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Abstract

This paper reviews the theoretical and empirical literature on micro pension products for informal sector workers in developing countries. Micro pensions provide a mechanism that allows these workers to make small or infrequent contributions to a pension system, providing the flexibility they need to accommodate their irregular income flows. The aim of micro pensions is to create an accessible, affordable all-inclusive pension system. The evidence suggests that workers involved in informal employment lack access to social protections and employer-based pensions particularly in developing countries. The evidence also suggests that micro pensions can contribute to the betterment of uncovered workers in less developed countries. Micro pensions show potential for implementation in high-income countries where non-standard forms of work represent a significant minority of the labor force through contract, part-time, seasonal employment, freelance arrangements, and gig workers. For instance, non-standard and informal employment arrangements represent about 20 percent of workers in the developed world (ILO 2018). The Government Accountability Office (GAO) estimates that the size of total non-standard employment as a proportion of the total U.S. employed labor force can range widely, depending on how it is defined. For instance, when including all self-employed, contingent and part-time workers, non-standard, non-traditional workers reached about 40 percent of the total work force in 2010 (GAO 2015). This paper undertakes a discussion and analysis to weigh in on the debate for the feasibility, development, and implementation of micro pension schemes in developing and developed countries where informal and non-standard work arrangements employ significant shares of the labor force.
Introduction

Lack of access to employer-based pensions and exclusion from the financial system for millions of underprivileged, informal workers has led to the development of a recent phenomenon: micro pension schemes to reduce old age income security risks. Different forms of micro pension products have been developed during the last two decades in India, Bangladesh, China, Mongolia, Philippines, Republic of Fiji, Guatemala, Honduras, Nicaragua, Chile, Rwanda, South Africa, Kenya, and Ghana. Micro pensions have also been implemented in developing countries to create accessible and affordable pensions funded by workers’ small or irregular contributions, which are made when their cash flow allows them to do so. Although not everyone in the informal sector is poor, the design of micro pension schemes takes into account the financial capacity of low-income workers, as well as their financial literacy. Evidence suggests that the advantage of existing micro pension schemes is that they are designed with the client in mind by making the product affordable and accessible. Also worth mentioning is the recent economic literature that discusses micro pensions in terms of their relevance to innovation and their potential to integrate into the traditional pension systems in developed countries. Recently in developed countries, more attention has been given to the challenges of providing pension coverage to self-employed and non-standard workers such as contingent or contract, part-time, and seasonal workers and freelancers. Research studies suggest significant changes in labor markets in a number of developed European economies and in the United States, where millions of workers are no longer in traditional full-time, year-round jobs. Non-standard and informal employment arrangements represent about 20 percent of workers in the developed world. (In contrast, in developing countries, informal workers represent about 70 percent of the labor force.) These workers have limited or no access to social protections, including pension coverage (ILO 2018; ILO 2020-22). van Wass et al. (2015) analyze micro pension schemes in terms of their ability to make “disruptive” changes within the Dutch pension system, which is considered to be among the top systems in the world. While the Dutch mandatory pension system provides coverage for workers in formal employment, there are few opportunities for the self-employed to save for retirement. The study concludes that the current Dutch pension system is vulnerable to new initiatives to address the retirement income shortfall of self-employed. van Wass et al. (2015) suggest that micro pensions can also be implemented in the Netherlands. Chamberlain and Saunders (2017) argue that micro pensions can better target gaps in the middle-
income and higher-income labor markets where formally employed workers may also lack pension coverage. Therefore, they suggest that the developing world’s experience in addressing the challenge related to micro pension coverage will be valuable for the developed world as it moves into the “new economy.” But in the absence of in-depth country and market studies, it will be difficult to determine how micro pension schemes might help solve the problem of old-age income security for workers in the developing and developed worlds. It will also be necessary to understand the behavioral patterns of working populations and the economic and institutional barriers to participation in such schemes. However, the paper sought to undertake a discussion and analyses to weigh in on the debate for the feasibility, development, and implementation of micro pension schemes in the context of developing and developed countries.

Definitions and Main Features of Micro Pension Schemes

Theoretical and practical justifications for micro pension schemes, their design features and economic sustainability issues of micro pension schemes are described and addressed by Hu and Stewart (2009); Uthira and Manohar (2009); Gianadda (2007), Dullemen and Bruijin (2011, 2015), van Wass et al. (2015), Njuguna (2012), Srinivasan and Arunachalam (2012), Shankar and Asher (2009; 2010), etc. In very broad terms, micro pension schemes in developing countries can be defined as any arrangement that builds up assets that will provide income to poor old people (Srinivasan and Arunachalam 2012). Additionally, various studies have viewed micro pension schemes as a new phenomenon and an innovative form of pension insurance for workers with flexible and uncertain working patterns (van Wass et al. 2015; Njuguna 2012; Dullemen and Bruijn 2015). Micro pensions typically can be classified as voluntary defined contribution schemes, though they can be characteristic of quasi-mandatory pensions as well. For instance, micro pensions may combine the elements of a regular pension scheme and specific features of microfinance (Asiamah, 2023). Poor workers in developing countries have limited access to traditional financial services. Microfinance remains an important service in developing countries, where it can provide access to capital and promote financial inclusion. Grameen Bank in Bangladesh, for example, that offered microfinance products to low-income workers made their pension scheme subscription mandatory in order to receive a loan of a certain size (Ivanova, 2010; Uthira and Manohar, 2009).
The existing literature on micro pension schemes suggests that the most common features of micro pensions that reach a large share of informal workers may include: contributions of small amounts; flexibility in payment amounts and the timing of payments; a statutory retirement age of 55- to 60-years of age; and flexible withdrawal opportunities that allow pension savings to be withdrawn at the request of a client much earlier than statutory age comes. The accumulated assets can be collected as a lump sum at the time of retirement, in phases, or on a monthly basis as an annuity, but often, a combination of these methods is used. Additionally, governments must create an enabling environment that includes a regulatory framework, infrastructure and technology supportive of mass registration, a system of contribution collection and the database management that is crucial importance to administer micro pension schemes (van Wass et al., 2015). Neutral third parties such as micro finance institutions, non-government organizations, post offices, self-help groups, cooperatives, social networks and mobile technology should be put in place and play significant roles in the development of micro pension schemes. Efficient processing of small savings at low costs to both participants and providers is critical to the success of micro pension schemes. Other critical characteristics include financial education as well as marketing necessary to create awareness of the need to plan for financial security in old ages and to put strategies in place to stimulate participation and regular contributions to the schemes (PPH 2018). Building trust with potential participants is also crucially important. Risks associated with micro pension savings relate mostly to high transaction costs for low-income participants (Ivanova 2010). The level of fraud risk also varies and should be taken into account in the design and implementation of micro pension schemes. For instance, secure digital and mobile transactions would help to minimize risks. However, the economic environments where micro pension initiatives are implemented often rely on cash payments that can create risks that are not present in automated deposits and withdrawals. Finally, the sustainability of micro pension schemes depends a lot on its potential to protect against often high inflation rates (Njuguna, 2012).

The research literature suggests a few models for implementing micro pension plans: (1) a partner-agent model served by micro finance institutions (MFIs), non-governmental organizations (NGOs), banks or other large financial and non-financial institutions; (2) a Grameen model with compulsory savings; (3) an agency model, where agents sell micro-
pensions to clients; and (4) less formal community-led models (Uthira and Manohar 2009; Hu and Stewart 2009; Gianadda 2009; van Wass et al. 2015; Dullemen and Bruijn 2011, 2015).

Gianadda (2007) and van Dullemen and Bruijn (2011) suggest that the presence of a micro finance industry has been typical in numerous micro pension projects. The literature suggests that a partner-agent model served by MFIs, NGOs, banks and other large financial and non-financial institutions delivers a win-win situation for both the micro pension providers and participants. The partner-agent model is a scheme whereby, for instance, the MFIs act as partner and one of the state banks as the agent. In this model, the asset management company (the agent) reaches out to the informal or low-income workers while the MFI (the partner) expands its pension product range. In addition, the partnership allows each institution to focus on its core business and expertise. In other cases, NGOs play the role of a partner and focus on their direct relations with clients and administration of the pension scheme, while the bank focuses on their investment capacity.

Throughout the years and over decades, a number of micro pension schemes have been transformed into some other forms of saving products. Many of the micro pension schemes in India have also had problems with governance, systems, management and transparency (Srinivasan and Arunachalam, 2012). Existing micro pension schemes in developing countries in Africa have been established both as private and public entities. The recent pandemic made it more difficult to sustain micro pension schemes since most informal and low-income workers lost access to earnings and their opportunities to contribute to the pension schemes. Nevertheless, the need for micro pension schemes for informal sector workers over the long-term is obvious, particularly in view of high level of informal employment as well as global demographic trends in aging. Also worth mentioning is that by 2075 one-third of the world’s working-age population will be African. The COVID crisis underscored the importance going forward with the reform agenda in Africa to bolster existing local micro pension funds as contractual savings institutions including by enabling more extensive participation in micro pension schemes (Irving 2022; Collins-Sowah at el. 2023).

Implementation Challenges and Constraints

Based on the experience of micro pension providers described in the literature, there are a number of political, institutional and macroeconomic factors that create risks for the
implementation, development and sustainability of micro pension schemes in developing countries. Those factors may include political instability and all forms of corruption, as well as government regulations and regulatory barriers, unstable and high inflation, fraudulent and volatile financial markets, low levels of computerization, and limited access to banking and other financial institutions due to underdeveloped financial sectors.

Other risks associated with implementation and development of micro pension schemes relate to demand- and supply-side challenges of micro pensions’ sustainability. The most obvious challenges is the vulnerability of very low income and underprivileged populations. Low-income workers face two main obstacles to participation in pension schemes: 1) insufficient income available to save; and 2) an unwillingness to trust the system and make formal pension savings a priority (Njuguna 2012; Ivanova, 2010). Based on analyses of micro pension markets provided by Dhandapani and Manohar (2009) and Njuguna (2012), the major challenges for micro pension development relate to the cultural and social patterns that low-income populations usually follow. For example, low-income populations prioritize make investments in gold and land and also rely on strong family ties for support in Asia and Africa. Another major challenge, van Dullemen (2014) suggest, is insufficient knowledge of financial products among these populations. Literature suggests that demand for formal pension saving opportunities is low due to low levels of financial literacy among poor populations. There is the need of setting clear communication strategies and financial education campaigns that should be supported from government and financial institutions.

Cultural and behavioral barriers to implementation vary not only from one region or country to another, but differences in the views of pension schemes by various socioeconomic groups within the same region or country can also conflict. In developing countries, and in particular in post-Soviet ancestors, people acknowledge pension savings is important but also perceive pension schemes as complex and unpredictable given the historically low trust in financial institutions and/or government. Even within the developed world, there is a great uncertainty regarding expectations about secure pensions. In the Dutch pension systems, for example, van Wass et al. (2015) suggest that changing labor market patterns and tendency towards more mobility and flexibility makes it difficult for people, particularly self-employed “to understand” their financial situation.
At the same time serious challenges occur on the supply side as well such as whether pension provider can instill financial discipline by offering financial and pension education to ensure a stable stream of payments made by the pension schemes participants and to minimize early withdrawals. Other challenges are designing less expensive micro pension products for micro pension sustainability and mitigating longevity risks and external risks such as investment and inflation (Njuguna 2012; Ivanova 2010).

**Policy Relevance and Conclusion**

The potential market for micro pension scheme provision can be huge worldwide. The most critical political argument for developing micro pension schemes either in the developing and developed world should be the potential of such schemes to complement social protections and pension insurance policies that aim to alleviate poverty and increase pension coverage. On the other hand, the formulation of micro pension schemes requires finding a delicate balance between multiple, often competing considerations: the economic viability within particular national environments; the generation of adequate returns to savings within national financial systems; and the customization of features to fit the cultural preferences of the participants of such schemes. Since financial systems play a crucial role in the potential of such pension schemes, a well-developed sizable financial system within a country is one of the most important pre-conditions for the implementation and development of micro pension schemes. Gianadda (2007) and Dhandapani and Manohar (2009) emphasize that the fluctuations in capital markets that can have a negative impact on pension savings, deemed unaffordable for poor populations, would potentially prevent development of micro pension initiatives in developing markets due to a lack of political will. On the other hand, in developing economies, micro pension schemes could be politically feasible if they are viewed as an additional driver of development of their financial systems.

Key policy issues around micro pension schemes relate to their sustainability. In order to achieve and maintain financial sustainability of such schemes, the number of participants should be as large as possible. One of the key policy issues in developing and developed countries is how to enroll low-income workers and especially informal and non-standard workers. Complete freedom and flexibility in terms of enrollment and sometimes even payments can be seen as a strong motivation for micro pension scheme participants, though this creates a significant
tradeoff. Voluntary pensions schemes discourage low-income workers from prioritizing contributions since they may be unwilling or unable to put aside money that can be spent today on their basic needs or have determined there are other ways to meet their retirement needs. Another tradeoff can be associated with the flexibility of permitting small but frequent contributions, which causes high transaction costs and low benefit payouts (Njuguna 2012). A critical policy issue when designing a micro pension scheme is to increase the number of participants of such schemes by reducing the number of dropouts. How to increase the frequency of contributions is another challenge that might be addressed by pension policy. One of the most responsive strategies can be an effort by pension providers and governments to increase financial security, pension awareness and literacy among the most vulnerable workers by implementing extensive financial and pension education and advice. Literature on micro pensions suggests that these schemes should be backed by sound fiscal policies and government regulation. Changing the nature of micro pensions from voluntary to quasi-mandatory can be also considered in some specific contexts. Additionally, innovative approaches already introduced by pension providers, including social development models and mobile digital communication and payment solutions, should be considered in an increasingly digital economy.
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