

Introducing and up-scaling savings-linked endowment products by Guardian Life and BRAC in Bangladesh

1. DEVELOPMENT RELEVANCE

Economic and poverty context ^{1,2,3,4,5}

Bangladesh, supported by India, won independence from Pakistan in 1971.

Approximately 35% of the country is made up of the Ganges-Brahmaputra delta, one of the most fertile regions in the world. Approximately 98.9% of its population is Bengali and nearly 89% Muslim.

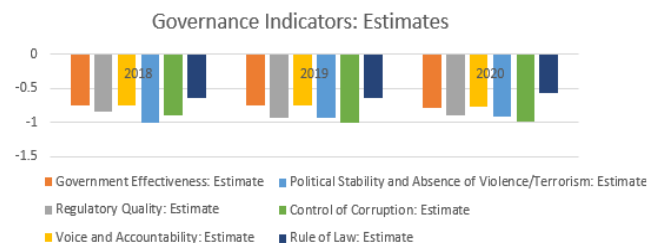
Dhaka, the capital, home to more than 20 million, contains one of the most densely populated areas in the world. With 75% of the country less than one meter above sea level and 700 km of coastline, Bangladesh is greatly threatened by rising sea levels. One of the fastest growing economies (6% p.a. real GDP growth over the last decade), it has made tremendous gains in poverty reduction in the past 20 years. The COVID-19 pandemic, however, badly impacted female labour force participation and undermined several previously stable financial conditions. Although its debt is relatively low, the government recently introduced a new taxation law to increase revenues. More than half of GDP consists of services, 33% of industrial output (only China is a larger ready-made garment exporter) while the rest is mainly composed of agricultural products.

Table 1: Population and economic indicators¹

Population in million (2022 est)	166.3
GDP growth (2019 / 2020 / 2021)	7.9/3.4/ 6.9%
Inflation (2019 / 2020 / 2021)	5.6/5.7/5.5%
Trade balance (% of GDP) (2019 / 2020 / 2021)	-5.4/-5.4/-6.4%
Foreign direct investment (net inflows, % of GDP) (2018 / 2019 / 2020)	0.8/0.5/0.4%
Net ODA received (% of GNI) (2018 / 2019 / 2020)	0.9/1.2/1.4%
Remittances received (% of GDP) (2018 / 2019 / 2020)	4.8/5.2/5.8%
Economic Freedom Index (Rank among 186 countries) (2022)	52.7
Poverty indicators	
GDP per capita (USD/CHF) (2021)	2'503 / 2'475
Gini Index (0= equality 100= inequality) (2016)	32.4
International poverty rate (2016 / 2019; at \$2.15 USD/day 2017 PPP)	10.5/8.4%
National poverty rate, % of population (2016 at \$2.15 USD/day 2017 PPP)	13.5%
National rural poverty headcount rate (2016) ³	26.4%

Financial sector context ^{6,7,8,9, 10,11,12,13,14,15,16,17}

The **formal financial sector** includes regulated institutions like banks, non-bank financial institutions, insurance companies, capital market intermediaries like brokerage houses, merchant banks etc.; and microfinance institutions. The **semi-formal sector** is regulated but not under the jurisdiction of the Bank of Bangladesh (BB, the Central Bank), Insurance Development and Regulatory Authority (IDRA), Securities and Exchange Commission (SEC), Microcredit Regulatory Authority (MRA), nor under any financial regulator. It includes specialized financial institutions like House Building Finance Corporation (HBFC), Palli Karma Sahayak Foundation (PKSF), Grameen Bank, NGOs and discrete government programs. The **informal sector** are the private unregulated intermediaries.



Four main types of institutions are involved in microfinance activities: 1) Grameen Bank (GB), a member-owned specialized institution; 2) about 1,500 NGOs like BRAC, ASA, Proshika, and others; 3) commercial and specialized banks like Bangladesh Krishi Bank; and 4) government sponsored micro-finance programs which are run through several ministries and mostly target the functionally landless rural poor. The ten largest MFIs and Grameen Bank hold over 87% of mobilized member savings and 81% of credit. Microfinance grew tremendously for over 35 years despite challenges like high dropout rates, over-indebtedness, high operational expenses, and others. These were exasperated by lack of access to Bangladesh's National Identity Card (NID) database and non-existence of a credit bureau for MFIs. The COVID-19 pandemic disrupted usual microfinance activities as MFIs focused on intermediary functions between the government and the people. Approximately 32 million individuals directly benefit from microfinance.

In general, ensuring continued inclusive economic growth remains a challenge in Bangladesh, especially since almost 70% of the population is rural-based. The country persistently lags behind in global financial inclusion indicators; World Bank's Global Financial Inclusion Index (Global Findex) shows that just 52.8% of all adults had either a financial institution or a mobile money account as of 2021. The use of information technology and digitally enabled tools to deliver financial services is also relatively low. Formal financial institutions are overly concentrated in urban areas and their services cater mainly to middle and upper-middle class urban populations.

In 2009 the government launched the Digital Bangladesh infrastructure which among other things enabled digital payments. Digital transactions grew to 20% of all transactions in the last five years and now 79% of the population is using the financial ecosystem. To boost it further, a three-year strategy / roadmap was developed in 2022 which lays out how innovative technologies will transform the country's payments ecosystem by bringing together governments, development organizations and private companies to promote a wider transition to electronic payments. More recently, the Ministry of Finance launched National Financial Inclusion Strategy 2021-2026 with a core theme titled "Journey towards Sustainable and Impactful Financial Inclusion through Digitization and Innovation".

The insurance industry is composed of 18 life (one state-owned) and 46 general insurance companies (also one state-owned). The industry has grown in the past decade although at a slower pace than GDP. Hence insurance density slipped from around 1% in 2009 to just 0.40% in 2020, much lower than that of Asian neighbours (India stood at 4.2% in 2021). The main challenges, as in many other developing insurance markets, are lack of trust in insurance companies and limited awareness of life insurance products. The pandemic did, however, heighten market interest in financial protection, evidenced by premium growth of 8.45% in 2021. Life insurance makes up approximately ¾ of the annual USD 1 billion premium. Microinsurance and Takaful are also part of the insurance sector.

Financial sector partners ^{18,19,20}

BRAC is an international development organization registered under the NGO Affairs Bureau of the Government of Bangladesh. Established by Sir Fazle Hasan Abed in 1972, BRAC is present in all 64 districts of Bangladesh as well as in eleven other countries in Asia, Africa, and the Americas. Its general aim is empowerment of the poor through economic and social programmes. Its approach to development is holistic, utilizing a wide array of programmes and social enterprises which include microfinance, education, health, agriculture, gender, and human rights. Its basic premise is that every human being has potential that can be unleashed when an enabling environment is created. Given an opportunity through BRAC's interventions, even the poorest of the poor can become agents of positive change that affects their own lives, their families, and others within their communities.

BRAC's microfinance programme in Bangladesh is the largest in the world, providing services through 2'500 branches to 5.5 million of its 11.3 million Bangladeshi members. Recognizing the heterogeneity of its various target populations, special needs are addressed through customized products and services.

Guardian Life Insurance Company Limited (GLIL) was established in 2014 and became profitable after just two years of operation. The main areas of business focus are microinsurance, bancassurance, group insurance, and retail. The paid-up capital of the company stands at Taka 33.67 crores (CHF 3.33 million) and the authorized capital is set at Taka 200 crores (CHF 19.8 million). The company was founded on the promise of better products and excellent service utilizing a dynamic, caring, and knowledge-driven workforce using the most current technologies. It currently has 14 shareholders; one of these is BRAC which owns 10% of outstanding shares. As of 2022 it covered approximately 110,000 individuals.

BRAC and GLIL have successfully partnered since 2014, beginning with Credit Shield (credit life) insurance, a voluntary credit life product covering BRAC's micro-borrowers of which there are two types: "Dabi" and "Progoti" which respectively refer to BRAC's group borrower and individual borrower programmes.

2. INTERVENTION APPROACH

Problem statement and basis for SCBF intervention

Beginning in 2008, BRAC offered a savings product called Deposit Pension Scheme (DPS) to client-members and their families. For BRAC, it is a mechanism to mobilize savings for its numerous activities such as micro-credit. For client-members, DPS represents an opportunity to save money securely with modest interest without having to meet the requirements of opening an account with a financial institution such as a bank. The

key features of DPS are: 1) Four plan tenures/durations/terms: three years, five years, eight years, and ten years; 2) Any number of accounts may be opened; 3) Premature encashment is possible (with interest penalty); 4) Participation is voluntary; 5) It is open to anyone, including minors accompanied by a legal guardian; 6) Monthly deposits by planholder are limited to a few select amounts ranging from Tk 100 (CHF 1) to Tk 10'000 (CHF 1'000); 7) If five successive monthly payments are missed, the account / plan is automatically closed and paid out at lower interest rates.

The automatic cancellation when a planholder dies under the current BRAC policy usually presents a problem for the planholder's beneficiary(s) since the objective to be financed at DPS maturity (such as education of a child) remains unmet. Thus, the concept of a savings-linked insurance product called Savings Shield was conceived. If a DPS planholder with the insurance cover died, the surviving beneficiary(s) would receive the full DPS maturity value (or at least partial, depending on plan design) and thus be able to follow through with the original savings purpose.

There are many possible ways to design such a product. The main challenge is to engineer a version that would be attractive and affordable to planholders while remaining financially viable for the insurer. This objective describes the basis for SCBF technical intervention.

Main activity areas

Typically, demand research is carried out near the beginning of a product development cycle but it was not deemed necessary in this case. BRAC had gauged demand for some time from general feedback and was confident enough that Savings Shield insurance would succeed. Thus, the initial set of planned activities by the SCBF Actuarial Consultant, BRAC, and GLIL were: 1) Product concept and design features for consideration and pricing to be determined / set in Dhaka meetings; 2) Analyze (offsite) 2010-2018 DPS data from 1.731 million plans sold to establish demographic profiles of buyers, plan persistency, and seasonal sales patterns for each of 16 plan-buyer categories ^{note 1}; 3) Analyze (offsite) 2017-2018 Credit Shield insurance data (6.6m loans, 11.7m insureds) to determine mortality experience of BRAC borrowers and their co-insured dependents (4 categories); 4) Set profitability targets and other financial/actuarial parameters; 5) Build an actuarial and financial projections model to calculate premium rates, test assumptions, calculate cost of various product features, and project key performance indicators; 6) Run the model and present the results for feedback and to decide which design to retain for pilot testing.

The main product features in consideration included: a) Minimum and maximum age limits for each plan duration; b) Should premium be paid up front, as a monthly add-on or integrated by adjusting the interest rates? c) What is the length of the waiting periods needed to curb adverse selection? d) What is the duration of the grace period for late premiums wherein coverage remains active? e) To keep costs low, should the benefit levels for longer term plans be reduced in the earlier stages of the DPS? f) Should all DPS purchasers be required to buy the insurance cover or should it be voluntary? g) Should there be a partial premium refund in case of plan cancellation? h) Should pricing be set to just one common rate for easier implementation? The negative effect of uniform pricing is subsidization of riskier plan-holders by lower risk individuals which dampens that subgroup's willingness to participate. ^{note 2}

With this set of activities completed, the Consultant would then 7) Assist GLIL (if necessary) with preparation of all the requirements for approval of the product by the insurance regulator; 8) Advise (if necessary) with design of materials for member-client awareness creation, financial education, and capacity building of field staff; 9) Provide inputs on the following: distribution processes, monitoring and administration systems, workflows, service agreements, and others as needed; 10) Advise in regard to piloting the product in a few select branches; 11) Finalize the product features (and accordingly, the pricing) and distribution based on pilot feedback. It was anticipated that BRAC, being one of the most experienced and sophisticated MFIs in the world, would need very minimal assistance, if any, from SCBF with some of these latter activities (i.e. #7-10). Nevertheless, since SCBF also has wide and varied experiences in other countries with savings-linked insurance, there may be some opportunity to provide useful inputs.

Activities 1 to 6 were fully completed and number 7 just partially before the COVID-19 pandemic arrived in early 2020. The project was then put on hold for more than two years as BRAC concentrated on COVID-relief projects aimed at its client-membership. When insurance development activities finally commenced in 2022, the insurance regulator advised GLIL that product registration will not be required until its finalization after the piloting phase.

3. RESULTS ACHIEVED AND NOT ACHIEVED

Following extensive deliberation and discussion, BRAC and GLIL agreed to pilot the following version of Savings Shield in 202 BRAC branches:

1. Only 3-year and 5-year DPS plans will be insured;
2. Insurance participation is voluntary;
3. The DPS planholder cover is for accidental and non-accidental death only. Optionally, a dependent of the DPS planholder may be jointly insured.
4. To be eligible, the applicants should be of qualifying age and in good health. Generally, applicants will sign a Declaration of Good Health wherein he / she will list existing health problems. The listed conditions will be excluded. Savers affected within the past 12 months by major illnesses such as cancer, liver, and kidney problems cannot participate. Non-disclosure will result in claim denial.
5. The minimum eligible age is 18 years. The maximum age for 3-year plans is 62 years while for 5-year plans it is 60. Coverage will automatically cease on the 65th birthday.
6. Claims will be denied if the applicant dies of conditions mentioned in the health declaration; if death is due to suicide; if murder is perpetrated to trigger insurance benefits; or if death occurs in relation to an illegal activity. As well, any deliberate misinformation or manipulation of documents uncovered during processing of a claim will be grounds for denial.
7. Premium rates are 27 Taka (0.27 CHF) per 100 monthly savings deposit for 3-year plans and 68 Taka (0.68 CHF) for 5-year plans. For joint coverage, the premium rates are doubled for simplicity. Premium is payable in full at inception and unused premium will not be refunded if the DPS lapses. Premium rates were increased to fund anticipated increase in mortality risk from the COVID-19 virus.
8. The grace period will be up to six months. This means that even if the monthly savings deposits stop for five months, insurance coverage will continue in the sixth month but after that the DPS and coverage will be cancelled.
9. There is no waiting period for accidental death. For non-accidental death it is one month from the date of policy inception (i.e., no benefit is payable if death occurs less than one month after policy inception). The purpose of the waiting period is to curb adverse selection risk. ^{Note 3}

Piloting will commence as soon as BRAC systems are ready to accommodate the new product. It is expected to start in early 2023 and last for approximately six months. The main purpose of this activity is to a) Optimize distribution processes and systems; b) Decide which product features to add, enhance, or delete; c) Improve sales techniques to enhance closing rates; and d) Gather data for calculation of several key performance indicators. Following this, pricing will be modified in response to product and policy changes.

In summary, the main result at this stage of the project is the development of the Savings Shield product using real experience data and tangible market information collected through BRAC's extensive interaction with client-members.

NOTE: This report will be updated sometime in 2023 to include the pilot results.

Client-member level

Generally, BRAC client-members' families will benefit greatly from the added insurance protection. Specifically, data and pilot feedback will enable a depiction of client level results [which can be presented when the report is updated in 2023](#). Results are expected to show how well the product has been received and what needs to be changed, among others. In addition, some numerical indicators such as sales closing rates and overall satisfaction will be derived. These particular indicators are an important gauge of product appeal in the target market.

Financial sector partner(s)-level

The two organizations, BRAC and GLIL, after successfully partnering with the Credit Shield product for about eight years have now had a second opportunity to develop a different kind of product in Savings Shield. The ability of an insurer and aggregator / distributor to effectively work together is vital for the evolution of valuable insurance products. The Savings Shield product will, however, be quite a bit more challenging in that it is more complex and being offered to a relatively smaller market (only DPS buyers) than Credit Shield. The pilot data will enable preliminary calculation of financial indicators such as incurred claims ratio, expense ratio, and net income ratio. These and other indicators will guide the partners towards an optimal balance between affordability, product appeal and value, insurer profitability, and others. If the product succeeds, it will enhance the DPS offering and give BRAC a competitive advantage over other MFIs contending for savings mobilization in Bangladesh.

Financial sector-level

Whenever a new product such as Savings Shield is launched, the entire financial sector benefits from the innovations and the learnings that it brings to the market. In general, if the product succeeds then competitors will be encouraged to develop similar products or aim for improved versions. Overall, this is good for financial sector development and fosters innovation. A new product also helps regulators by guiding them towards developing more relevant and effective regulations.

4. CONCLUSIONS AND RECOMMENDATIONS

Feedback from BRAC characterized the SCBF actuarial intervention as helpful to BRAC and GLIL. The Consultant, with inputs from the GLIL actuarial department and BRAC, undertook an in-depth modelling exercise to price and project the financial performance of numerous product versions. When this was completed, the most practical combination was retained for piloting as discussed in Section 3. For the BRAC team in particular, the Consultant's technical reports facilitated better understanding of the implications, advantages, disadvantages, and costing of most product features and enabled BRAC to negotiate more effectively with the insurer, GLIL.

Overall, the SCBF objective of transferring savings-linked product development knowledge and local capacity building was achieved.

NOTE: Additional conclusions will be added when the report is finalized in 2023.

Note 1: 16 categories are 4 DPS plan terms X 2 categories of planholders (voluntary or mandatory participation) X 2 classes of planholders (existing BRAC MFI borrowers or non-borrowers).

Note 2: Low risk individuals (e.g. the young, healthy, etc.) generally tend to resist life insurance and this is amplified with higher cost.

Note 3: Adverse selection in this context means that the participant buys insurance because he/she knows and conceals the fact that he/she is not in good health and has a higher-than-normal chance of death.

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