

Mobilizing Domestic Micro Savings to Finance SDGs



THE UNITED NATIONS SECRETARY-GENERAL'S
TASK FORCE ON DIGITAL FINANCING
OF THE SUSTAINABLE DEVELOPMENT GOALS



Risefinance • Capital Development



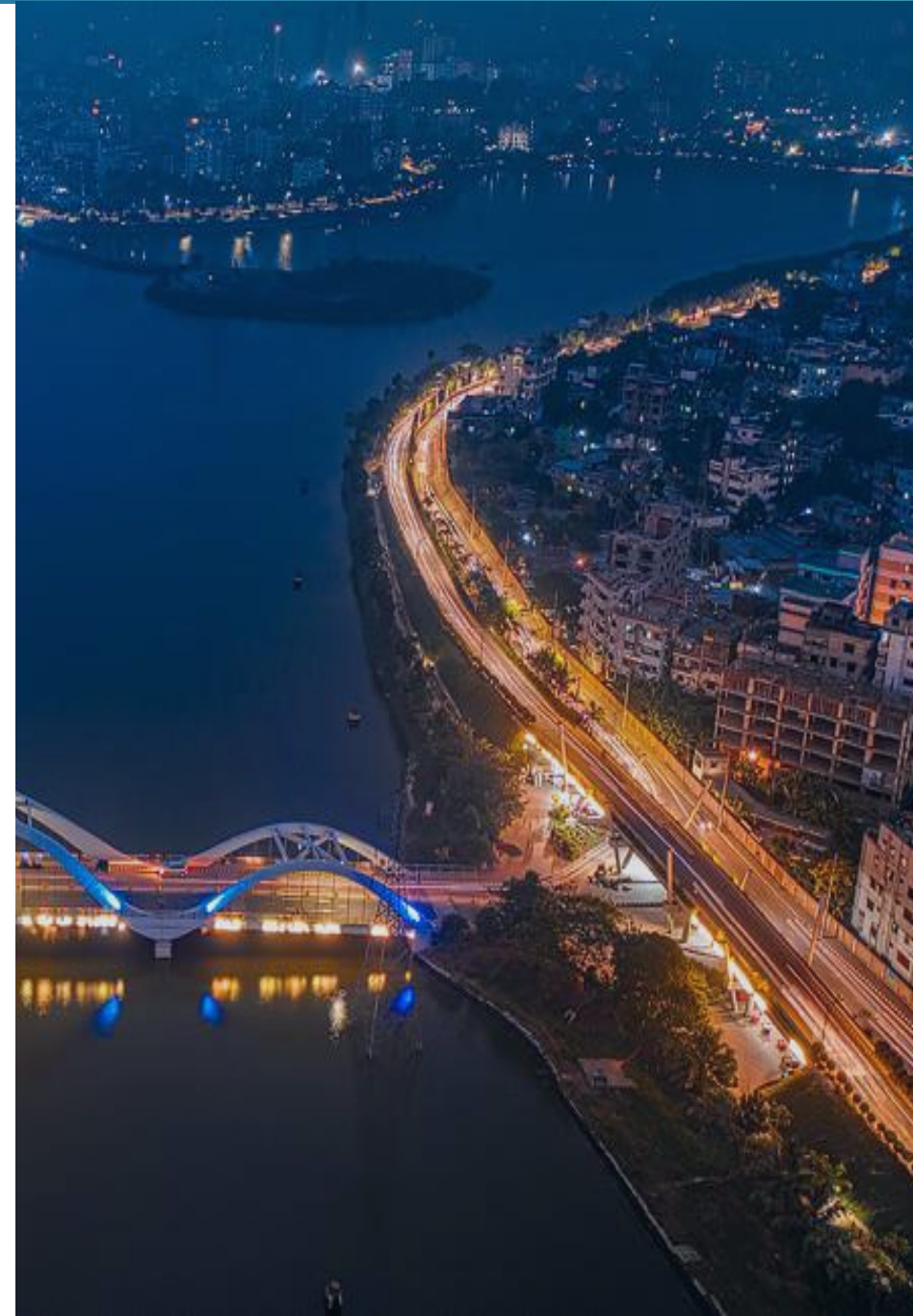
Cabinet Division
Government of the People's
Republic of Bangladesh



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Executive Summary

- The Gov. of Bangladesh's development expenditure will keep growing at a CAGR of 22% (FY2020-30) due to SDGs requirements.
- COVID19 pandemic and upcoming economic recession might plunge the SDG budget higher with significant allocation in – healthcare, education, communication infrastructure, stimulus package disbursement among other essential sectors.
- Presently, 48% of the development budget is financed by external sources (*foreign concessional and non concessional loans, grants*). Due to the global pandemic (*in short to medium term*) and Bangladesh's graduation to Middle Income Class (*in longer term*), the flow of foreign capital will dwindle significantly by 2028.
- Since 2016, Bangladeshi citizens have been saving an annual average of US\$ 46 Bn through formal and informal channels. Last year, total savings hovered around US\$ 103 Bn. Currently, only 6% of the formal savings is being mobilized to finance the development budget.
- A digital financial value chain can mobilize US\$ 118 Bn (*estimated for 2020*) of citizen micro savings, remittances and Zakat at scale and finance specific SDGs.
- Leveraging technology (*i.e. blockchain, cloud computing*), innovative financial instruments (*i.e. crowdfunding, impact bonds, securitization*), partnerships (*i.e. MFS, Financial Institutions, Telco, Startups*), and building a policy sandbox, Bangladesh can create an unprecedented opportunity for its citizens to directly invest in building their own infrastructure while also getting equitable returns.
- A seamless flow of domestic capital for long-term development financing will expunge the reliance on foreign capital market while also expand financial inclusion.



Context

- This initiative is one among the selected pathfinder projects portfolio, catalyzed by the UN Secretary General established Task Force on Digital Financing of the Sustainable Development Goals (SDGs). The Task Force's mandate is to recommend and catalyze ways to harness digitalization in accelerating financing of the SDGs.
- This pathfinder project in Bangladesh is jointly being implemented by a2i (UNDP and ICT Division) and UNCDF. The project illustrates the practical potential for ambitious, game-changing action empowering citizens by providing more and better data, cheaper transactions and financial intermediation, and innovative financial products.
- For more information, please contact: Anir Chowdhury, Policy Advisor, a2i (Aspire to Innovate) Programme, anir.chowdhury@a2i.gov.bd



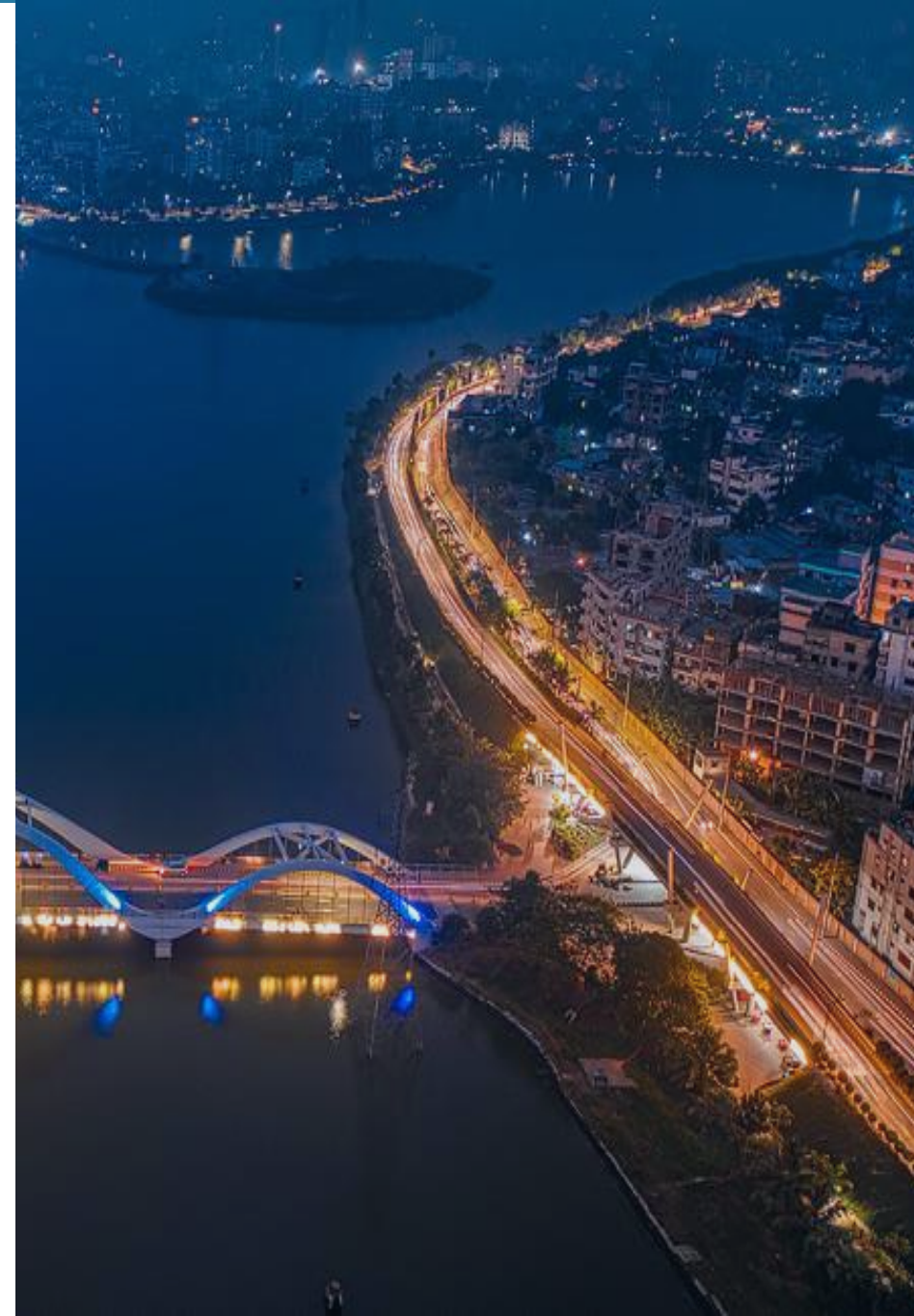
List of Acronyms

AI	Artificial Intelligence	IMF	International Monetary Fund
ASEAN	Association of Southeast Asian Nations	LIC	Low Income Community
BDT	Bangladeshi Taka	ME	Middle East
BN	Billion	MFI	Micro Finance Institutions
BoP	Bottom of the Pyramid	MN	Million
CAGR	Compound Annual Growth Rate	NBFI	Non-Bank Financial Institutions
CPD	Center for Policy Dialogue	NRB	Non Resident Bangladeshis
DFS	Digital Financial Services	NSC	National Savings Certificate
DPS	Deposit Pension Scheme	ODA	Overseas Development Aid
FDI	Foreign Direct Investment	RMG	Ready Made Garments
FDR	Fixed Deposit Receipt	SME	Small and Medium Enterprise
FY	Financial Year	SDG	Sustainable Development Goal
G2G	Government to Government	US\$	United States Dollar
GDP	Gross Domestic Product	Y-o-Y	Year on Year
GoB	Government of Bangladesh		
HH	Households		

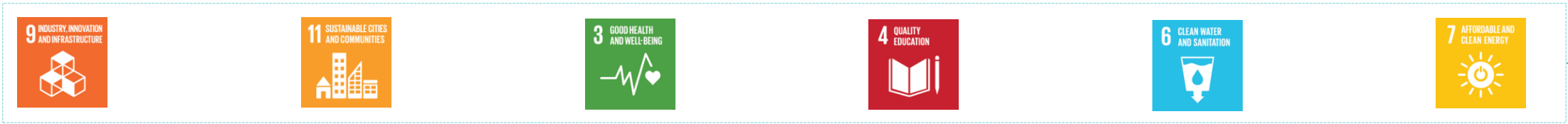


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SDGs



Development Expenditure

Today

Tomorrow

Alternative

Financing

Rising Cost of Fund

Channeling Savings by Bangladeshi Citizens

International 48%

Domestic 52%

Project Aid (Foreign) 35%*

Revenue 27%

Foreign Borrowing 13%

Borrowing from Banking System 19%

Non Bank (NSC & others) 6%

International capital will be 15 to 20% more expensive than domestic capital due to –

- Discounted flow of project aids and increasing interest rates on foreign loans
- Threat of currency devaluation

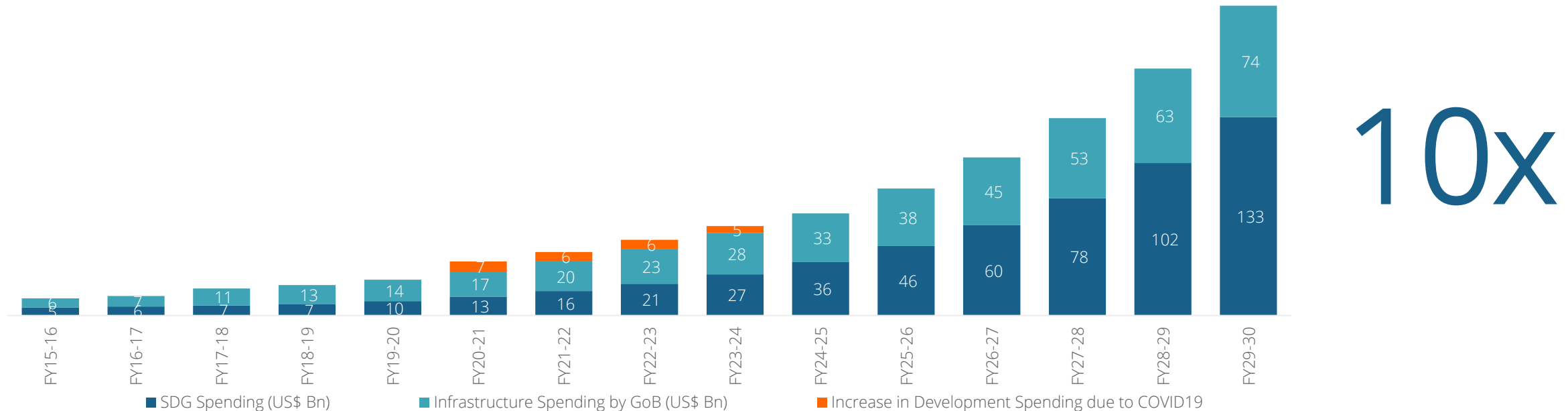
Unprecedented aggregation of micro savings using digital financial value chain

*foreign grants are less than 4% and the rest is concessional loans

Source:
 1. National Budget FY 2020-21, 2019-20, 2018-19; Ministry of Finance
 2. Budget Speech FY 2019-20, FY 2018-19; Ministry of Finance
 3. Demand for Grants and Appropriation : Summary by Ministry / Division: 2019-20, 2018-19; Ministry of Finance
 4. Budget Analysis FY 2020-21, 2019-20; Center for Policy Dialogue

48% of the development infrastructure budget is financed through external sources, by 2030 SDG spending will comprise 88% of the total infrastructure budget

Split of SDG Spending and National Infrastructure Budget (US\$ Bn)



In FY19-20, the infrastructure budget stood at **US\$24 Bn**



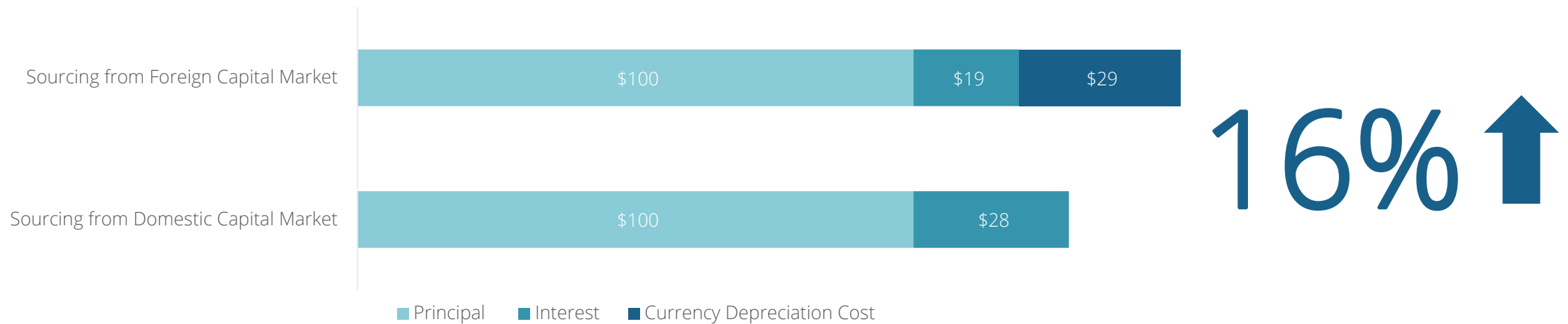
Due to SDG requirement the budget is projected to go up to **10x by 2030**. Government's development **expenditure will rise due to the COVID19 pandemic** which might further drive SDG expenses higher and both **foreign and domestic debt market might shrink**.



More spending is anticipated to occur in building **healthcare infrastructure, blended learning in education** sector, improving **communication infrastructure** and **stimulus package disbursement** in the coming years.

External funding can be cheaper now, but the **cost of fund** will keep rising and International capital can be **15 to 20% more expensive** compared to domestic capital

Procuring US\$ 100: Domestic Capital Market vs Foreign Capital Market



Sources:
Bloomberg, Bangladesh Investment Advisory Board, Bangladesh Bank



Discounted flow of project aids (foreign) and increasing interest rates

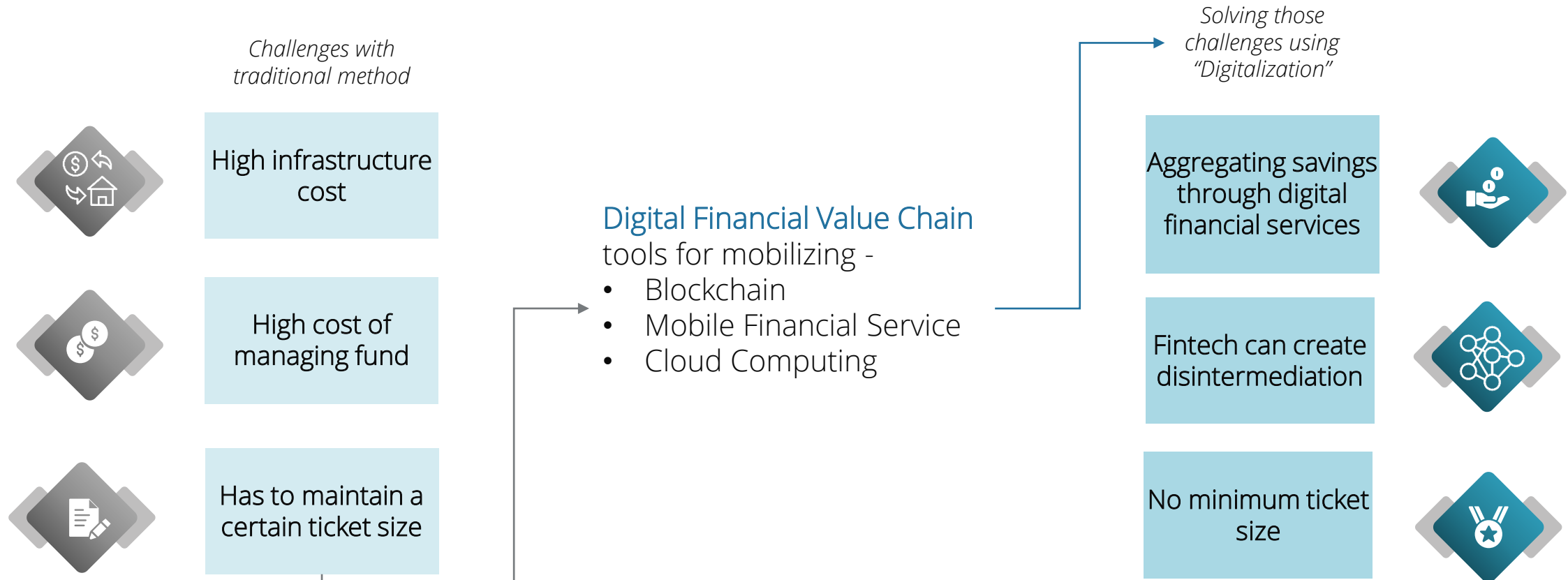


Currency devaluation

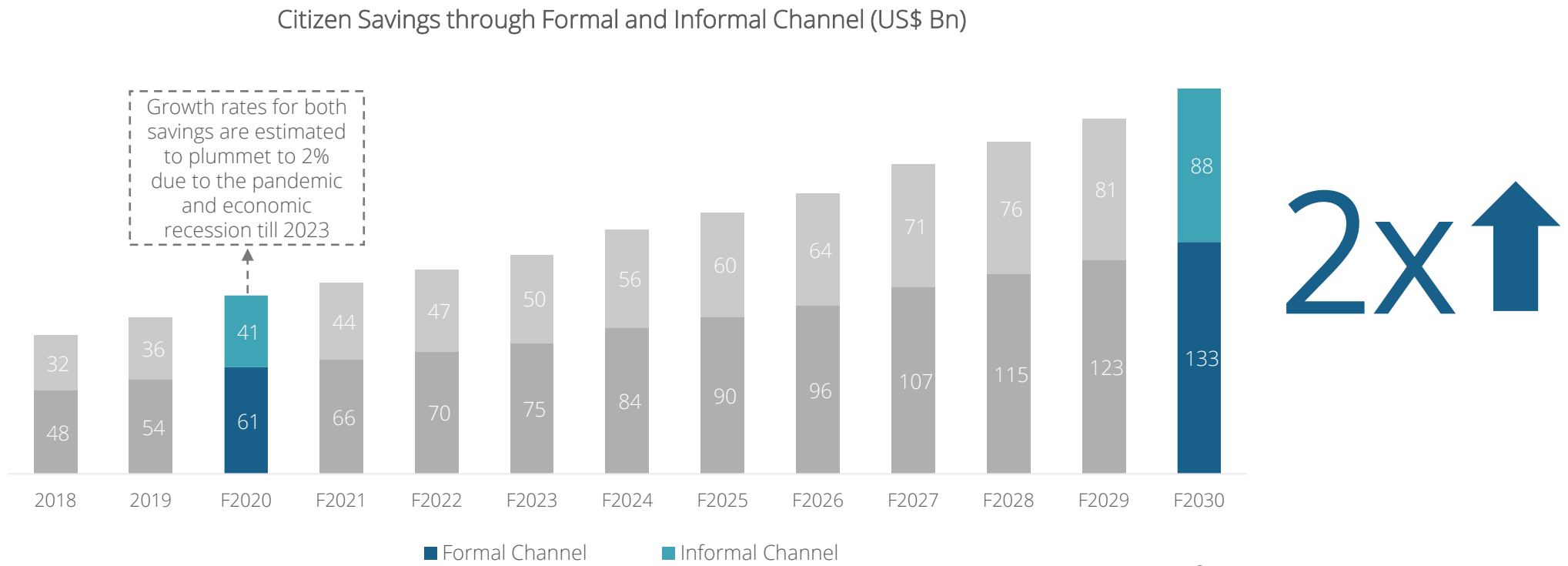
A relative comparison between sourcing from domestic and foreign market capital

Point of Comparison	Domestic Savings	Foreign Market Capital	Winning Sector
Initial Lucrativeness	Initial higher cost makes national savings less lucrative.	Existing infrastructure and availability makes it more lucrative in the short run.	Foreign Market Capital
Equity Outcomes	Better equity outcomes for for micro savers/Bangladeshi Citizens. GoB will pay dividends to its own citizens leading to distribution effect and citizen equity. Citizens have a choice and opportunity to invest in the country's infrastructure.	Payment goes to an international bank or financing agency	Domestic Savings
Cost of Funds	Initial cost of fund may seem high compared to international rates however both borrowing and repayment would be in domestic currency with no Forex risk.	Open to forex risk and expected BDT devaluation will keep driving the cost of fund higher	Domestic Savings
Effect on Forex Reserve	The transactions are done in local currency so no effect on foreign exchange	Puts pressure on forex reserve.	Domestic Savings
Economic Independence	With domestic savings, the country does not have to provide any special advantages to external parties which ensures greater economic independence.	Most of the time, investors impose conditions that bind the recipient to certain conditions like specific trade agreements.	Domestic Savings
Development of Domestic Capital Ecosystem	Innovations in local financial markets including (not limited to) Impact Bonds, Micro-savings, Crowdfunding, Alternate Investments, Securitization, Opportunity to collect micro-amounts at scale across Bangladesh and beyond will create an ecosystem which will facilitate the growth of domestic capital market.	Doesn't directly help in the growth of domestic capital markets.	Domestic Savings

Fintech gives us an unprecedented opportunity to mobilize micro savings at scale



Savings by Bangladeshi citizens will rise **twofold** within the next 10 years



Growth rates for both savings are estimated to plummet to 2% due to the pandemic and economic recession till 2023

Sources:

World Bank Data, Global Findex Report 2017, Household Income and Expenditure Survey 2016, Bangladesh Bureau of Statistics

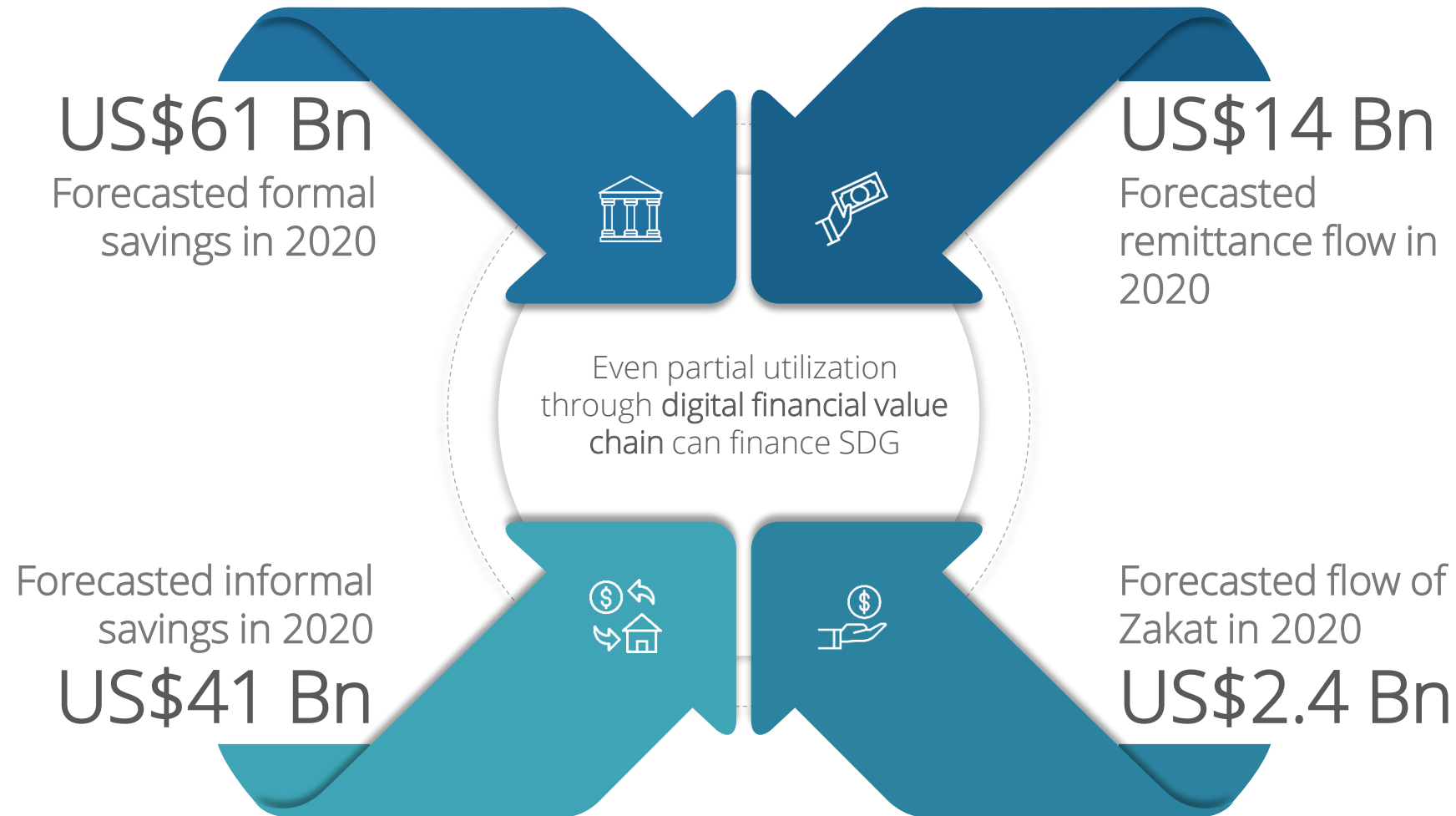


Presently, only **6% of formal saving** (National Savings Certificate) is being invested in infrastructure



COVID19 pandemic and economic downturn might force **middle and affluent class consumer** to spend less and save more while lower income group might stop saving altogether as their incomes are getting affected

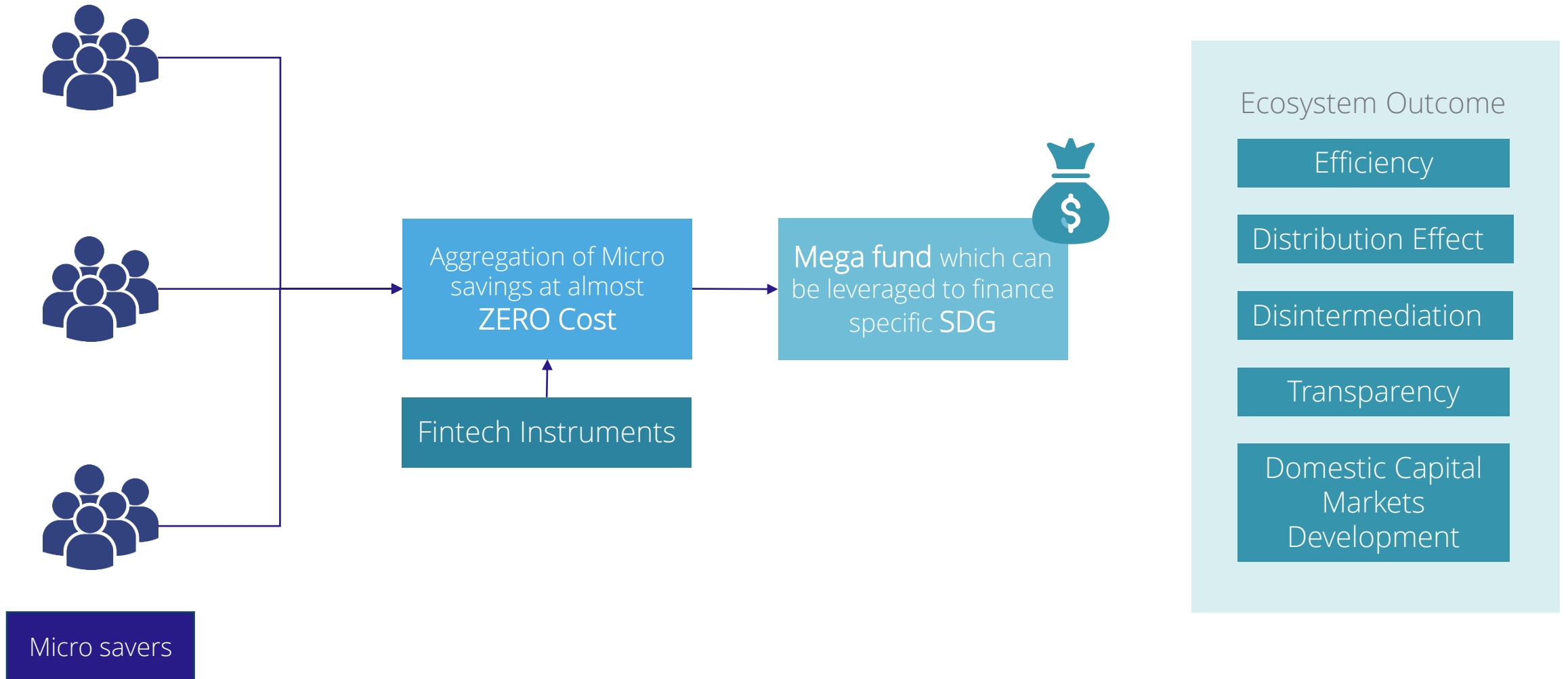
In 2020, savings by Bangladeshi citizens totalling US\$ 118.4 Bn+ can be tapped to finance SDGs



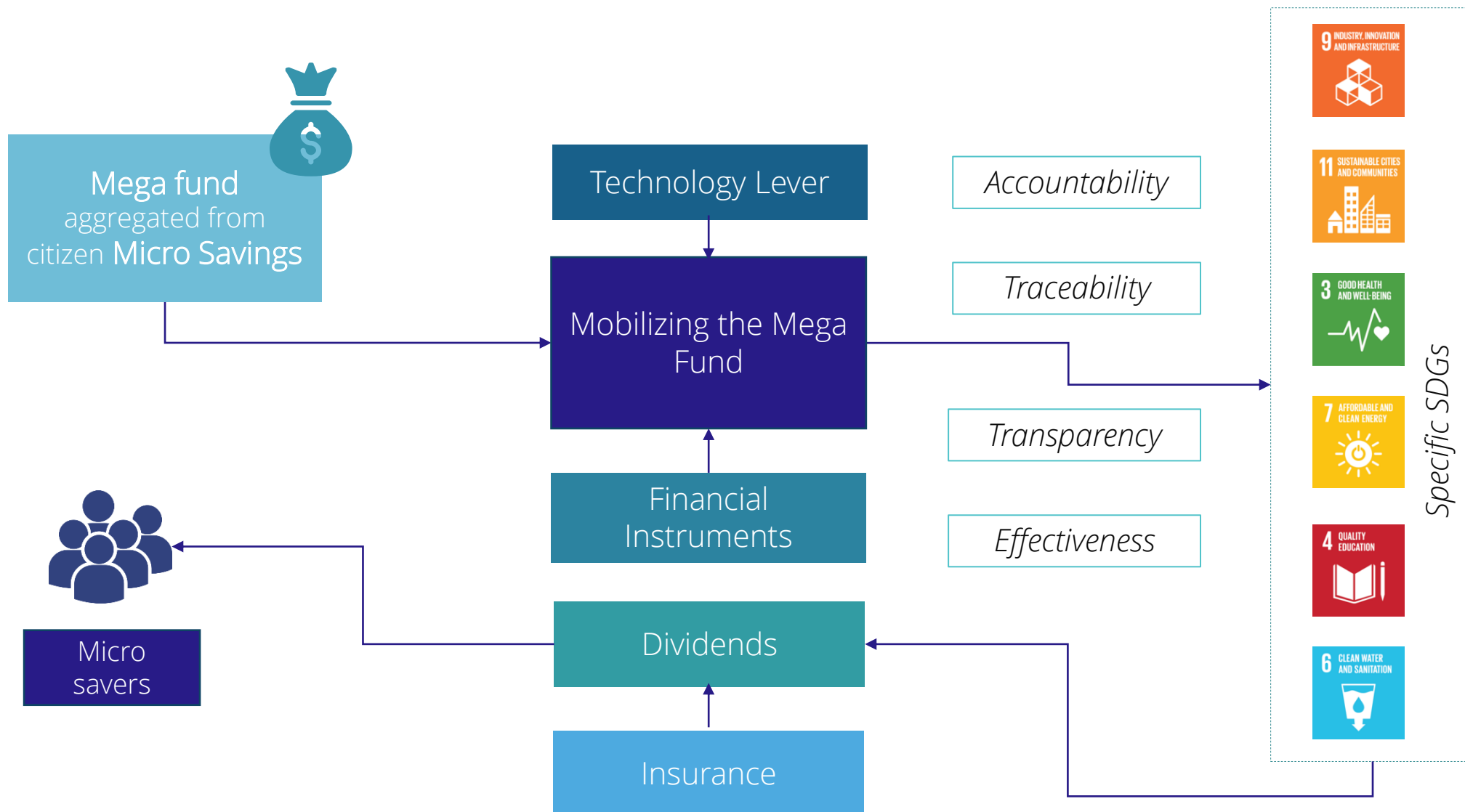
Source:

1. Powering Inclusive Growth In Emerging Economies, McKinsey and Company, 2016)
2. Annual Zakat - Calculated based on expert opinion

Fintech transforms micro saver to micro investor creating significant distribution effect in the economy



Mega fund aggregated from micro savers can be channeled to finance specific SDG projects with traceability using fintech and innovative financial instruments



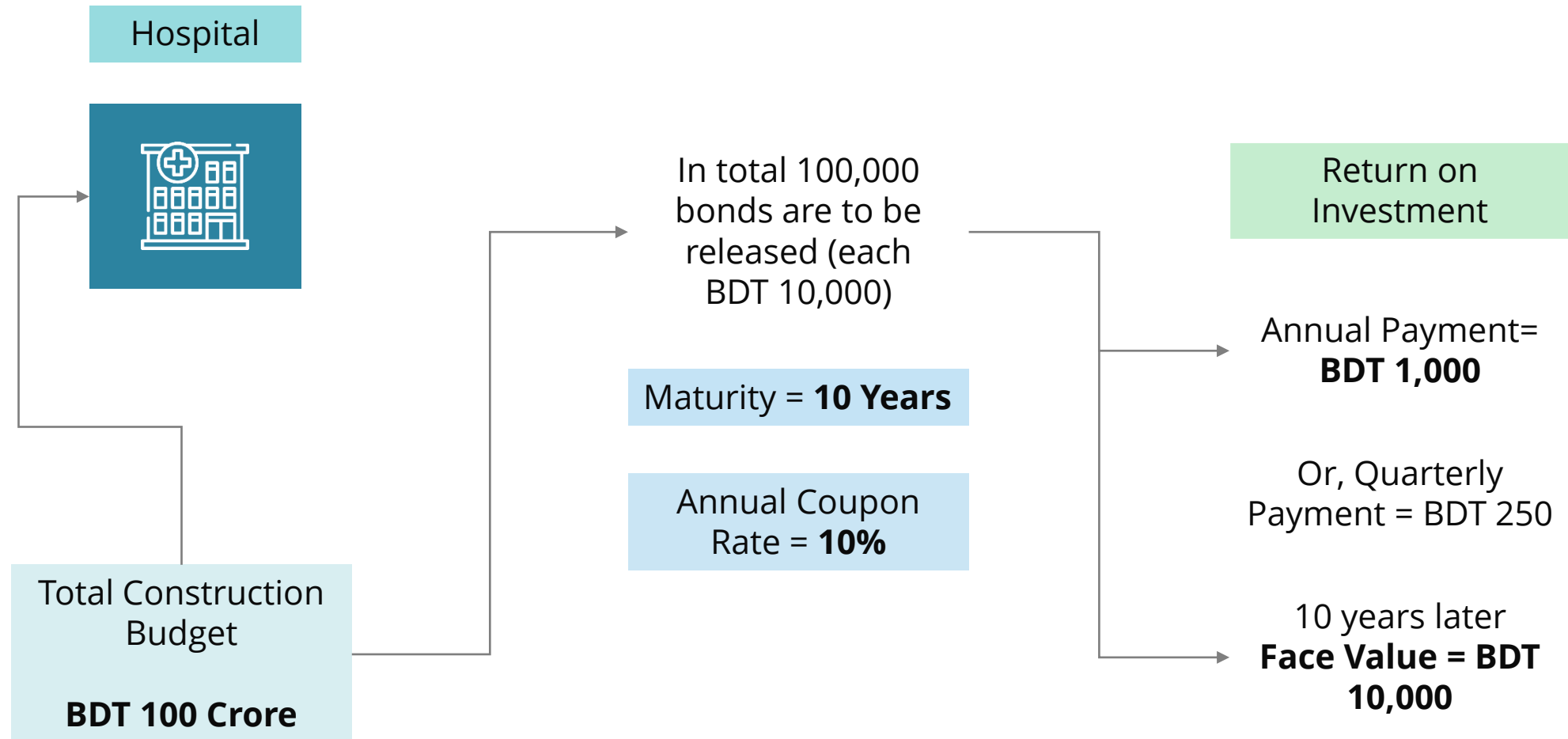
Once invested dividends from the infrastructure go back to the original Micro Investor creating unprecedented distribution effect

Think of a CNG driver paying the toll for using a bridge which has been built utilizing his savings.



Building **Bangladeshi infrastructure** from **Bangladeshi citizens' savings** and ultimately **repaying the citizens** their money through the infrastructure income – can create an exemplary case of **distributional effect** globally!

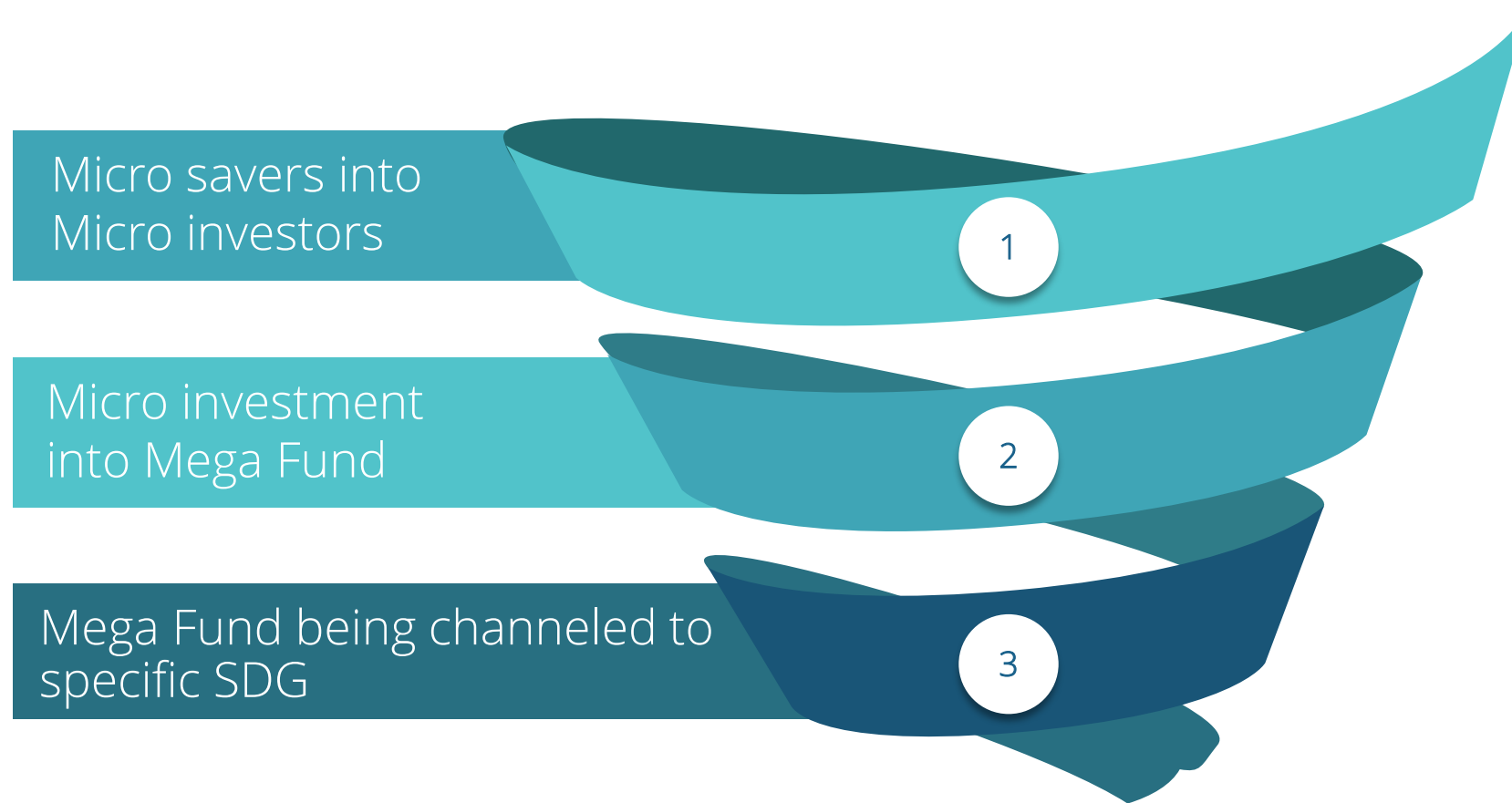
Calculation: Fixed Coupon Rate Bond



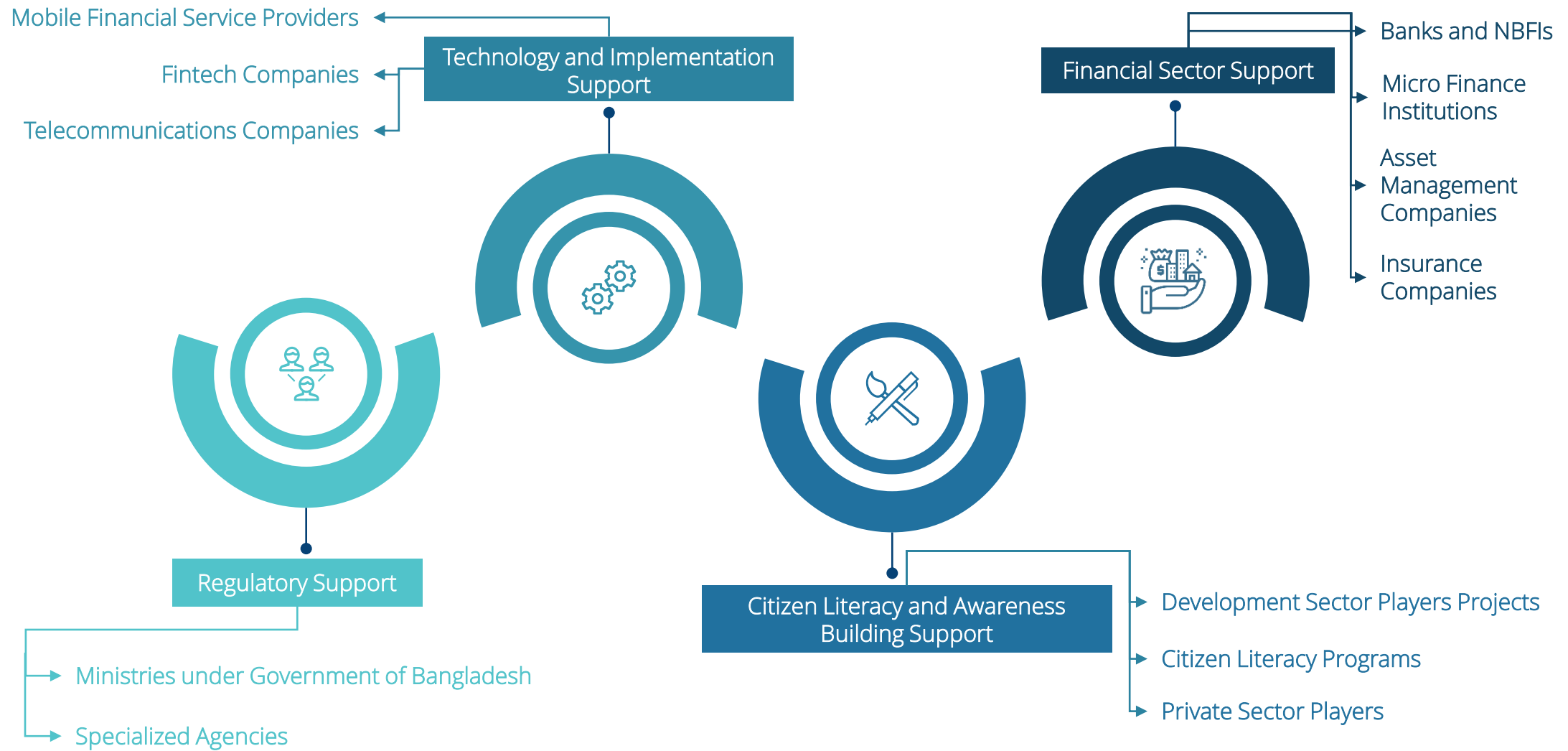
Innovative financial instruments and their relevance in Bangladesh context

Instruments	How These Work	Global Success Story	Application in Bangladesh's Context	For Savers		For Government	
				Liquidity	Security	Stability	Scalability
Securitization	Citizen micro savings can be used to finance big infrastructure project. The savers are repaid by the earnings generated through the infrastructure.	The citizens of Seoul, South Korea, have financed a railways station using their savings. Later they were repaid by the revenue earned from selling tickets.	Can be used for financing large infrastructure (road and transport) projects such as – Padma bridge. The repayment can be generated through toll fees.	Low	High	High	High
Crowdfunding	Funding development projects directly from sourcing money from the citizens can create heightened sense of responsibility among citizens. They will be repaid within a short period of time once the	Ketto, a crowdfunding platform in India, has raised US\$70 Mn from 2.5 Mn donors through 150k campaigns (2012- 2019) .	Following donation, debt or reward model small infrastructure projects such as – repairing a rural bridge or school building can be done using it. The social return of contributing often surpasses the cost.	Low	High	High	High
Micro Savings	Savings by the people belonging to LIC is too small to be included in the formal channel using traditional mechanisms	M-pesa allows people to increase savings, while enabling a data capturing mechanism to tap into idle money (floating money) for further investment across Kenya.	With the application of digitization, micro savings can be transformed into funds	High	High	Low	High
Impact Bond	Donor funding will be released based on the impact created by the investee	In 2016, Educate Girls, a local NGO in Rajasthan India, teamed up with a donor agency in implementing programs to encourage parents to send their female children to schools.	Government can coordinate the activities of private sector investor and donors in creating a steady flow of impact funding	Low	High	High	Medium
Microinsurance	Through micro insurance investment, savers can earn a significant return while government can use that fund.	MicroEnsure, using mobile technology and data-driven approaches, provides microinsurance to small-business owners in Nairobi, Kenya. Users can get pay-out through mobile money services.	Unbaked people can be included to the formal channel using this instrument. Relatively smaller funds can be raised for short to medium term projects.	Medium	High	Medium	Medium
Infrastructure Bond	Infrastructure bonds are borrowings to be invested in government funded infrastructure projects within a country. Issued by governments or gov. authorised Infrastructure companies or NBFIs.	The Central Bank of Kenya has floated a US\$ 236 Mn Infrastructure Bond in May 2020 to assist the Government finance the Nairobi Standard Gauge Railway in FY20-21. The six-year bond will pay an interest of 10.2% per annum.	Financing of large mega projects can be done by launching infrastructure bonds. This also unlocks unprecedented opportunities for public private partnerships.	Low	High	High	High

Summing up the three phases of creating long-term development fund from citizen micro savings to finance SDGs



We need to bring together agencies to create a seamless flow of domestic capital for long-term development financing



Next Steps: A Pilot to get things started: Micro-Savers to Micro-Investor Model

Steering group -

Fintech,
Banks/MFIs/NBFIs,
GOB

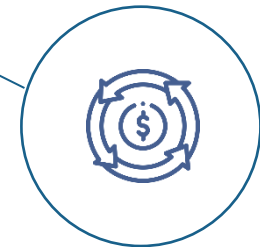


SDG Linked Investment -

Small-scale
Investment for 1 year



Investment to
Return - 1st Year
Pilot Return



Investment
Vehicle - Savings
Mobilization

Policy and Regulatory Support

Proposed pilot projects



Construction/ Renovation of new/ existing public communication infrastructure



Road/bridge that collects toll

Road/bridge Financing



Development /Expansion of a new/ existing Healthcare facility (semi or fully autonomous).



Hospitals, union health complex

Healthcare Financing



Development/ Expansion/renovation of an Educational Facility at peri-urban/rural area



Schools practicing online education, flipped classroom models.

Education Financing

Risk Assessment and Mitigation Strategies

Major Risks	Probability of Occurring	Level of Impact	Response Strategies
Challenges in aggregating micro funds	High	High	<ul style="list-style-type: none"> a. Running a pilot project: Before formally launching the proposed plan, a piloting can be done to identify the underlying challenges in aggregating micro funds. The rationale behind this is to test the efficiency of the suggested financial and technical instruments and measure citizen readiness. b. Citizen literacy program: Awareness programs in partnership with relevant public, private and non-profit organizations, can reduce the threat. c. Policy support: Proper policy support from regulatory bodies and involvement of government agencies can play a pivotal role in increasing citizens' confidence in investing in SDG funds.
High cost of managing fund	Low	High	The key rationale behind suggesting a digital financial value chain in mobilizing fund is that it will minimize the cost of managing fund using traditional methods. Initially, it might seem expensive to design and implement innovative instruments, but in the long run the cost will surpass the benefit generated by it.
Failure in deployment phase	Medium	High	In order to mitigate the chance of failure in deployment phase i.e. inability to target aggregated fund to specific SDGs, two preconditions should be met – <ul style="list-style-type: none"> a. Piloting before implementation b. Ensuring accountability of involved agencies
Failure to adapt fintech	Medium	High	Citizen literacy program can play an instrumental role in increasing fintech adaption. Additionally, appropriate policy guidelines that enable fintech instruments to work as a savings mechanism is necessary to mitigate this challenge.
Inability to bring together relevant agencies	Medium	High	The suggested solution cannot be implemented in silo. Therefore, all relevant agencies such as regulatory bodies, digital financial service providers, telecommunication companies, non-profit organizations, private sector players and financial institutions must work together for bringing about the change. Therefore, before launching the program, each party must be on boarded with the plan.

Impact of COVID-19 on SDG implementation

Impact on the Economy

Export earning from RMG might shrink by US\$ 7 Bn compared to last fiscal

Flow of remittances might plummet by 22% from the previous fiscal year

By the end of 2020, around 6 Mn people will lose their jobs

Poverty rate might rise to 41% from 20.5% (FY19)

52% of SMEs have completely shut down their business

Agriculture supply chain got disrupted and negatively affected the food security of vulnerable communities

16 Mn students might fall out of education as a result of poverty

Public health infrastructure is at the brink of collapse

Directly Impacted SDGs



Indirectly Impacted SDGs



Source:

1. RMG & Remittances Data, Bangladesh Bank, World Economic Forum
2. Poverty level, education, unemployment, South Asian Network for Economic Modeling (SANEM)
3. SME Data, LightCastle Partners and Sheba.xyz Research

THANK YOU

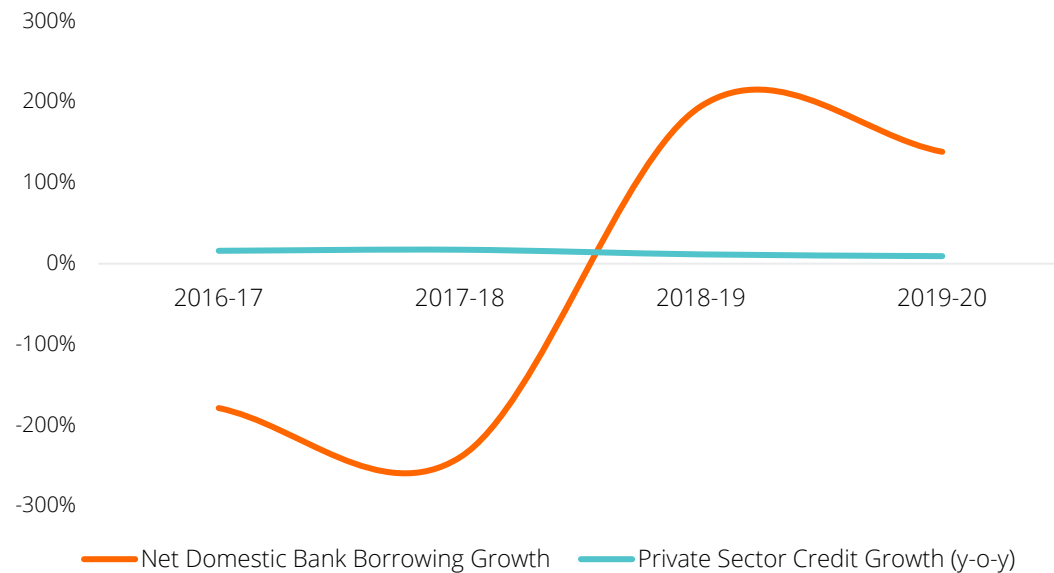


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ANNEXURE

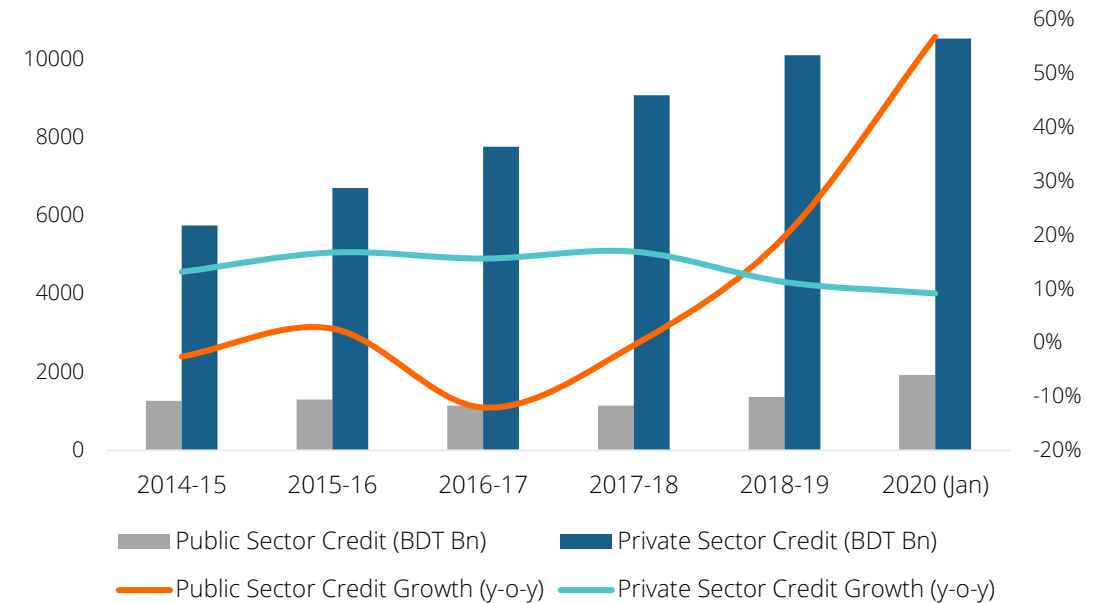
Annex 1: Continuous local market borrowing will lead to a crowding effect and hinder the growth of private market

Government Borrowing from Private Sector vs Private Sector Credit Growth (%)



Source: Budget in Brief, Ministry of Finance

Public vs Private Sector Credit Growth



Source: Monthly Economic Trends, Bangladesh Bank, January 2020

Annex 2: The ecosystem is ready to accommodate a transformation



5th largest mobile market in Asia Pacific



Number of active Mobile Financial Service (MFS) user: **35.09** million

Number of registered MFS account: **75** million



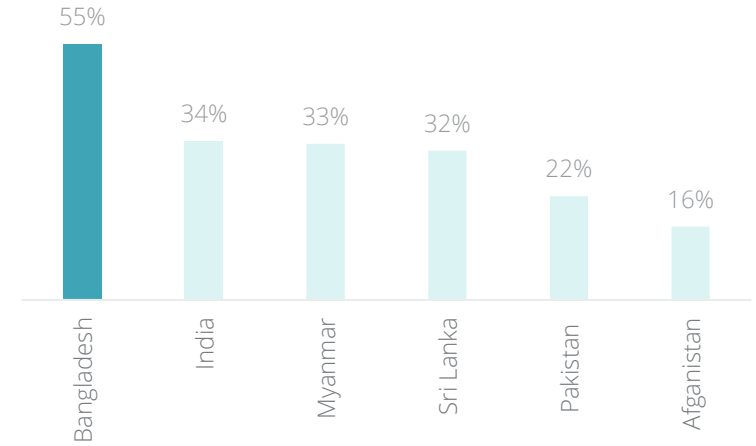
66% of the total population belong to 18-64 age group



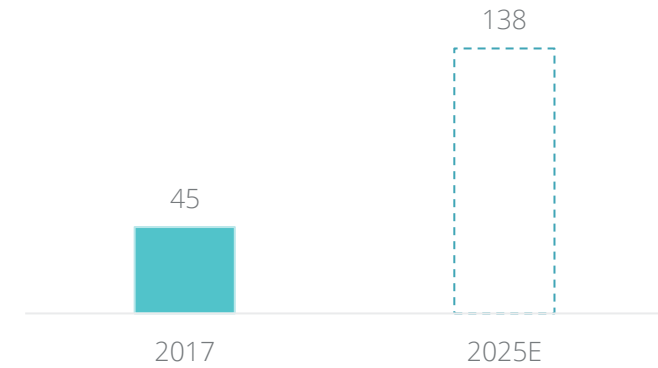
Total number of internet subscribers **90.705** million

94% of the internet subscribers use mobile internet

Internet Penetration Rate (Dec 2018)

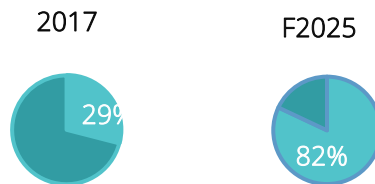


Number of Smartphone Users (in Million)



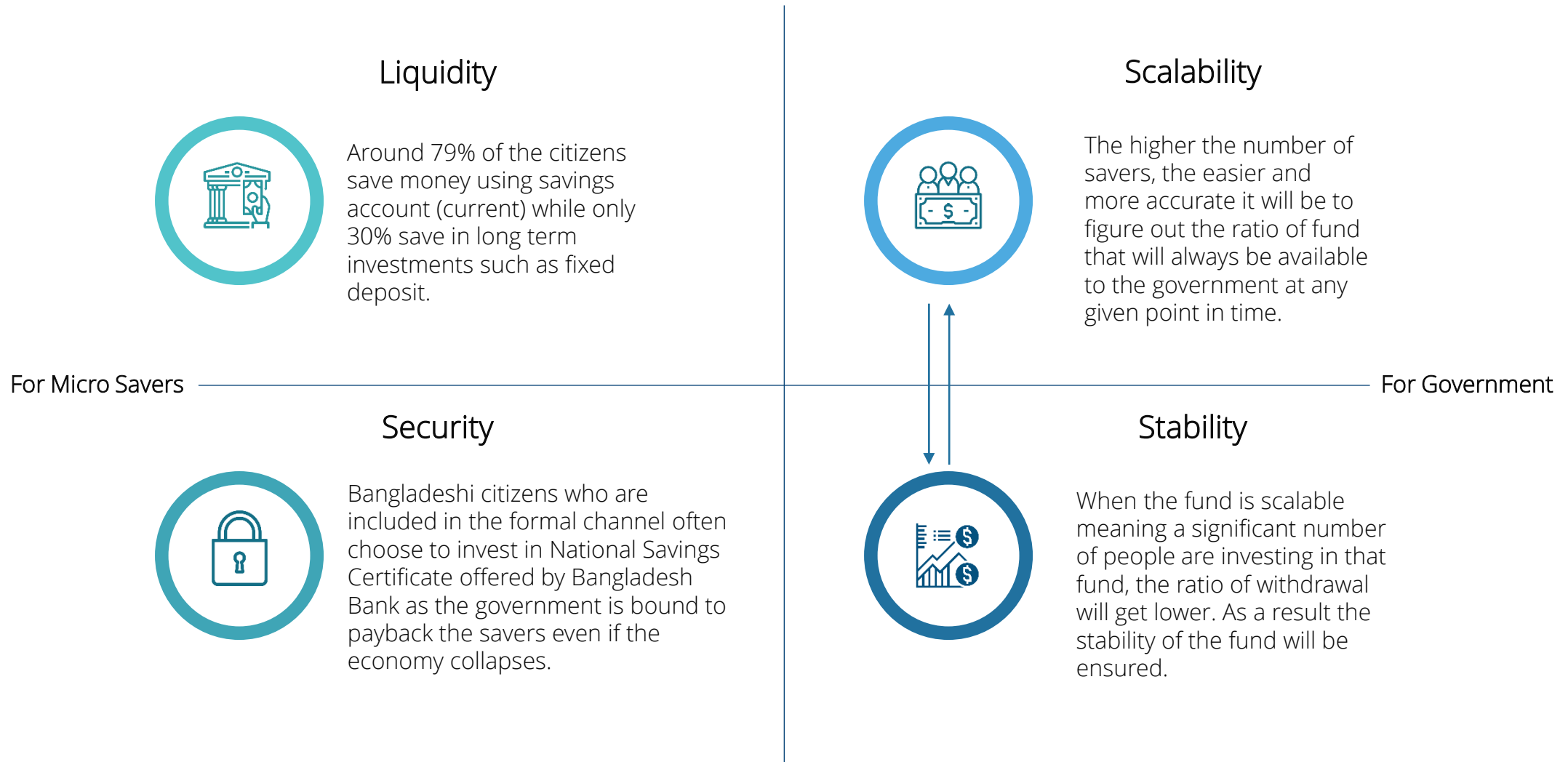
Number of active social media users **30** million

Mobile broadband adoption is assumed to accelerate with the introduction of 4G



Sources: GSMA: Bangladesh Country Profile, Hootsuite, We are social, 2018 Bangladesh, Bangladesh Bank

Annex 3: Requirements to be met by financial instruments for infrastructure funding



Annex 4: Preconditions for the pilot to be in place

Area	Policy Recommendations
Financial Policy	Formulate 'digital banking' license, where they can collect deposit and provide loan by using digital means
Regulatory Support	License for wallet or stored value facility should be open to all - liberalize from the present bank-led model
Regulatory Support	Crowdfunding needs green signal. Many small scale SDG related investments can be attracted through crowdfunding - specially from NRBs
Regulatory Support	Securitization needs green signal. It has the potential to channel large scale SDG related investments
Fintech License	Bangladesh Bank should open a sandbox for Fintech companies. Findings from the pilot can then be used to formulate requisite policy for Fintech companies.