capacity in individual countries for potential collaboration with them in tackling the challenges of the informal sector, ranging from social protection and improving the productivity of agriculture to linking products to markets.
5. The building blocks of an informal pension scheme

Because it is not possible to build a pension scheme for the informal sector by relying on formal employee-employer relationships, there is a need to identify additional building blocks. First, extending pension coverage to the uncovered segments of the population can be closely linked to financial inclusion. The effort to improve financial inclusion can be beneficial in extending pension coverage to the informal sector. Technological advances, such as mobile money and digital payments, can be used to support the spread of pension coverage. Pension coverage efforts can build on the strong outreach capabilities of MFIs. Second, national identification systems can support the operation of pension schemes. Similarly, improving pension coverage in the informal sector would contribute to financial inclusion. Informal savings mechanisms have an impact on saving for old age.

When governments are considering introducing a pension scheme for the informal sector, they need to acknowledge that they would need a national identification system of good quality as coverage increases even if the existing coverage of the identification system is not 100 percent. The financial inclusion efforts need to be moving toward including more people, particularly through digital services. This section examines financial inclusion and identification systems, which are the two building blocks of an effective pension scheme in the informal sector.

5.1. The financial inclusion landscape in Africa

Financial inclusion refers to the access by enterprises and households to reasonably priced and appropriate formal financial services that adequate to meeting their needs. Access to financial services may occur along several dimensions, including geographical access, that is, proximity to financial service providers, and socioeconomic access, that is, the absence of prohibitive fees and documentation requirements. The array of formal financial institutions includes banks, nonbank financial institutions, and MFIs. There is a critical difference between commercial banks, which are regulated and supervised by either the central bank or a separate regulatory authority, and other financial institutions, which are typically subject to fewer regulatory rules and constraints. One may also distinguish an array of formal and semiformal nonbank financial institutions, ranging from credit-only financing and leasing companies to postal savings banks and credit and savings cooperatives, such as the savings and credit cooperative societies in East Africa (Beck 2015).

In the 1990s, donors and microfinance providers focused primarily on a single product (credit) for a particular client group (microentrepreneurs). Microcredit was delivered mainly by specialized MFIs, most of which were nongovernmental organizations. Over time, the notion of microcredit broadened, first, from microcredit to microfinance and, then, to the concept of building entire financial systems to serve poor and low-income populations, that is, inclusive financial systems (Littlefield, Helms, and Porteous 2006). Today, microfinance covers financial services, including credit, savings, remittances, insurance, and leasing, which are increasingly being provided by diverse financial service providers. Commercial banks have also entered the
market, although they are adopting separate approaches. Some banks enter the market directly and expand their retail operations to reach the microlevel by creating an internal unit or launching a dedicated company, such as a service company or specialized financial institution. Others take an indirect approach by working with existing microfinance providers (Isern and Porteous 2005). Whereas microfinance advocates generally work with the MFIs that grew out of the microcredit revolution serving the poor, financial inclusion advocates more often work with a broad range of providers to achieve their goals, including those that do not necessarily focus exclusively on poor people. ¹³

African countries have experienced positive developments in access to financial services in recent decades. In many African countries, with the deepening of the financial sector, more financial services, especially credit, are now being provided to individuals and enterprises. Recent technologies, such as mobile money, have helped broaden access to financial services, including savings and payment products. However, the financial systems of many African countries are still underdeveloped relative to other developing economies, even though most of these countries have undergone extensive financial sector reforms. Indicators of the use of financial products and services by individuals and enterprises in the region show that many challenges remain to building a more financially inclusive financial sector in Africa (Demirgüç-Kunt and Klapper 2012).

Overall, the access to financial services improved in the region from 2011 to 2017. The share of adults with accounts through either financial institutions or mobile money providers rose from 23.2 percent to 42.6 percent.¹⁴ However, more than two-thirds of adults still do not have accounts at formal financial institutions. There is large variation in the share of the population that is unbanked in Africa. In Chad, Madagascar, Niger, and South Sudan, more than 90 percent of the population are unbanked. In Mauritius and Namibia, those who are unbanked represent 11 percent and 33 percent of adults, respectively, indicating that the share of people with bank accounts rises with the level of income of a country. Access to formal financial institutions is lower among the poorer segments of the population. In 2017, 31.9 percent of the poorest 40 percent of the population had accounts with financial institutions. Financial inclusion also improves with educational attainment. People with secondary educational attainment or higher exhibited almost double the ownership of bank accounts (60.3 percent) relative to people with primary educational attainment or less (30.7 percent). Adult men are more likely than adult women to have accounts with financial institutions (48.4 percent versus 36.9 percent, respectively).¹⁵

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¹⁴ The Global Findex database defines account ownership as possession of an individual or jointly owned account either with a financial institution or through a mobile money provider. The first category includes accounts at a bank or another type of formal, regulated financial institution, such as a credit union, a cooperative, or an MFI. The second consists of mobile phone–based services, not linked to a financial institution, that are used to pay bills or to send or receive money. These mobile money accounts allow people to store money and to send and receive electronic payments. See Global Findex (Global Financial Inclusion Database), World Bank, Washington, DC, https://globalfindex.worldbank.org/.

Lack of documentation, cost, remoteness, and trust are cited as major obstacles to access to financing. Indeed, 65.7 percent of adults reported that they lacked accounts at financial institutions because of these four main reasons. Bringing financial services to rural clients is a major challenge on the financial inclusion agenda. Often, the main barrier to financial inclusion in rural areas is the great distances that rural residents must travel to reach a bank branch. Poor infrastructure and telecommunication and heavy branch regulation also restrict the geographical expansion of bank branches (Pickens, Porteous, and Rotman 2009). Financial inclusion is positively and significantly correlated with access points, measured as commercial bank branches per 100,000 people. The African economies are at the low end of the spectrum because of the low number of commercial bank branches per 100,000 adults and low account penetration in Africa (Demirgüç-Kunt and Klapper 2012).

The Microfinance Information Exchange has mapped the financial inclusion landscape in Africa (figure 9). The landscape data show that, in 2011, the institutions that provide financial services in Africa reached 71 million clients, 44 million deposit accounts, and 20 million loans through 23,000 providers in 45 countries. Breaking down these data by products and provider types shows that MFIs reached many more clients relative to traditional banks. Credit unions served the most people in aggregate. Savings banks, savings groups, and postal savings programs served 13.4 million clients (MIX 2011).

Figure 9. The Landscape of Financial Inclusion, Sub-Saharan Africa, 2011

Source: MIX 2011.

The rise in financial inclusion in Africa has been accelerated by mobile phones and the Internet. In 2014, 12 percent of adults in Sub-Saharan Africa had mobile money accounts, while this was true of only 2 percent of people worldwide. Today, Africa remains the global leader in the use of mobile money: 21 percent of adults in the region have mobile money accounts. Among this group, nearly half reported that they have only mobile money accounts, while the other half reported that they have accounts with financial institutions as well. Mobile money accounts are particularly widespread in Kenya, where 73 percent of adults have them, as well as in Uganda and Zimbabwe, where the corresponding share is about 50 percent (map 1). Sub-Saharan Africa is also home to all 10 economies worldwide where more adults have mobile money accounts.

rather than accounts with financial institutions: Burkina Faso, Chad, Côte d’Ivoire, Gabon, Kenya, Mali, Senegal, Tanzania, Uganda, and Zimbabwe.

**Map 1 Mobile Money Accounts Are Now More Widespread, Sub-Saharan Africa, 2014–17**

*adults with a mobile money account, %*

<table>
<thead>
<tr>
<th></th>
<th>a. 2014</th>
<th>b. 2017</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Source: Data of Global Findex (Global Financial Inclusion Database), World Bank, Washington, DC, https://globalfindex.worldbank.org/.*

In 2014, mobile money accounts were concentrated largely in East Africa. Now, such accounts have spread to West Africa and beyond. In West Africa, the share of adults owning mobile money accounts has risen to about 33 percent in Burkina Faso, Côte d’Ivoire, and Senegal and to 39 percent in Ghana. It has reached nearly 45 percent in Gabon and Namibia (Demirgüç-Kunt et al. 2018). The Central Bank of West African States and the countries of the West African Economic and Monetary Union have recognized digital financial services as a key catalyzer of financial inclusion because it offers greater convenience and the possibility of lower cost relative to traditional banking. The Central Bank of West African States has thus adopted a new framework allowing for the licensing of e-money issuers in 2015. The e-money access points are the most numerous, and mobile users outnumber bank and MFI account holders, making the mobile technology one of the most promising tools for expanding access to financing and achieving financial inclusion objectives (figure 10).
In Africa, digital services providers are expanding rapidly. The convenience and flexibility supplied by mobile money services and mobile wallets relative to traditional money payment and transfer techniques are encouraging users to consider mobile money services. These mobile services facilitate sending and receiving money at less cost without having to travel long distances. Mobile phones and the Internet are increasingly offering an alternative to debit and credit cards for making direct payments from accounts. More than one-fourth of adults made payments using digital services (29.1 percent) in 2017, and almost one-fourth received information through digital services (24.8 percent). In 2017, 24.1 percent of adults sent or received domestic remittances through mobile phone, representing a significant rise from the share of adults that used mobile phones for this purpose in 2014 (13.2 percent). About 11 percent of adults in African countries received payments for the sale of agricultural products through mobile phones.

Rapid advances in technology, mobile phone penetration, the number of players, and investment in financial technology are transforming the financial services industry. This presents tremendous opportunities for MFIs to raise efficiency, lower transaction costs for institutions and clients, and expand outreach to new markets. However, modern technologies are complex and can represent difficult challenges for institutions and clients. For MFIs to be able to fulfill the promise of their role and play a part in the new ecosystem for financial inclusion, they must face the challenges of meeting evolving customer expectations and needs by incorporating digitization and partnering with the other actors in the ecosystem (World Bank and Bank Negara Malaysia 2017). Understanding consumer behavior is critical in increasing the use of digital financial services. This means providing a range of products that respond to the needs of users with low-cost service delivery options (box 2).
Financial exclusion and the expansion of pension coverage to the unserved segments of the population are closely linked. The efforts undertaken and innovations realized in improving financial inclusion can also be beneficial in extending pension coverage to the informal sector. Technological advances such as mobile money and digital payment transactions can be used to support the expansion of pension coverage. Efforts to expand pension coverage can build on the strong outreach capabilities of the microfinance sector. Improving pension coverage among the informal sector would likewise contribute to financial inclusion. That informal savings mechanisms have an impact on saving for old age should be acknowledged.

### 5.2. A brief overview of Africa’s identification systems

The proper identification of individuals has significant implications for pension systems. Formal sector pension schemes usually cover the need to identify individuals through employers. However, identification becomes critical in the absence of employers, which is often the case in informal sector pension systems.

Identification systems are important for pension systems for several reasons. It is critical that individuals be correctly identified within pensions systems to be able to verify and track contributions accurately and establish the ownership of pension benefits. Precise identification

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17 There are also challenges in identification in formal sector pension schemes. There are still critical identification needs in the decumulation stage where people need to be properly identified to collect pensions, long after their employment has ceased. There also needs to be some form of death registry and notification to the pension fund. Beneficiaries need to be appropriately identified.
is a key element in any pension system because it allows authoritative enrollment, recordkeeping, management of contributions, and delivery of benefits.

If an identification system is not used as a mechanism to verify the identification entity of participants, an individual might become associated with multiple records or pension accounts. If individuals are not correctly identified and have several pension accounts, they may receive pensions or benefits that are reduced or that do not otherwise correspond with actual contributions. This may encourage a lack of trust in the reliability of a scheme. The incorrect identification of individuals may also translate into higher costs because administrators would have to manage several accounts belonging to the same individual and then verify the identification and rightful ownership across multiple accounts. This could generate higher fees for members, thereby lowering pension benefits.

Informal sector pension schemes rely on national identification systems to accomplish the important task of identifying individuals. This helps the pension scheme to assertively identify, verify, and track contributions and accrued benefits accurately over a multiple decade horizon (figure 11).

**Figure 11. Provision of Pensions, Stages**

![Figure 11. Provision of Pensions, Stages](image)

*Source: Khanna, Price, and Bhardwaj 2017.*

The key problems around identification in the pension world may be summarized as follows: (1) inaccurate enrollment of individuals during the enrollment stage (A in figure 11), (2) mismanagement of the contributions made throughout the working lives of individuals (B), and (3) mistaken funds disbursements during the payout phase (C).

The consequences of the lack of an appropriate identification system may become more challenging in pension schemes targeting informal sector workers because individuals in the informal sector tend to change jobs more frequently during their working lives, thus making them more difficult to track. However, the main challenge is related to the lack of employers, who
usually help in the process of enrollment and the collection of contributions. Moreover, informal sector workers usually do not possess registration documents, which may mean they are not associated with unique identifiers that can act as a link between various databases in the implementation of government policies. The lack of database links makes the monitoring process more complicated because of the added difficulties in determining which individuals are eligible for which programs (Khanna, Price, and Bhardwaj 2017).

The need to identify people in an accurate, efficient, and agile way has led many governments across the world to invest in new mechanisms and technologies to establish national identification systems to facilitate access to services, including pension programs. Actors in various sectors have developed, tested, and adopted diverse forms of identity authentication, including reliance on behavioral patterns, identification systems based on personal identification numbers or keys that allow individuals to gain access to social benefits and financial services, and digital biometrics, such as fingerprint, voice, facial, and iris recognition technologies.

Various African governments, such as in Ghana, Kenya, Nigeria, and South Africa, have been pioneers in developing national identification systems in support of boosting the use of digital services among the population (DIAL 2017, 2019). The systems have been launched as part of distinct schemes, backed by different levels of expertise, technical capacity, and public-private collaboration. The result has been an enormous range of identification systems, but also fragmentation and disparity (figure 12).

Figure 12. Status of National Identification Systems

Another crucial factor is the segmentation of identification systems within a country. Separate identification systems are often available for voter registration and birth and death registration. Each has a specific objective and coverage (table 1; figure 13). Several governments have recently attempted to integrate identification systems or create new ones from scratch, although other
identification systems already exist. For instance, in 2006, 12 identification projects in Nigeria were identified, including 8 involving biometrics (Atick 2018).

Table 1. Types of Registration and Identification Fees

<table>
<thead>
<tr>
<th>Country</th>
<th>Population (millions)</th>
<th>Birth Registration (Under 5)</th>
<th>Death Registration (% Adult Pop.* )</th>
<th>National ID Register (% Adult Pop.*)</th>
<th>Voter Register (% Adult Pop.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Botswana</td>
<td>2.0</td>
<td><strong>76.9%</strong></td>
<td>75%</td>
<td>80-90%</td>
<td>80-90%</td>
</tr>
<tr>
<td>Cameroon</td>
<td>22.7</td>
<td>66%</td>
<td>34%</td>
<td>66%</td>
<td>30-40%</td>
</tr>
<tr>
<td>Chad</td>
<td>14.0</td>
<td>16%</td>
<td>unavailable</td>
<td>64%</td>
<td>100%</td>
</tr>
<tr>
<td>Côte d’Ivoire</td>
<td>22.6</td>
<td>65%</td>
<td>unavailable</td>
<td>75%</td>
<td>53%</td>
</tr>
<tr>
<td>DRC</td>
<td>72.5</td>
<td>25%</td>
<td>unavailable</td>
<td>n/a</td>
<td>75%</td>
</tr>
<tr>
<td>Ethiopia</td>
<td>94.1</td>
<td>7%</td>
<td>unavailable</td>
<td>n/a**</td>
<td>70%</td>
</tr>
<tr>
<td>Guinea</td>
<td>11.8</td>
<td>58%</td>
<td>&lt; 6%</td>
<td>n/a</td>
<td>90%</td>
</tr>
<tr>
<td>Kenya</td>
<td>44.4</td>
<td>63%</td>
<td>45%</td>
<td>88%</td>
<td>65%</td>
</tr>
<tr>
<td>Liberia</td>
<td>4.3</td>
<td>25%</td>
<td>12%</td>
<td>n/a</td>
<td>82%</td>
</tr>
<tr>
<td>Madagascar</td>
<td>23.5</td>
<td>83%</td>
<td>&lt; 50%</td>
<td>unavailable</td>
<td>61%</td>
</tr>
<tr>
<td>Morocco</td>
<td>33.3</td>
<td>95%</td>
<td>60%</td>
<td>75-80%</td>
<td>80%</td>
</tr>
<tr>
<td>Namibia</td>
<td>2.3</td>
<td>80%</td>
<td>89%</td>
<td>unavailable</td>
<td>91%</td>
</tr>
<tr>
<td>Nigeria</td>
<td>173.6</td>
<td>38-42%</td>
<td>unavailable</td>
<td>6%</td>
<td>71%</td>
</tr>
<tr>
<td>Rwanda</td>
<td>11.7</td>
<td>63%</td>
<td>51%</td>
<td>90%</td>
<td>96%</td>
</tr>
<tr>
<td>Sierra Leone</td>
<td>6.1</td>
<td>73%</td>
<td>unavailable</td>
<td>~5% (total pop)</td>
<td>79%</td>
</tr>
<tr>
<td>Tanzania</td>
<td>49.3</td>
<td>16%</td>
<td>lower than BR</td>
<td>10%</td>
<td>94%</td>
</tr>
<tr>
<td>Zambia</td>
<td>15.7</td>
<td>12%</td>
<td>10%</td>
<td>83%</td>
<td>79%</td>
</tr>
</tbody>
</table>


Figure 13. Coverage of Birth Registration and National identification Systems

*Note: Although Ethiopia lacks a true national ID system, its local system of kebele cards has a high level of coverage.


Segmentation creates a challenge to achieving intercommunication and interoperability across the systems of institutions within countries. Information sharing and even the use of a single national identifier becomes complicated because of the differences in the conceptualization of the systems (table 2).
Table 2. Authentication Forms and Standards

<table>
<thead>
<tr>
<th>Country</th>
<th>Type</th>
<th>Number /Capture</th>
<th>Deduplication</th>
<th>NID Card Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>Botswana</td>
<td>ink</td>
<td>2 thumbs</td>
<td>AFIS</td>
<td>plastic, barcode (planned smartcard)</td>
</tr>
<tr>
<td>Cameroon</td>
<td>ink</td>
<td>10</td>
<td>AFIS</td>
<td>plastic (planned smartcard)</td>
</tr>
<tr>
<td>Chad</td>
<td>digital</td>
<td>4 (individually)</td>
<td>ABIS</td>
<td>plastic, 2D barcode</td>
</tr>
<tr>
<td>Côte d’Ivoire</td>
<td>digital</td>
<td>10 (individually)</td>
<td>AFIS</td>
<td>smartcard, 8k contactless, proprietary encryption</td>
</tr>
<tr>
<td>DRC</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
</tr>
<tr>
<td>Ethiopia</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
</tr>
<tr>
<td>Guinea</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a [planned 80k smartcard]</td>
</tr>
<tr>
<td>Kenya</td>
<td>ink</td>
<td>10</td>
<td>AFIS</td>
<td>plastic, machine readable</td>
</tr>
<tr>
<td>Liberia</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
</tr>
<tr>
<td>Madagascar</td>
<td>ink</td>
<td>10</td>
<td>none</td>
<td>paper, laminated</td>
</tr>
<tr>
<td>Morocco</td>
<td>ink/digital</td>
<td>4 digital (indiv.), 10 inked</td>
<td>AFIS, planned: ABIS</td>
<td>smartcard, contactless, signed by identity provider, plastic</td>
</tr>
<tr>
<td>Namibia</td>
<td>ink</td>
<td>10</td>
<td>AFIS</td>
<td>plastic</td>
</tr>
<tr>
<td>Nigeria</td>
<td>digital</td>
<td>10</td>
<td>ABIS</td>
<td>smartcard, 13 applets, payment card, ePKI encryption</td>
</tr>
<tr>
<td>Rwanda</td>
<td>digital</td>
<td>2 thumbs (individually)</td>
<td>AFIS</td>
<td>plastic, 2D barcode</td>
</tr>
<tr>
<td>Sierra Leone</td>
<td>ink, planned: digital</td>
<td>6</td>
<td>none, planned: AFIS</td>
<td>paper (planned smartcard)</td>
</tr>
<tr>
<td>Tanzania</td>
<td>digital</td>
<td>10 (4:4:2)</td>
<td>AFIS</td>
<td>smartcard, 80k contactless (NFC)</td>
</tr>
<tr>
<td>Zambia</td>
<td>ink</td>
<td>1 thumb</td>
<td>none</td>
<td>paper</td>
</tr>
</tbody>
</table>


Other factors that hinder initial registration and the enrollment process are the lack of coverage and the complexity of the procedures to generate a national identification system. Many systems involve burdens on individuals, ranging from transfer disbursements, time, repetitive visits, and the requirement to obtain numerous supporting documents. In some countries, the identification of parents must be proved to obtain supporting documents (World Bank 2017).

Government institutions are involved in various efforts to implement national identification systems accessible to all. Some governments have applied innovative strategies that have increased coverage, outreach, and accessibility. This has facilitated the registration and use of identification information to support the provision of a range of new services and benefits. Noteworthy efforts have been undertaken in Botswana, Namibia, Sierra Leone, and Zambia, the governments of which consider identification management as an essential part of their respective national development plans. Some governments, including in Liberia, Nigeria, Tanzania, and Zambia, have developed strategies that are bundled with health services. Through the relevant measures, they seek to promote enrollment in identification systems from the moment of birth and the application of vaccines. Other governments, such as in Guinea and Kenya, have offered the public the option of mobile registration through cell phones and electronic devices (World Bank 2017).

Several national, regional, and international organizations have launched the ID4Africa initiative to strengthen national efforts and solve the numerous problems that must be faced in the implementation of a national identification system. One of the objectives of the initiative is to

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18 The organizations include the African Development Bank, Agence Française de Développement, the United Nations Development Programme, the United States Agency for International Development, and the World Bank (Atick 2018).
issue standardized guidelines that allow all countries to develop national identification projects and promote the accessibility of identification among all people.

6. Initiatives to expand pension coverage to informal sector workers

The experience of Africa (and the world) in extending pension coverage to the informal sector is limited although there have been quite a few initiatives. In Africa, the governments of Ghana and Kenya were the first to introduce specific schemes to cover the informal sector. Because of the persistent low coverage and the realization that existing schemes are not responding to the needs of the informal sector, more governments are undertaking initiatives, although most of the efforts have been baby steps. The countries involved include Benin, Côte d'Ivoire, Mali, Nigeria, Rwanda, Senegal, Sierra Leone, Uganda, Zambia, and Zimbabwe. This section reviews the experiences of Benin, Ghana, Kenya, Rwanda, and Uganda. Given its rapid expansion, the India experience, which raised the attention of the governments of many low- and middle-income countries, is presented in annex A.

The governments of the countries presented below followed distinct approaches. In Rwanda, the existing formal sector pension administrator is also the central administer of the informal sector pension scheme, which involves matching contributions from the government.

In Kenya, the first mobile money scheme in the region was launched. It leveraged the National Federation of Jua Kali, an informal sector association, with the involvement of the Retirement Benefits Authority, a strong regulator, but struggled to attain scale. It initially reached only 100,000 individuals. Administrative costs have thus become a problem. The government is planning to relaunch the Mbao Pension Scheme and address the administrative challenges.

In Uganda, the approach has relied on a more classic microfinance type scheme. However, reaching scale has been a struggle. The government is considering a centralized approach to address the scale issue.

The government of Ghana has been trying a combination of the above approaches. There, the Social Security and National Insurance Trust (SNNIT) and other commercial providers operate in the market, but scale might be an issue.

The design characteristics of the informal sector pension schemes described below are summarized in annex B.

6.1. The Kenya experience: the Mbao Pension Scheme

The National Social Security Fund in Kenya covers formal sector employees. In addition, there are over 1,300 occupational and individual pension schemes with over 2.2 million members who are already registered and have contributed an aggregate retirement savings of over US$7.8 billion.

19 Other countries that have launched initiatives are not covered in this section because of insufficient information.
In 2006, the fund introduced individual voluntary membership and contributions that allow individuals to supplement their pension benefits. The fund also includes a portability vehicle to transition the occupational pension schemes of individuals. Although these schemes have existed for some time, they have not been successful in attracting informal sector workers, who account for over 80 percent of the labor force (Raichura 2008). Social security programs have generally targeted formal sector workers or individuals at higher incomes. As a result, less than 15 percent of the population is covered by social security old-age benefit programs (Okulo 2011).

To expand pension coverage to informal sector workers, the Mbao Pension Scheme was launched at the end of June 2011.²⁰ It is promoted by the Retirement Benefits Authority, along with the National Federation of Jua Kali.²¹ It is a voluntary individual account savings plan designed to encourage savings for retirement among low-income informal sector workers. A key feature of the scheme is the ease of payment: participants can contribute anywhere and anytime over a mobile phone. The minimum periodic contribution is about US$0.20 (K Sh 20) per day. To contribute, individuals rely on mobile money accounts supplied by mobile network operators (MNOs). Two branded accounts are currently available: Safaricom’s M-PESA and Airtel’s Airtel Money.²² Members can make withdrawals three years after their first contributions. This option is designed to make the scheme more flexible. The scheme was not launched as a national individual pension scheme targeted at the informal sector, but as an individual pension scheme sponsored by an association of informal sector workers and built on the regulations governing individual pension schemes.

**Regulator support**

The Retirement Benefits Authority regulates and supervises the establishment and management of retirement benefit schemes and has regulatory responsibility over the Mbao Pension Scheme. The authority’s mandate is to promote the development of the retirement benefits industry, which was the motivation of the authority’s considerable support for the National Federation of Jua Kali in fostering public awareness of the Mbao scheme initially. The authority continues to be active in encouraging the expansion of the scheme’s coverage and operations. The marketing of the Mbao Pension Scheme includes television and radio advertisements and printed materials highlighting the authority’s support.

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²⁰ Mbao (literally, wood in Kikuyu and Swahili) is a term used for the English pound or 20 shillings; also simply money, especially money in coins or change.

²¹ Jua Kali (literally, hot sun in Kiswahili) is a term used to refer to informal workers, especially in agriculture, carpentry and woodworking, and metalworking, and to artisans in soapstone, ceramics, textiles, leather, and beekeeping, as well as small businesses in electronics and mechanical engineering.

The current status of Mbao

Over 76,000 accounts are associated with the Mbao Pension Scheme after seven years of operation. Nonetheless, the total has been declining in the last couple of years. In 2016, there were more than 100,000 active members, and the fund was valued at US$1,283,265. However, from 2015 to 2016, the number of active members decreased 34 percent, and fund contributions shrank by 27 percent.

Institutional challenges and recommendations

When the Mbao Pension Scheme was launched, stakeholders expressed significant support. However, the scheme did not reach the economies of scale necessary to permit adequate outreach and operational improvements to build the trust and services required by individuals.

The scheme currently relies on a high degree of voluntarism, whereby various stakeholders manage the scheme as an example of corporate social responsibility. While all the stakeholders involved are committed and devote substantial energy to the scheme, corporate social responsibility cannot be the only driver behind a sustainable pension scheme.

The scheme needs to be improved in two main areas to reach adequate scale and become self-sufficient and viable over the long term, as follows:

- Public awareness: (1) develop a comprehensive communication strategy focused on pension awareness and targeted on relevant demographic groups and geographical locations; (2) undertake public awareness campaigns through television, radio, and social media; and (3) develop a systematic strategy for partnering with scheme marketing units
- Management: (1) establish an efficient, effective micropension administrative platform; (2) introduce an efficient and reliable customer service mechanism able to provide contributors with the individual and general information they require in a timely manner; (3) establish a reliable system so subscribers may consult their balance accounts; (4) establish an innovate technology platform for new services; (5) develop incentive mechanisms to encourage a habit of saving among subscribers and promote the benefits of the scheme among nonusers; and (6) diversify the product range to target different types of subscribers.

Recommendations and next steps

Administrators of the pension scheme must validate identification information with the entity responsible for the Integrated Population Registration System, the national identification system. This would allow the cost of know your customer procedures to be reduced and ensure that each member is associated with a unique record. Likewise, a single database containing information on all transactions is required for the provision of all online services, including account
statements, mobile withdrawal transactions, and so on. The automated reconciliation of contributions must be carried out on a daily basis through the system to supply reliable online information on past contributions and balances.

The Mbao pension product needs to be appropriate for operational flexibility, allow dynamic product synergy and a short- and long-term savings pension subaccount structure to achieve higher yields, and represent a foundation for additional benefits, such as insurance policies provided by insurance companies.

Transparency in yields and costs is likewise necessary to gain the trust of members, who, according to focus group discussions, should be able to view this information in their statements and in their contributions. The regulations established by the Retirement Benefits Authority should also be strengthened to ensure that a pension scheme for the informal sector is supported and that the regulations are aligned with best practice in the operation of pension schemes.

6.2. The Ghana experience

Introduced through the National Pension Act of 2008, the pension system in Ghana has a three-tier structure, consisting of two mandatory schemes, tiers 1 and 2, and a voluntary scheme, tier 3. Tiers 1 and 2 cater exclusively for the formal sector. Tier 3 is open to both formal and informal sector workers. Tier 1, a mandatory defined benefit pension scheme run by the SSNIT, covers both public and formal private sector workers. Under the mandatory schemes, participants pay a contribution rate of 18.5 percent, out of which 13.5 percent is remitted to tier 1. Of the 13.5 percent paid to tier 1, 2.5 percent is transferred to the National Health Insurance Fund. Tier 2 is a mandatory privately managed defined contribution scheme paying predominately lump-sum benefits financed by a contribution rate of 5 percent. Tier 3 is a voluntary privately managed defined contribution scheme that provides tax incentives among participants and consists of the provident fund scheme and the personal pension scheme.

The Provident Fund Scheme is usually established by an employer as an incentive to give additional benefits to employees. Both employer and employee usually make voluntary contributions, which are also tax exempted up to 16.5% of the employee’s basic salary.

The personal pension schemes usually target the self-employed and the informal sector. The schemes are fully funded and make provisions for a Retirement Account (cannot be accessed until retirement) and a savings account (can be accessed after five years tax-free in case of an informal sector work and 10 years for the formal work or earlier in which case shall be taxable).

There are two types of schemes as follows:

- Group personal pension scheme are usually for trade associations or identifiable groups in the informal sector that come together to establish such a scheme which is often limited to members of that group e.g. Tailor Association. Membership is voluntary and contribution rates are up to 35 percent of declared income.
Personal Pension Schemes are for individuals who are self-employed. Membership is voluntary and contribution rates are up to 35 percent of declared income.

Benefits from the tier 3 (informal sector retirement account) eventually are to be paid in the form of an annuity once the annuities market is developed.

The SSNIT informal sector pension scheme experience

The SSNIT Informal Sector Pension Scheme was launched in 2005, prior to the passage of the National Pension Act of 2008. This was the first pension scheme in Ghana targeting the informal sector. It grew to include almost 100,000 participants by 2012. After the passage of the National Pension Act of 2008, SSNIT management interpreted the act to indicate that SSNIT’s role was to provide tier 1 pensions and not necessarily to participate in the tier 2 or 3 schemes. Management also recognized that the scheme required different business processes relative to the main scheme and opted to focus on improvements to the main scheme. The scheme generated high administrative costs, which SSNIT management did not want to subsidize from tier 1 contribution revenue. In 2012, the SSNIT Informal Sector Pension Scheme became the responsibility of the National Trust Holding Company, which further acquired a trustee’s license to operate under the new pensions law. The scheme has continued to grow and currently has over 155,000 members. The scheme was brought under the supervision of the National Pensions Regulatory Authority (NPRA) in 2018.

The scheme was designed to include both a short-term savings account and a long-term retirement account. Members were allowed to contribute any amount and as frequently as they chose, daily, weekly, every two weeks, monthly, quarterly, twice a year, yearly, or seasonally. Each contribution was divided into two equal parts and credited to the two accounts, that is, short-term and retirement savings. Members were allowed to withdraw the accumulated savings in the short-term accounts after five months of membership. Members could also use their short-term accounts as collateral to access credit from other financial institutions. Contributions could be provided at a branch office in person, through organized trade associations, through an accredited marketing agent of SSNIT, through a bank standing order, through payroll deductions, or through money transfers.

The scheme continues to operate from an informal sector desk in each of the SSNIT regional offices. 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.

23 The NPRA is the regulator of public and private pensions in Ghana. It was established in 2009 based on the National Pension Act of 2008.
Privately managed informal sector pension initiatives

Several other entities (trustees) are experimenting with products aimed specifically at informal sector workers under the tier 3 legal framework. The main privately managed informal sector initiatives are being offered by institutions like United Pension Trustees (My Own Pension), the People’s Pension Trust, and the Daakye Pension Trust. The initiatives are relatively new, dating from 2016 onward. The number of participants ranges from 5,000 to 160,000. The initiatives have interesting features, including the use of mobile money, wallet accounts, short message service reminders, and standing orders, but retain the short-term savings account–retirement account structure of the original SSNIT scheme. Although the schemes have recently been introduced on the market, they seem to be effective in reaching out to the informal sector. Nonetheless, their longer-term viability is not assured.

An additional issue has arisen because of the regulator, the NPRA. NPRA has lumped plans for informal sector workers together with other voluntary retirement plans. Voluntary retirement plans typically allow contributions to be free of tax as an incentive for individuals to participate. Given the tax advantage, if individuals withdraw their money before the age of retirement, they typically face tax penalties. The laws are being applied to the informal sector plans for the withdrawals from the short-term accounts. However, most individuals in the informal sector do not pay taxes and thus gain nothing from the tax advantage. If their short-term savings withdrawals are now subject not only to taxes, but to additional penalties, this becomes a huge disadvantage to contributing to these systems relative to other MFIs.

Moreover, the government announced its intention to establish the Cocoa Farmers Pension Scheme in the 2018 budget statement. A steering committee, technical committee, and taskforce were then established and are to be overseen by the Ministry of Finance. The scheme is intended to be accessible to the 850,000 cocoa farmers in the country. Discussions on the design continue, but the initial design of the scheme provides for the launch of a group personal pension scheme, which would provide lump-sum, pension, and short-term financial assistance in defined circumstances. The sponsors of the scheme are to be the government and the Ghana Cocoa Board. The scheme will be a hybrid of tier 2 and tier 3 based on a combination of mandatory and voluntary contributions.

Recommendations

The current landscape of informal sector pension schemes includes the development of various business models. While, according to some of these models, significant investments have been made in contribution collection processes, the scale of the effort still required of the industry to reach all informal sector workers who are able to save remains substantial. Pension administration is largely the business of economies of scale. If a new or existing informal sector scheme or other tier 2 or 3 scheme is given sole responsibility for covering the cocoa farmers,
economies of scale could be achieved. This will allow outreach to other groups of informal sector workers in a financially viable manner. Innovative initiatives are needed, while the industry concentrates on fresh product design and outreach activities to enroll new clients.

Leveraging a technology platform could facilitate access to an easier enrollment process that complies with e–know your customer requirements as well as mobile money contributions within pension schemes. If agents are required, the platform could also facilitate collections and provide security features to mitigate the risks involved in manual money collection. If a collection platform is offered, it could provide the trustees a single point of contact for the interaction of all pension trustees and schemes with collection channels, thereby facilitating economies of scale among the various industry players.

There is also the issue of whether the SSNIT is going to reenter the informal sector worker market and, if so, the format the SSNIT might adopt and the effect of the SSNIT’s entry on existing schemes and future trends in the market. As a participant, the SSNIT would have major advantages: (1) it could achieve economies of scale, much as the cocoa farmer scheme could activate sufficient economies of scale; (2) it has brand recognition throughout Ghana; (3) it has regional offices throughout Ghana, unlike the other informal sector schemes, which tend to have a single office in Accra; and (4) it already has a biometric database and technology that could allow it to use biometrics in the administration of a scheme involving informal sector workers as well. On the negative side, (1) the informal sector business is a defined contribution business and different from SSNIT’s other business in defined benefit systems; (2) SSNIT management would have to be more mindful of generating good rates of return and low administrative costs; (3) the SSNIT does not currently have a mobile phone platform, although management would like to develop such a platform for tier 1 to make the submission of contributions easier for employers; and (4) the SSNIT’s new informal sector pension scheme would need to fall under NPRA’s regulation.

6.3. The Rwanda experience

The Rwanda Social Security Board

The Rwanda Social Security Board, a pay-as-you-go defined benefit scheme, provides pension coverage to public sector workers and formal private sector employees. Participants are required to pay 6 percent of their salaries as contributions (3 percent each from employers and employees). The benefit accrual rate is 2 percent per year of contributions. The pension is calculated based on the last 3 or 5 years of earnings after 15 years; a lump sum is provided if less than 15 years of contributions have been paid in. Participants are eligible for a pension upon reaching age 60. Disability and survivor pensions are also provided, in addition to old-age pensions. As of December 2013, there were around 265,000 active contributors and 15,000 pensioners. Similar to the situation in most countries in the region, informality is high in Rwanda, and board participants account for less than 6 percent of the labor force.
The Ejo Heza Long-Term Savings Scheme

To expand pension coverage, the government of Rwanda passed legislation to enable the creation of an old-age savings scheme in 2017. The Rwanda Social Security Board was assigned the task of administering the new scheme. The resulting Ejo Heza Long-Term Savings Scheme (Ejo Heza LTSS) is a voluntary defined contribution scheme that is open to the participation of all Rwandans and foreigners residing in Rwanda. It is possible for parents to open accounts for children ages below 16. Employers can also open accounts for employees, including domestic workers.

As in any defined contribution scheme, the amount of the pension at the age of eligibility depends on an individual’s savings and investment returns, net of administration costs. The amount and frequency of contributions depend on the capacity of the participants to pay. Pensions will be provided as a monthly annuity at the age of eligibility. The Ejo Heza LTSS will provide a special means-tested fiscal incentives package for the first three years to encourage mass-scale enrolments. With these incentives, the government aims to inspire a sustained savings discipline among nonsalaried workers. The incentives package includes a matching government contribution of up to RF 18,000 a year, along with free RF 1,000,000 life insurance policy and a RF 250,000 funeral insurance policy. Only citizens ages 16 or above with a permanent national identification registration will be eligible for the cocontribution and insurance benefits. The aggregate cost of matching government contributions and free life insurance and funeral insurance policies is estimated at around RF 20 billion over three years. It is estimated that effective implementation of the Ejo Heza LTSS could produce long-term household savings of RF 200 billion within five years and growing to nearly RF 500 billion over the next decade.

Members will have access to 40 percent of the accumulated savings for housing and education. For liquidity needs, participants will have access to 25 percent of the total accumulated savings. Moreover, 40 percent of the total savings can be used as collateral to obtain a loan.

Ejo Heza accounts are mapped to each member’s unique national identification number and are portable across jobs, locations, and service providers. Participants use national IDs and mobile phones or computers to activate their Ejo Heza accounts. Members are free to decide how much and when they wish to save based on their own cash flows. They are able to make contributions using mobile wallets, bank accounts, or debit or credit cards. Members enjoy single-window access to services through a nationwide network of thousands of branches and agents of banks, cooperatives, savings and credit cooperative societies, MFIs, mobile money service providers, and so forth. A simple and transparent web- and telephone-based mechanism has been established through a national toll-free helpline that provides information and complaints resolution support to members.

The LTSS was pilot tested in a few districts in October 2018. Over 30,000 participants used mobile phones to open digital Ejo Heza accounts in less than two weeks and contributed over RF 20 million in long-term savings using mobile money wallets. All service providers, including banks,
Airtel, Irembo, MobiCash, and MTN, were recruited to help register LTSS members and collect funds. The LTSS was formally launched in December 2018. In advance of the launch, district, sector, cell, and village leaders were trained to lead in mobilizing participation, supported by LTSS district coordinators at the Rwanda Social Security Board. Heads of cooperatives and youth and women council heads were also trained to mobilize members. The agents and branches of service providers, including AirtelTigo, BK, BPR, MobiCash, and MTN, were trained to register and collect savings. The training of targeted groups, such as ministries and other public and private institutions, was undertaken to facilitate payroll deductions.

Subscribers will receive a periodic LTSS bill via SMS or e-mail. LTSS bills are payable through bank or mobile money transfers or in cash (akin to paying a utility bill). All LTSS contributions flow to an LTSS pooling account in the custodian bank for reconciliation. Only reconciled savings are invested. LTSS bills and contributions are automatically indexed at 5 percent a year. LTSS savings are invested according to specified investment guidelines by a professional fund manager regulated by the National Bank of Rwanda (figure 14). LTSS savings are unitized, and the custodian computes and declares a daily net asset value of the LTSS portfolio. Subscribers are able to verify the current value of their savings easily.

**Figure 14. LTSS Governance Structure**


An LTSS Trust will be established by the sponsor (the government) under the Trust Act. Trustees will have a fiduciary responsibility to protect the beneficial interests and rights of subscribers. LTSS accounts are linked to a custodian who will oversee the functioning of the LTSS system and the compliance of intermediaries and ensure client protection, including through periodic external audits. The custodian physically receives all contributions, undertakes daily reconciliation with the administrator, transfers reconciled funds to the investment account,
settles all trades properly authorized by the investment manager, holds titles in the name of the Scheme Trust, and makes authorized payments funded through the liquidity reserve.

The amount in an LTSS account is paid back as a monthly pension that increases by 5 percent a year in line with inflation. The actual pension value will be calculated and calibrated to last for 20 years, subject to a minimum of RF 20,000 per month (at 2017 prices). This monthly pension will continue to be paid until the balance in the LTSS account reaches zero. Subscribers who accumulate sufficiently to achieve a monthly pension of RF 100,000 over 20 years will be able to withdraw a part of their savings as a lump sum.

6.4. The Uganda experience

Formal pension coverage is at about 10 percent in Uganda (URBRA 2017). The retirement benefits system consists of mandatory employer-based pension schemes (for example, the noncontributory Public Service Pension Scheme), the National Social Security Fund, and supplementary voluntary occupational and informal sector schemes.

The National Social Security Fund was established in 1985 as a provident fund serving private sector workers. It is a contributory scheme and is financed through the contributions of employees (5 percent) and employers (10 percent). Individuals are eligible to receive retirement benefits at age 55.

Mandatory employer-based pension schemes include the Armed Force Pension Scheme, the Parliamentary Pension Scheme, and the Public Service Pension Scheme. This last is financed directly by the government, and benefit eligibility requires at least 10 years of participation.

Supplementary voluntary occupational schemes are provided entirely at the discretion of employers. Benefits are funded through the contributions of employees and employers and are often lump-sum payments, though this may vary depending on the scheme.

Supplementary voluntary informal sector schemes

In early 2016, the Uganda Retirement Benefits Authority (URBRA) licensed two voluntary micropension schemes focused on low-income informal sector workers, the Mazima Voluntary Individual Retirement Benefits Scheme and the Kampala City Traders Association–Uganda Provident Fund Scheme (URBRA 2017). These schemes are suitable for informal workers who may be unable to make regular fixed contributions. The key feature of the schemes is that low-income workers can use mobile money networks and choose how much and when to save. Participants may withdraw their savings after one year. In Mazima, individuals can make
contribution contributions beginning at the minimum of US$0.59. Mazima is available on Airtel, MTN, and MTN Mobile Money; direct deposits are also accepted.\textsuperscript{24}

Regulator activities

URBRA regulates and supervises the establishment, management, and operation of retirement benefit schemes. URBRA’s mandate is to protect the interests of scheme members and beneficiaries. The regulator is also responsible for extending coverage to formal and informal sector workers (URBRA 2017). In early 2016, URBRA licensed two voluntary micropension schemes, which aim to increase the coverage among informal sector workers (see above). The voluntary occupational schemes have been growing in the number of members and in assets.

The current status of voluntary informal sector schemes

There are an estimated 15.0 million people in the employed workforce in Uganda, but only about 1.8 million workers had been registered by the National Social Security Fund in 2017, while about 600,000 were paying contributions. For this reason, pension authorities are grappling with expanding coverage to the informal sector. The Mazima retirement plan currently has more than 720 subscribers, with savings reaching U Sh 400 million (about US$110,000). Currently, to ease the collection of member savings contributions, participants may use Airtel and MTN Mobile Money, but standing orders and direct deposits are also accepted. Other contribution mechanisms for the general public should also be introduced involving, for example, more reliance on mobile technology. More recent innovations, such as blockchain technology, might also be incorporated both as new contribution mechanisms and as mechanisms to track and control contributions and ensure the traceability of funds.

To understand clearly how to scale the Mazima pension scheme, URBRA commissioned a World Bank–funded study during 2017 to analyze the conditions and state of the Mazima pension scheme and the ways the scheme can achieve the scale needed to secure its long-term viability. The study concluded that the administrative platform was not adequate to meeting the needs of the Mazima pension scheme or the scheme participants or to building a reputable pension scheme that could reach scale cost-effectively. Furthermore, the products and services offered through the scheme seemed limited and, indeed, rather than functioning as a vehicle for setting aside money for retirement, appeared to provide ways for individuals to accumulate short-term savings.

Among the main recommendations of the study are the following:

- A specialized, centralized administrative platform for the pension scheme should be instituted that can more effectively manage microlevel contributions and provide services and more readily available information to its members.

• Outreach programs to target clients—including the communication materials of marketing professionals—and financial literacy programs need to be established and maintained on a more permanent basis.
• New products and services should be developed and bundled with the pension scheme to increase the appetite of individuals to save for the long term.

Institutional challenges and recommendations

Voluntary individual micropension schemes should be developed and offered as alternatives to informal sector workers in Uganda. Initiatives should be launched to strengthen the financial sector in the development of a voluntary micropension scheme within a secure framework that is viable over the long term.

The government appears to be considering a reform of the National Social Security Fund to provide the institution more flexibility to be able to pursue the contributions of informal sector workers. In that case, information on experiences with formal sector pension systems in other countries should be plumbed to integrate expertise on incorporating informal sector workers. In particular, to achieve mass-scale uptake, it may be desirable to develop a voluntary pension scheme supported by fiscal incentives, instead of enforcing mandatory contributions.

A review of URBRA regulations should be undertaken to identify regulations that should be reformed to strengthen the financial sector and support the development of a micropension scheme model.

6.5. The Benin experience

Institutions and programs

Three government institutions are currently operating pension schemes in Benin, as follows: (1) the National Social Security Fund, which provides mandatory pension coverage to formal private sector workers; (2) the Benin National Retirement Fund, which provides mandatory pension and health coverage to civil servants and contracted public sector workers; and (3) the Mutual Social Insurance Fund, which provides voluntary pensions and health insurance to informal sector workers, but has not been successful because of design and capacity issues. Total spending on old-age pensions in Benin through the National Social Security Fund and the Benin National Retirement Fund amounts to 1.4 percent of GDP.\(^{25}\) This spending covers pensions for 10.6 percent of the population ages more than 60.

The government has launched the Insurance for Strengthening Human Capital Program (l’assurance pour le renforcement du capital humain) (ARCH), which is the main program for implementing the government’s social protection strategy. The government is embarking on ambitious social reforms through ARCH to promote human capital development in the country.

\(^{25}\) The excludes spending on military pensions.
ARCH is designed with four components: (1) universal health insurance, (2) pensions for the informal sector, (3) microcredit, and (4) training. The services under these four components are to be provided among the population as a package to maximize the benefits by leveraging synergies among them.

ARCH is to be managed by the National Social Protection Agency, which is to be created at the Ministry of Labor, Civil Service, and Social Affairs. The agency will sign a contract with a private sector operator to manage the four ARCH programs or to subcontract the management to private companies. The government intends to establish a structure to supervise the agency to ensure adequate governance and accountability and to protect the interests of the population.

The objective of the pensions component of ARCH is to provide a mechanism so informal sector workers save for old age. The government has determined that this pension scheme for the informal sector should be voluntary and that it will be based on defined contributions whereby the savings of participants will be recorded in individual accounts. Other details of the ARCH pensions component still need to be fleshed out.

Recommendations and next steps

Given the widespread growth of mobile network services, mobile money may be viewed as the primary method for participants to make contributions to the informal sector pension scheme. In this way, the scheme may more easily reach remote areas at reduced cost. Outreach and communication channels need to be cost-efficient and effective in reaching the target population. One factor that could be important in outreach is the MFIs. Given the problematic experience with the Mutual Social Insurance Fund (see above), it is critical to design flexible, dynamic products and services that may be delivered through the informal sector pension scheme. A link between the informal pension scheme and the national identification system is crucial. The administrative census for population identification should be regarded as a way to provide the necessary data for the institution that manages and operates the recordkeeping on all contributors and will eventually manage the informal sector pension benefits. The success of the scheme depends on investment of old-age savings to maximize returns. It is important to pilot various approaches to draw lessons about what works and what does not work before scaling up the pension scheme nationwide.

The immediate next steps for the operationalization of the ARCH pension component include the following: (1) initiate discussions with MNOs and associations on their roles and their willingness to participate in ARCH; (2) explain the design of the informal sector old-age savings product to stakeholders, including insurance companies, highlighting that this product is not the same as the pension insurance products they may offer; (3) begin development of terms of reference for the administrative platform of the ARCH informal sector pension component; (4) undertake the design of pilot options to test the old-age savings component before the nationwide scale-up; and (5) implement a pilot pensions component, along with other products, especially health components, in selected departments and communes.
7. Responding to the needs of the informal sector in pensions

The informal sector has distinct characteristics. While the specifics of the characteristics would need to be studied in each context to design the appropriate scheme for each country, the characteristics broadly apply in almost all contexts. It is therefore useful to consider them as a starting point for policy makers in Africa. Figure 15 presents the typical characteristics of informal sector workers and provides a summary of how these characteristics may be addressed in designing and operationalizing a pension scheme for informal sector workers. Overall, three main principles need to be addressed, as follows; (1) administrative costs need to be minimized through reliance on technology; (2) by leveraging stakeholders, such as informal sector associations, MFIs, and so on, the institutional structure relied on in managing the scheme should have the capacity to identify informal sector workers who are able to save; and (3) the savings of informal sector workers should be professionally managed to optimize returns and to minimize asset management costs. While these principles apply to all pension schemes, they are particularly important in building trust and encouraging people to contribute in the case of voluntary pension schemes for the informal sector. Efficient administration and investment would avoid the erosion of the relatively small savings by minimizing administrative and asset management costs. To manage expectations, clearly communicating what people may expect to receive as a pension depending on what they contribute is essential.

Figure 15. Addressing the Challenges in the Informal Sector

7.1. Pension scheme structure, pension product design

Pension product design and the institutional structure need to reflect the characteristics of the informal sector to improve the chance of success, including the key characteristic that the informal sector typically lacks clear employer-employee relationships. To respond to this and other characteristics, policy makers would benefit from an examination of the following elements.

Voluntary scheme. It is not realistic to mandate that a pension scheme be implemented in the informal sector. This assertion is justified by two main considerations. The first one relates to the level of incomes in the informal sector. While some informal sector workers may have sufficient incomes to defer consumption and save for old age, others face competing demands on their incomes today, such as buying food, paying for children’s education, caring for family members, housing, health care costs, and so on. So, even if a scheme is designed as mandatory, some informal sector workers may not be able to contribute when these pressing and frequent demands arise. Some may not have sufficient savings to fall back on in the case of unexpected events that impact incomes.

The second consideration relates to the challenges involved in implementing a mandatory scheme efficiently. Because informal sector workers are typically spread widely around a country, including in rural areas, experience shows that obliging the entire informal sector to contribute to a pension scheme does not produce any relevant impact. This is especially so because of the typical gaps in national identification systems and the absence of robust know your customer procedures to verify the identities of individuals.

Reaching scale in a voluntary pension scheme without subsidies and other incentives may be a challenge. If countries have the financial resources to subsidize a voluntary pension scheme, they can use systems established through social safety net programs to identify and target the poor who would benefit from subsidies to help save for old age. Social registries are increasingly used to support the implementation of safety nets systems in Africa. If countries have robust targeting mechanisms supported by social registries, these systems can be used to identify low-income individuals who would receive subsidies. As in the case of matching contributions, the affordability and sustainability of these subsidies to support participation in the voluntary pension scheme would need to be taken into consideration.

Defined contribution scheme. There are two main options in the structure of a voluntary pension scheme: a defined benefit pension scheme or a defined contribution pension scheme. In a defined benefit scheme, contributors are promised a pension payment based on a predetermined benefit formula when they reach the age of pension eligibility. The benefit formula is based on earnings history, years of contributions, and the age of the contributors rather than directly on the contributions and the investment returns achieved by the pension authority. Defined benefit plans are more suitable in the formal sector, where there are clear employee-employer relationships and where predefined contributions are made based on regular earnings.
In a defined contribution scheme, pensions are based on accumulated contributions and investment income, net of expenses, meaning that the pension to be paid out is a direct result of the savings that have been accumulated. There are several reasons why defined contribution schemes are more suitable for voluntary pension schemes in the informal sector. First, defined contribution schemes are more intuitive for informal sector workers. Because the contributions are kept in individual accounts for which actual contributions and investment returns are recorded, a defined contribution plan mimics bank savings accounts. Second, these schemes build trust and encourage the payment of voluntary contributions more easily because participants can see how much savings they have at any time. Third, defined contribution schemes can be crafted so as not to require the regular payment of predetermined contribution amounts. As a result, participants may make contributions at any time, and whatever contributions they make will be added to the relevant individual accounts.

**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.

**Level of contributions and frequency of payments.** Because most informal sector workers do not have regular incomes, the frequency of the payment of contributions should be flexible. For example, some informal sector workers, such as seasonal workers and agricultural producers, receive earnings only once a year, and the pension scheme might require the payment of contributions at least once a year to respond to this circumstance. However, more frequent payments, including weekly payments, should also be allowed, thereby taking into account cost considerations. While the amount of the contributions to a pension scheme ought to be flexible, an annual minimum payment might be necessary to ensure the viability of the scheme. To encourage participation, the government might decide to make matching contributions. In this case, a matching contribution scheme refers to the amount paid by the government as a subsidy relative to each unit paid by the contributor. The fiscal burden on the government of the subsidy for the matching contribution scheme in the informal sector needs to be evaluated. Those
participants able to defer consumption for the sake of pension savings are a relatively more well-off segment of the informal sector. While a matching contribution may attract informal sector workers who would not contribute at all without the government subsidy, it is important to put in place policies so that the majority of the subsidy does not benefit the more well-off segment of the informal sector. This is particularly important in Africa, where poverty rates in the informal sector are generally high. A review of the international experience with matching contributions for pensions finds that including a matching contribution increases savings plan participation and contributions, although the impact is less significant relative to the impact of nonfinancial approaches. Conditional on participation, a higher match rate has only a small effect on savings plan contributions. By contrast, the match threshold has a substantial impact, probably because it serves as a natural reference point if individuals are deciding how much to save, and it may be viewed as advice from the savings program sponsor on how much to save. Other behavioral approaches to changing savings plan outcomes—including automatic enrollment, simplification, planning aids, reminders, and commitment features—potentially have a much greater impact on savings outcomes than do financial incentives and often at a much lower cost (Hinz et al. 2013).

Integration or bundling with other services. The voluntary nature of an informal sector pension scheme means that, in the design of the scheme, there must be an emphasis on features aimed at attracting participants and encouraging them to make contributions. One possible synergy that might benefit this goal involves health insurance. Health expenses generally account for a large share of household spending, particularly in the case of unexpected health events. In the absence of health insurance, informal sector workers may prefer to set aside resources for health expenses. Interviews with informal sector representatives during focus group analysis in Benin indicate that, if they have access to health insurance, people can be encouraged also to save for old age. Policy makers should therefore examine the possibility of combining health insurance and the pension scheme into a package of services and of designing the informal sector pension scheme by building on synergies between these services. Government providers may also benefit on the operational side from these synergies. For instance, if individuals are participating in both, collecting contributions for health and pensions at the same time would be more efficient. If a government is considering adopting a health insurance scheme, it might do so by building on the synergy by automatically enrolling people who are in the informal sector pension scheme in the health insurance scheme as well. This automatic enrollment could be accomplished through mobile phones and using the national identification system. The automatic enrollment could be designed with an opt-out capability so that those people who do not wish to contribute to the pension scheme could opt out, including through their mobile phones.

Contributors to the informal sector pension scheme could likewise be offered priority access to financing through MFIs. The short-term savings accounts in the pension scheme could be used as collateral. Based on clear memorandums, MFIs may be granted access to certain data on their clients through the information technology platform of the pension scheme to evaluate the creditworthiness of their clients for microfinancing. Where possible, the information technology platforms of MFIs could be made interoperable with the information technology platform of the pension scheme. The pension scheme for the informal sector could thus benefit from the knowledge base of MFIs on the informal sector during outreach (see below). If the MFIs are able
to indicate to potential customers that the chances of obtaining loans would increase if they contribute to the informal sector pension scheme, thereby gaining the capacity to use the short-term savings account as collateral, this might encourage some informal sector workers to participate in the pension scheme.

The synergies with health and financing services are merely examples showing that pension schemes could benefit from the related incentives created among informal sector workers to participate and pay contributions. The range of other services that might be used to influence participation in the informal sector pension scheme is wide. It might include crop insurance, occupational training, life insurance, and so on. People value short-term benefits. Bundling short-term benefits could thus create a response to long-term savings triggered by short-term benefits. What might make sense would depend on the country context. Additional research is needed to determine the priority requirements of informal sector actors so that appropriate incentives can be designed.

**Pension scheme rules and the payout phase.** Pension payments will be available in the medium term when individuals reach eligibility age after making contributions for a number of years. It is important to establish these rules at the outset. The rules would include, for instance, the age of eligibility, the minimum contributions required, government subsidies, and the rights of inheritance over the account balance in case of death. These design features will depend on the country context and preferences. Communicating the rules of the payout phase to the public is also essential during the launch of the pension scheme for the informal sector. It should be emphasized that the pension benefit will be strictly linked to the amount of the contributions paid, plus the returns on investment of the contributions, minus the costs to the scheme administrator. Pension calculators could be designed and used to show potential participants what they may be able to expect to receive based on their projected contributions. The payout options might include a lump-sum payment at the age of eligibility or the provision of term annuities for, say, 5 or 10 years or more. A term annuity might be encouraged given the risk that a lump sum might be spent quickly, defeating the purpose of contributing to poverty reduction in old age. A lifetime annuity might contribute more effectively to old-age poverty reduction, but designing such an annuity may be complex and costly in the case of a pension scheme for informal sector workers. Beyond the term annuity, government authorities that have sufficient resources might consider providing a social pension, but at a relatively high age (for example, age 75) at the poverty line and link the benefits to inflation indexation. This would cost less than the universal social pension provided at lower ages of eligibility, but would provide social protection beyond the annuity terms for those informal sector workers who save.

It is important to establish and communicate to the public the procedures for resolving the rights to account balances in the case of the death or disability of a contributor or death of a pensioner. In the case of disability where participants can no longer work and therefore cannot contribute, they should be given the option to withdraw savings in advance of the eligibility age. Participants would have to identify beneficiary survivors whose rights are to be recognized to collect the balance in the individual account in the case of death.
Institutional design is key to the success of a pension scheme in the informal sector. It should facilitate the operationalization outlined above to respond to the needs of informal sector workers. The identity of the administrator of the pension scheme depends on the country context and might range from the current pension administrator in the formal sector to a private sector operator or any other institution with the appropriate capacity. A current administrator is likely to be more appropriate if the country has a defined contribution scheme. Even if this is the case, carefully separating the existing mandatory defined contribution scheme for the formal sector and the voluntary defined contribution scheme for the informal sector is important, although the investment of the reserves can be combined to achieve a critical mass and reduce asset management costs. The design should at least aim to (1) be innovative in providing incentives for people to participate and pay contributions, including subsidies, if this is affordable; (2) provide flexibility in the payment of contributions that will depend on the amounts and regularity of incomes among the participants; (3) use innovative technology to facilitate the payment of contributions; and (4) build up the confidence of contributors that they will receive their pensions when they reach the age of eligibility. Given the low contribution amounts and assets involved, an analysis of the viable size of a defined contribution scheme would need to be carried out. A back-of-the-envelope analysis for Kenya suggests that a minimum contribution of US$100–US$200 a year for about 10 years would be required to generate a sufficient amount of income to meet at least a poverty level if no subsidies are allowed.

The main elements of the institutional design of a voluntary defined contribution pension scheme for informal sector workers include the following: (1) a contribution collection mechanism, (2) a recordkeeping infrastructure, (3) procedures for the investment of contributions, and (4) a treasury unit (see below). Figure 16 illustrates the main elements of such a scheme. This could be customized based on country context and the stakeholders involved.

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This section benefits from Guven, Brodersohn, and Joubert (2018).
The centralized administration of an informal sector pension scheme may help on the cost front. It would avoid duplicating start-up costs. Custodian and fund management services can also be aggregated under a central system to reduce costs. Central administration may add to the sustainability and robustness of the scheme and benefit from the credibility of a public sector provider. Commercial administrators might take on such a role, but this risks fragmenting the market, and reaching scale will be a big challenge that the government will need to take into consideration before allowing multiple initiatives to provide services. In Ghana, for example, multiple private sector providers are emerging, but they are facing great difficulty getting to scale, which suggests the business model is not viable. The government of Rwanda chose to institute a national public administrator, which will likely help reduce administrative costs. The government of Benin is also aiming to put in place a national scheme to be administered by a private sector operator, which is likely to lower costs. Because an informal sector pension scheme deals with the critical savings of low-income individuals, costs are a crucial issue and need to be carefully handled.

**Contribution collection mechanism.** One of the challenges in designing an informal sector pension scheme is reaching geographically dispersed populations. It would make sense to collaborate with multiple public and private sector partners to facilitate the collection of contributions. Such partners could be selected based on their various complementary strengths. One partner might be authorized MNOs. In many countries in Africa, mobile phone penetration is substantial, and people are already using mobile money in daily transactions, including in rural areas. In other countries, the use of mobile money is increasing rapidly. Partnering with MNOs in the collection of contributions could potentially (1) optimize the cost of processing small contributions, (2) provide easy access to balance and withdrawal data, and (3) avoid cash
exchanges. This solution would require discussions with MNOs in each country to determine the operational feasibility of contribution collection through mobile phones. Mobile money is definitely part of the solution. It promotes financial inclusion and can reach more people in the informal sector, while costs can be maintained at a low level. Contribution collection through mobile money would generate costs that would also need to be discussed and negotiated with mobile network operators. The aim would be to achieve lower rates for handling the contributions to the informal sector pension scheme to make the case for the feasibility of the scheme. Costs would likely decline with greater scale. Other potential partners include MFIs and associations of informal sector workers that could provide last mile services to participants.

**Recordkeeping infrastructure.** As in other systems that must track individual contributions among participants, a central recordkeeping infrastructure would be required to monitor all individual contributions submitted through diverse collection points. Monitoring contribution amounts, frequency, and collection points would allow informal sector pension administrators to improve processes and policies through data analytics teams residing within the recordkeeping units. These units would also be responsible for aligning incentives, issuing contribution reminders, and marketing other old-age savings products pushed out through national social protection agencies and targeted on informal sector workers. Depending on the rules on incentives and withdrawals, for instance, recordkeeping units would track the short-term savings available for withdrawal. The units would also monitor balances and ensure the access of the services of MNOs, MFIs, and other partners to facilitate the provision to scheme participants of data on individual account balances and transaction information. The smooth supply of such services also helps build trust among the user population. Tailored software responding to the needs of the recordkeeping units would need to be developed. Alternatively, depending on the country context, recordkeeping institutions that already have this capacity may be able to provide the required infrastructure to run individual accounts. In this case, policy makers may leverage existing entities to supply the same service for the informal sector. Whatever option is chosen, recordkeeping needs to be separate for the informal sector pension scheme and the formal sector pension scheme.

**The investment of savings.** Once the contributions are collected and the payouts of partial withdrawals during the accumulation phase or of pension resources at the age of eligibility age have been processed, investment units would receive the resources from the recordkeeping units through the treasury units (see below). The key activity of the investment units would be investment of the resources received in accordance with guidelines dictated by legislation (box 3). The investment units would need constantly to evolve their capabilities to ensure that returns are maximized while risks are minimized, given the pension scheme’s needs at maturity for short- and long-term savings and the maintenance of low asset management costs.

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**Box 3. Investment and Regulation**

One of the main elements in the formulation of the design of an old-age savings scheme for informal sector workers is the management of the investments of the savings reserves. The efficient management of savings by maximizing returns and minimizing administrative and asset management costs is important in any pension...
scheme, but especially in old-age savings schemes for the informal sector in which contributions are irregular and relatively small and may be depleted quickly if they are not invested following the best practice. This is particularly important because the participation of informal sector workers is typically voluntary, and the government must therefore undertake greater effort to build public confidence and trust to encourage people to contribute, to strengthen outreach, and to minimize administrative and asset management costs significantly to avoid erosion in the relatively small savings. Unlike formal contributory schemes, which typically pay benefits at retirement, most informal sector old-age savings schemes are based on savings account principles whereby some funds are available for withdrawal in the short term, while the majority are available at retirement. Because benefits and account balances depend critically on investment returns, the success of these plans often hinges on appropriate investments. If the returns are negative in real or nominal terms, participants will sacrifice the benefits of saving.

Maximizing the returns during the accumulation phase allows the informal pension scheme to provide relatively better benefits in old age. Whether pension contribution investment strategies are different between informal sector and formal sector schemes is a frequent subject of discussion among stakeholders in Africa. Because informal sector schemes tend to provide access to account balances in the short term, investment strategies must take into account both short- and long-term investment strategies.

Whether the informal sector schemes should be subject to existing regulations is another area that needs to be taken into account. It is also important to examine the governance structure of an informal sector pension scheme, including the structure of the board of directors or other body that will take investment decisions. Possible synergies between investment opportunities and the portfolios of instruments available for the investment of pension reserves in formal and informal sector schemes should also be identified.

*Source:* Guven, Brodersohn, and Joubert 2018.

**The treasury unit.** To support the adequate control of the funds flowing into and out of a pension scheme, a treasury unit should be established and put in charge of monitoring and balancing all transactions of the investment unit. The recordkeeping unit would also interact with the treasury unit in charge of receiving funds from MNOs or MFIs to ensure proper control over the funds flowing into and eventually out of the office of the pension administrator. This allows investments to be optimized and moderates the effect of potential unnecessary transactions performed by the Investment unit.

### 7.3. Outreach, communication, and financial education

Raising awareness, building confidence, and propagating a proper understanding of a pension scheme help informal sector workers make appropriate, informed decisions about participation and encourage them to save for old age. Potential participants in a scheme would want to know the rules of the scheme, their various options for participation, the channels for making contributions, the modalities for the payment of the pension benefit, the age of pension eligibility, and so on. Communicating these details in a transparent way helps build trust in the scheme and scheme administrators. This is particularly important in encouraging informal sector workers to save for retirement through a pension scheme. A carefully designed communication strategy should therefore be implemented in advance of the launch of the scheme. The communication strategy could be realized in phases. A first phase might revolve around the announcement of the launch of the informal sector scheme, while the second phase might
provide additional details on the benefits, rules of participation, making contributions, the age of pension eligibility, and so on.

The success of the communication strategy will also depend on close collaboration with stakeholders outside the government. This is key in Africa, where the general public may lack confidence in government. Informal sector actors, especially, feel marginalized and isolated relative to their formal sector peers, whom they often consider privileged in the access to government services and resources.

The communication strategy needs to identify clearly the roles and responsibilities of all, including nongovernmental stakeholders. Three main nongovernmental stakeholders may help in communicating the objectives of an informal sector pension scheme, as follows:

- Associations of informal sector workers are typically able to communicate with and convene their members. Knowing that their association supports an informal sector pension scheme may encourage informal sector members to participate in the scheme. Associations could play a key role not only in marketing and encouraging their members to sign up for the scheme, but also in ensuring the maintaining a steady flow of contributions, which is crucial to building up a sufficient scale of savings. According to van Ginneken (1999), the existence of an association based on trust is one of the fundamental requirements for establishing a social insurance scheme for the informal sector that is financed by contributions.

- In addition to their potential role in collecting contributions, MNOs can assist in outreach and communication. Outreach and communication materials could be specifically prepared to leverage MNO communication channels and provide information to the customers of MNOs through the use of short message services. MNOs could supply members with information about their account balances, remind individuals to make contributions, and provide a channel for transaction services such as partial short-term withdrawals. Enrollment through opt-in or opt-out mechanisms could be significantly leveraged using the communication infrastructure of MNOs. As in most financial inclusion initiatives in which traditional banking faces greater difficulties in reaching individuals, MNOs represent an easier way to gain access to savings account services.

- In Africa, the penetration rate is much higher among MFIs than among traditional banking service providers. Because MFIs are typically active countrywide, they have the ability to reach portions of the population that other formal structures may not be able to reach. They therefore represent an opportunity for outreach and communication.

Evaluating the gaps in the capacity of the above structures to contribute to a communication strategy to promote an informal sector pension scheme is important. In some cases, the gaps may be addressed and resolved; in other cases, other partners may need to be sought. For example, associations of informal workers sometimes lack ready access to all their members because of poor membership databases or the remoteness of members. Policy makers can evaluate whether assistance should be supplied to address these and other capacity gaps in the implementation plan of a pension scheme for informal sector workers. For instance, focal points might be trained to work actively on outreach and communication efforts. Likewise, because of
the characteristics of the informal sector participants, one must carefully scrutinize the profiles and the reputations of potential MFI partners to ensure they are appropriate and can meet the needs of an informal sector scheme. Thus, the microlending product provided by an MFI may not be adaptable to the microsavings product to be offered through the pension scheme. Indeed, there may be competition between repayment capacity and savings capacity. Using a microsavings product as a source of funds for a pension benefit may not be ideal for the financial health of participants in the scheme.

Financial literacy is another major element in the success of a communication strategy. Key messages about the informal sector pension scheme could be sustained throughout the implementation of the communication strategy. This could be supported by an ongoing financial education program targeting informal sector workers. The goal of a financial education program in the case of pensions is to increase the awareness and understanding of the benefits of participation in the scheme as well as the benefits that would arise because of the bundling of products created by building on synergies between various services. Improved understanding of the pension scheme through the support of a financial education program would also likely increase the trust of potential participants in the scheme.

8. Conclusions

The informal sector in Africa is large, and its size is not expected to decrease for many years to come. As a result, the majority of the labor force in the region is employed in informal jobs without a formal employee-employer relationship. In fact, a majority of workers in the informal sector in Africa are self-employed. The agricultural sector accounts for a large share of employment in most African countries, where subsistence farmers and seasonal workers tend to dominate.

The characteristics of the informal sector are distinct. First, the sector is heterogenous. Although self-employment is a predominant characteristic, it provides employment to a diverse group ranging from small farmers to street vendors, small traders, porters, and so on. These workers typically do not receive regular earnings. They are thus more highly vulnerable to shocks because of their relatively lower incomes, lack of social protection, and limited savings for coping. Moreover, individuals active in the informal sector are often widely scattered throughout a country and are therefore difficult to reach. Outreach is a major challenge in rural areas because the informal sector workers are often in remote locations in which services may not be available. Even in urban areas, outreach is difficult because informal sector workers may not have stable jobs and may be especially mobile. Nonetheless, contrary to the common perception, not all informal sector workers are poor. Some are able to defer consumption to save for old age. Moreover, some are also already organized through associations.

Existing formal sector pension schemes do not respond to the distinct needs of the diverse informal sector. Formal sector pension schemes tend to be designed based on formal employee-employer relationships, which are atypical in the informal sector. They also require regular monthly contributions, which are not suitable for informal sector workers who are usually
characterized by irregular incomes. Participation in formal sector pension schemes may not even be affordable for informal sector workers.

Recognizing these challenges, African governments are seeking innovative pension solutions that respond to the distinct needs of the informal sector. There is no one-size-fits-all program design that can be implemented across the informal sector throughout Africa. However, there are several principles that policy makers and technicians may consider, as follows:

- African governments can benefit from modern technology for improved outreach and reduced costs. Today, Africa is a global leader in the use of mobile money. Mobile network services are expanding rapidly across the region. This means there is an opportunity to use MNOs in the collection of pension contributions from an informal sector that is widely scattered around each country. The cost of the use of mobile phones in the collection of contributions, including in remote areas, is likely to decline with scale. Governments should discuss this and other issues with MNOs.

- A communication strategy should be designed and implemented to raise awareness and build trust among the public in relation to the benefits of informal sector pension schemes. Governments should seek collaboration with potential public and private stakeholders in the implementation of a relevant communication strategy, including MFIs, MNOs, and associations among informal sector workers. An ongoing financial literacy training program during the implementation of the strategy could help informal sector workers understand key messages and take informed decisions.

- The design of pension products offered by an informal sector pension scheme should reflect the characteristics of the informal sector. A survey of these characteristics suggests that a voluntary defined contribution scheme involving a combination of short- and long-term savings accounts may be one possible product. The amounts and frequency of contributions, pension scheme rules, the payout requirements, and synergies with other services, such as health care, microfinance, training, and so on, should be carefully considered in the design of products and communicated to the public at the outset.

- An administrative platform needs to be established for the scheme. The platform should be able to maintain records on contributions, withdrawals, and account balances, while minimizing administrative costs. Creating the platform would require financing as part of the start-up costs. The administration of the pension scheme should ideally be linked to the national identification system. A central administration of the informal sector pension scheme can help on the cost front. It would avoid duplicating start-up costs. Custodian and fund management services can also be aggregated under a central system to reduce costs. A central administration can add to the sustainability and robustness of the scheme as well as the credibility associated with a public sector provider. Commercial administrators can take on this role, but this risk fragmenting the market, and commercial administrators would face substantial challenges in reaching scale. Governments will need to take this into consideration before allowing multiple initiatives to providing services.

- To improve the success of the scheme, the contributions should be invested by professionals to maximize returns and minimize asset management costs. Proper regulations must also be identified, developed, and implemented. The identity of the administrator of the pension
scheme depends on the country context. It might range from the current pension administrator in the formal sector to a private sector operator or any other institution with the appropriate capacity. A current administrator is likely to be more appropriate if the country has a defined contribution scheme. Even if this is the case, carefully separating the existing mandatory defined contribution scheme in the formal sector and the voluntary defined contribution scheme in the informal sector is important, although investment of the relevant reserves can be combined to achieve a critical mass and reduce asset management costs.

- Given the relatively low amounts of the contributions and assets involved, an analysis of the viable size of a defined contribution scheme would need to be carried out. To be successful, these schemes must reach scale, while minimizing the costs of asset management and operations. Governments would have more chance of reaching scale if incentives and subsidies are provided. These would also help inspire a savings culture in a society that may not otherwise save.
- The various approaches to realizing a scheme should be pilot tested before a national scale-up to evaluate methods and processes, including behavioral nudges, the role of various stakeholders, synergies with other products, the amount of contributions, subsidies, and so on. While there are broad approaches that may work, the country-specific lessons learned through pilot testing should inform national design and implementation arrangements.
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Annex A. The India experience

Pensions in India encompass mandatory and voluntary components. Mandatory pensions include pensions scheme for civil servants and provident funds for the formal sector. The mandatory and voluntary plans cover the contributory phase of pension programs. They cover around 86.5 million individuals in a workforce estimated at 520.0 million, thus representing about 17 percent of the workforce.27

Since January 1, 2004, all new central and state government employees have been enrolled in an individual account, defined contribution pension system, the National Pension System (NPS). At retirement, members can take 60 percent of their accumulated contributions as a lump sum and must annuitize the remaining 40 percent. The decision to implement the NPS was taken in 2002. Employees who entered government service prior to 2004 are part of a traditional defined benefit pension system. The NPS membership—central and state government employees—is at about 5.6 million, while the membership of the old defined benefit scheme is about 9.4 million. The NPS has its own architecture and institutions (NSDL, n.d.). The most important are the Central Recordkeeping Agency, the Pension Fund Managers, and the Trustee Bank, through which the money is sent to the fund managers.28 The NPS ecosystem is regulated by an independent regulator, the Pension Fund Regulatory and Development Authority (Sane and Thomas 2014).29

Employees in firms with 20 or more employees are obligated to participate in the schemes under the Employees’ Provident Funds and Miscellaneous Provisions Act, 1952. These schemes are the Employees Provident Fund and the Employees Pension Scheme. They are administered by the Employees Provident Fund Organization. The Employees Provident Fund is a defined contribution provident fund that pays an administered rate of interest (declared at the start of the year) and a lump sum at the time of retirement. The Employees Pension Scheme is a defined benefit scheme that pays a pension on retirement. The Employees Provident Fund Organization schemes cover about 60 million individuals.

Voluntary pensions include pension plans that are distributed by mutual funds and insurance companies. Moreover, the NPS was opened up to all citizens on a voluntary basis in 2009, thus allowing nongovernmental employees to open accounts with the NPS. The same institutional architecture—the Central Recordkeeping Agency and the Pension Fund Managers—is used for the voluntary sector as well. The government of India launched another scheme, the Atal Pension Yojana (APY), in 2015. It is a defined contribution–defined benefit scheme for low-income workers and is separate and distinct from the NPS. The private sector NPS, plus the APY account for about 10.3 million individuals.

28 For the Central Recordkeeping Agency, see https://ndml.in/cra.php. The Pension Fund Managers are listed at https://www.valueresearchonline.com/NPS/.
29 For the Trustee Bank, see http://npstrust.org.in/content/functions-trustee-bank.
29 See the Pension Fund Regulatory and Development Authority website, at http://www.pfrda.org.in/index.cshtml.
India also has a means-tested social pension program, the National Social Assistance Program, which is funded by the government. It includes an old-age pension and a widow’s pension. The social pension covers about 34.5 million elderly.

The informal sector pension scheme: the NPS

The contributors to the NPS include people working in corporates (largely middle- and high-income individuals) as well as people in the informal sector (largely low-income individuals). This is organized as follows: (1) NPS corporates, that is, companies that subscribe for their employees; (2) NPS individuals, that is, people who may subscribe themselves; and (3) NPS lite, that is, individuals from low-income backgrounds who subscribe to the NPS. The NPS uses the same architecture of the Central Recordkeeping Agency and the Pension Fund Managers. The contributions are made through points of presence, which mostly consist of banks licensed to collect NPS contributions.

The minimum age of entry is 18. Individuals may enter up to age 60. The age of retirement is 60, but people can remain invested until age 70 (Beniwal 2013). There is no minimum contribution period, but there are requirements on contribution value. The minimum annual contribution to keep an account active is Rs 1,000.30

In 2010, the Pension Fund Regulatory and Development Authority licensed a category of nonbank financial institutions, several of which were MFIs, to collect contributions from low-income informal sector members. These were called aggregators. They would usually collect cash from contributors and use the NPS architecture to transfer the money forward to the fund managers.

The government started a cocontribution scheme, the NPS-Swavalamban in 2010. Members were given a maximum cocontribution of Rs 1,000 every year if they managed to contribute Rs 1,000 to their NPS accounts. The cocontribution was promised for three years. There was no systemwide assessment of the NPS-Swavalamban.31 The scheme was discontinued in 2015 and replaced by the APY among the participants in the 18–40 age bracket. These members were given the choice to port their accounts to the APY. Anecdotal evidence suggests that few did.

Informal sector pension scheme: Atal Pension Yojana

The APY was announced in the 2015 budget speech by the finance minister. This was a government-led initiative. Anecdotal evidence suggests that it was believed that the earlier informal sector pension scheme, the NPS-Swavalamban, did not guarantee a minimum pension and was therefore not popular. The government thus launched the APY (NSDL 2015).

In the APY, members contribute a fixed sum every month and are then guaranteed a minimum pension amount, which varies between Rs 1,000 and Rs 5,000. The contributor has to choose the desired pension amount, and the contributions are based on this pension amount and the age of

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31 For an example of the experience of the NPS-Swavalamban on the ground, see Sane and Thomas (2015).
the individual. For example, if age at entry is 18, then the individual will be required to contribute Rs 42 a month for a Rs 1,000 pension upon retirement. If the age at entry is 40, the individual will be required to contribute Rs 291 a month for a Rs 1,000 pension (NSDL 2015). The scheme also offers a cocontribution mechanism whereby the government promises to contribute 50 percent of the contribution or Rs 1,000 a year, whichever is lower, to subscribers who joined the APY before December 31, 2015, for the first five years (until 2019–20).

There are three modes of payment: monthly, quarterly, or twice yearly. A minimum of two contributions are mandatory every year. If subscribers miss a contribution, they can make good on the contribution later by paying a penalty decided by the Pension Fund Regulatory and Development Authority. If contributions are not paid for six months, the account is frozen (NSDL 2015). The pension is payable to the subscriber and, on the death of the subscriber, to the spouse. On the death of the spouse, the contributions are returned to the nominee.

The scheme is open to individuals between ages 18 and 40. The member has to contribute for the full period to obtain a pension. For individuals joining at age 40, the minimum number of years is 20, that is, at the retirement age of 60.

The APY front end is the savings account in a bank. At the back end, the APY relies on the NPS infrastructure. The banks pass on the contributions to the Central Recordkeeping Agency, the Pension Fund Managers, and the Trustee Bank. Mobile money is not used. All contributions and other transfers must be routed through the specific bank account. (Tables A.1 and A.2 provide comparisons of the NPS and the APY in numbers of subscribers and assets under management.)

### Table A.1. Number of Subscribers

<table>
<thead>
<tr>
<th>Period</th>
<th>NPS corporates</th>
<th>NPS individuals</th>
<th>NPS lite</th>
<th>Atal Pension Yojana</th>
</tr>
</thead>
<tbody>
<tr>
<td>March 2012</td>
<td>17</td>
<td>57</td>
<td>969</td>
<td></td>
</tr>
<tr>
<td>March 2013</td>
<td>143</td>
<td>70</td>
<td>1,780</td>
<td></td>
</tr>
<tr>
<td>March 2014</td>
<td>262</td>
<td>79</td>
<td>2,816</td>
<td></td>
</tr>
<tr>
<td>March 2015</td>
<td>373</td>
<td>87</td>
<td>4,147</td>
<td></td>
</tr>
<tr>
<td>March 2016</td>
<td>474</td>
<td>215</td>
<td>4,480</td>
<td>2,485</td>
</tr>
<tr>
<td>March 2017</td>
<td>586</td>
<td>437</td>
<td>4,429</td>
<td>4,864</td>
</tr>
</tbody>
</table>


### Table A.2. Assets under Management

<table>
<thead>
<tr>
<th>Period</th>
<th>NPS corporates</th>
<th>NPS individuals</th>
<th>NPS lite</th>
<th>Atal Pension Yojana</th>
</tr>
</thead>
<tbody>
<tr>
<td>March 2012</td>
<td>1.29</td>
<td>1.32</td>
<td>1.40</td>
<td></td>
</tr>
<tr>
<td>March 2013</td>
<td>11.20</td>
<td>2.31</td>
<td>4.36</td>
<td></td>
</tr>
<tr>
<td>March 2014</td>
<td>26.28</td>
<td>3.65</td>
<td>8.39</td>
<td></td>
</tr>
<tr>
<td>March 2015</td>
<td>56.75</td>
<td>5.94</td>
<td>16.06</td>
<td></td>
</tr>
<tr>
<td>March 2016</td>
<td>92.90</td>
<td>12.73</td>
<td>21.08</td>
<td>5.06</td>
</tr>
<tr>
<td>March 2017</td>
<td>149.53</td>
<td>31.23</td>
<td>26.39</td>
<td>18.85</td>
</tr>
</tbody>
</table>

## Annex B. The design features of informal sector pension schemes

### Table B.1. Informal Sector Pension Schemes

<table>
<thead>
<tr>
<th>Country</th>
<th>Pension scheme</th>
<th>Administrator</th>
<th>Regulator</th>
<th>Short-term savings, % of total</th>
<th>Use of savings as collateral</th>
<th>Mobile technology</th>
<th>Members enrolled</th>
<th>Subsidies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ghana</td>
<td>The SSNIT Informal Sector Pension Scheme</td>
<td>Publicly run, initially piloted by SSNIT, then transferred to the National Trust Holding Company (semipublic)</td>
<td>National Pension Regulatory Authority (NPRA) (as of 2018)</td>
<td>50%</td>
<td>No</td>
<td>No mobile technology was used</td>
<td>155,000</td>
<td>No subsidies</td>
</tr>
<tr>
<td></td>
<td>Other initiatives</td>
<td>Privately run, United Pension Trustees (UPT), the People’s Pension Trust (PPT), and the Daakye Pension Trust</td>
<td>National Pension Regulatory Authority (NPRA)</td>
<td>50%</td>
<td>No</td>
<td>Mobile money, wallet accounts, short message service reminders, standing order</td>
<td>UPT 17,000; PPT 160,000</td>
<td>Fiscal incentives</td>
</tr>
<tr>
<td>Kenya</td>
<td>Mbao Pension Scheme</td>
<td>Privately run Eagle Africa, launched in 2008 by the National Federation of Jua Kali</td>
<td>The Retirement Benefits Authority</td>
<td>100% can be withdrawn after first year of contributions</td>
<td>No</td>
<td>Mobile money accounts: Safaricom’s M-PESA and Airtel’s Airtel Money</td>
<td>76,000</td>
<td>No subsidies</td>
</tr>
<tr>
<td>Uganda</td>
<td>Mazima Retirement Plan</td>
<td>Privately run Mazima</td>
<td>Uganda Retirement Benefits Regulatory Authority (URBRA)</td>
<td>100% can be withdrawn after first year of contributions</td>
<td>No</td>
<td>Save through mobile money networks: Airtel and MTN</td>
<td>1,000</td>
<td>No subsidies</td>
</tr>
<tr>
<td></td>
<td>KACITA Provident Fund Scheme</td>
<td>Privately run Kacita</td>
<td>Uganda Retirement Benefits Regulatory Authority (URBRA)</td>
<td>NA</td>
<td>No</td>
<td>Save through mobile money networks: Airtel and MTN</td>
<td>NA</td>
<td>No subsidies</td>
</tr>
<tr>
<td>Rwanda</td>
<td>Ejo Heza Long-Term Savings Scheme (LTSS)</td>
<td>Rwanda Social Security Board (RSSB)</td>
<td>Government of Rwanda (Ministry of Finance)</td>
<td>25%</td>
<td>Yes, 40%</td>
<td>Save through mobile money: MTN, AirtelTigo, MobiCash</td>
<td>30,000 in the pilot test in October 2018</td>
<td>Matching contribution, fiscal incentives, life and funeral insurance</td>
</tr>
<tr>
<td>Benin</td>
<td>ARCH</td>
<td>The National Social Protection Agency</td>
<td>TBD</td>
<td>TBD</td>
<td>TBD</td>
<td>TBD</td>
<td>TBD</td>
<td></td>
</tr>
<tr>
<td>India</td>
<td>NPS Lite/Swavalamban</td>
<td>NPS</td>
<td>The Pension Fund Regulatory and Development Authority (PFRDA)</td>
<td>No</td>
<td>No mobile technology</td>
<td>4,500,000</td>
<td>Matching Contribution, Benefit committed based on committed contributions</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Atal Pension Yojana (AYP)</td>
<td>Government initiative</td>
<td>TBD</td>
<td>TBD</td>
<td>TBD</td>
<td>TBD</td>
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**Note:** TBD = to be determined.
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ABSTRACT

The coverage of pension systems in the Africa region is limited to the small segment of the population in the formal sector. Coverage is thin partly because traditional contributory pension schemes are not responding to the needs of the informal sector. As a result, a large share of the region’s adult population has no access to contributory pension schemes during their working lives. This means they will not be eligible for a pension. It also means the elderly coverage gap will persist in most countries. Expanding coverage to a larger group of workers is especially important because the elderly is now often cared for by their children. As the children move to cities, their ties to the elderly and home villages weaken. As a result, the elderly may be left behind with fewer resources.

An increasing number of governments in the region are examining initiatives to extend pension coverage to informal sector workers. This paper argues that informality represents distinctive issues in the provision of retirement income that cannot be addressed merely by extending conventional pension systems to these workers. Different solutions are needed to tackle the unique characteristics of this group, some members of which may have the potential to save, but not sufficiently to participate in traditional contributory pension systems. That the scheme does not rely on a formal employer-employee relationship is an important characteristic and contrasts with formal sector pension plans based on formal employment contracts pension scheme for the informal sector. This paper aims to provide recommendations on the main principles of a pension scheme for the informal sector.

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