



Keeping the Lights On: What Solar PAYGo Companies Can Do Today to Mitigate the Threat to their Businesses of COVID-19

*Leveraging lessons of experience from
the MSME Finance Sector*

Webinar
April 2, 2020



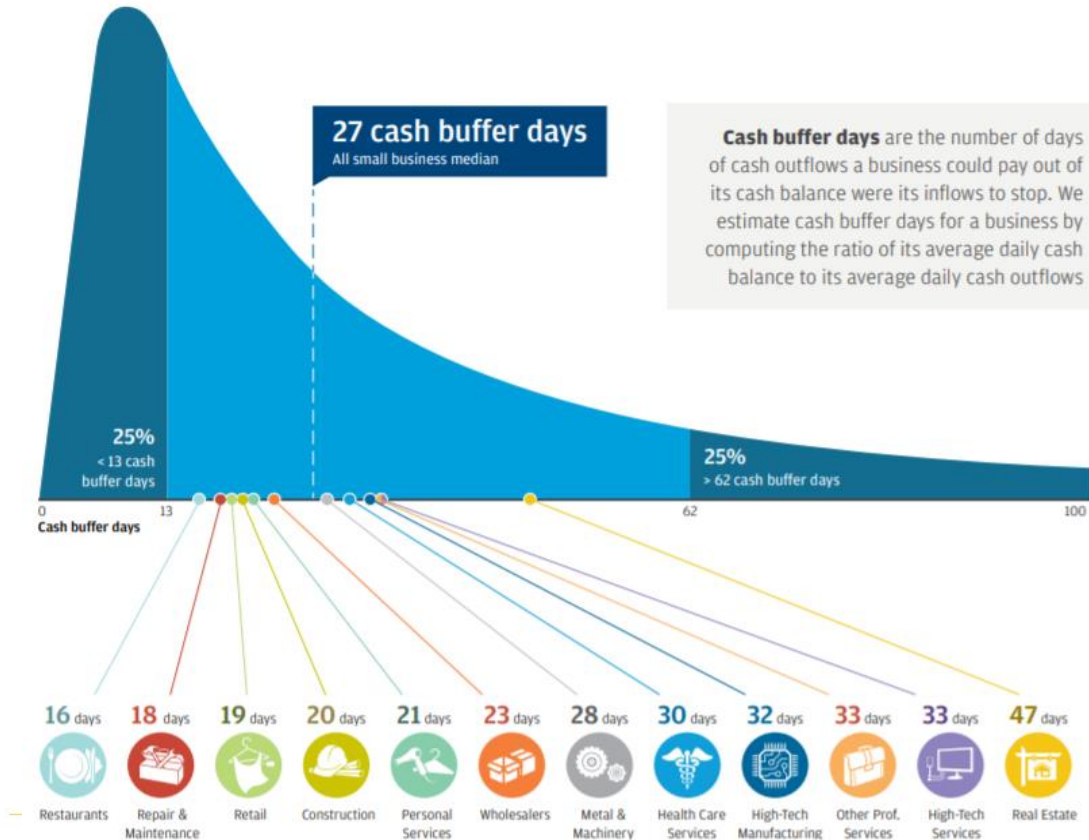
Agenda [1 hour]

- **Introduction** – Russell Sturm, IFC Lighting Global [5 minutes]
- **Managing Large-Scale Market Disruptions: Lessons of Experience In Emerging Markets From the MSME Lending Sector** – Dr. Joachim Bald, Frankfurt School of Finance [30 minutes]
- **Additional Insights for the PAYGo Sector** – Daniel Waldron, CGAP [5 minutes]
- **Q&A** [15 minutes]

What we have seen so far in the
market...

and anticipate ahead

Context: The Median US Market Small Business Holds 27 Cash Buffer Days in Reserve

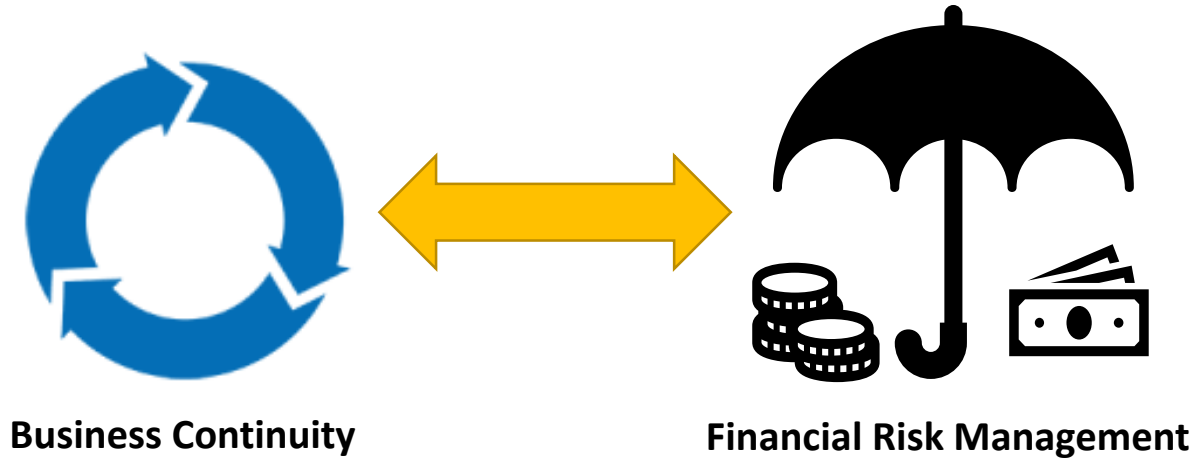


Half of US market small businesses hold a cash buffer of less than 1 month

- 25% of small businesses hold fewer than 13 cash buffer days in reserve
- 25% of small businesses hold over 62 cash buffer days in reserve

Source: [JP Morgan Institute \(2016\). "Cash is King: Flows, Balances, and Buffer Days"](#)

Two Competing & Interdependent Levels of Crisis Management



And positioning to move at speed once you exit the tunnel...



Managing Large-Scale Market Disruptions: Lessons of Experience In Emerging Markets From the MSME Sector

Dr. Joachim Bald (Frankfurt School of Finance and Economics)





Frankfurt School

Managing Large-Scale Market Disruption: Lessons from MSME Finance

2 April 2020

Managing Large-Scale Market Disruption: Lessons from MSME Finance in Emerging Markets

Frankfurt School, Apr 2020

Dr. Joachim Bald

Practice Leader Risk Management, Frankfurt School IAS. Academic Director, Certified Expert in Risk Management. Member of the Board of Directors at Bai Tushum Bank, Kyrgyzstan and at KMF, Kazakhstan. Director and Member of the Investment Committee FIDEF at EFA Group, Singapore.



AGENDA

(1) Introduction and Program Objectives - IFC

(2) How we are advising MSME Finance Providers. - FS

(3) Key Challenges for the Solar PAYGo sector. - FS

(4) How we can help: stress testing tools and analytics. - FS

**Discussion &
Questions
Throughout.**

2 – How we are advising MSME Finance Providers

SME Banks in Emerging Markets

Microfinance Companies
(deposit taking / non-deposit taking)

NBFIs Lenders (leasing, factoring,
supply chain specialists)

Transfer Credit and
Operational Risk
Tools & Analytics

PAYGo
Solar
Asset
Finance

Some Facts and Common Myths

The Usual Myths:

- We have a young population. It's hot and humid here. The virus does not thrive in this climate.
- We work in rural areas in developing countries. Less transmission here and less economic impact, because people just have to keep working.
- Masks are not helpful.

Some Facts:

- More testing, more cases.
- Masks are not as good protecting the healthy as they are keeping the sick from spreading the virus. So, everyone should wear a mask.
- Repeated exposure and total viral load matter. That's why even young medical staff die.
- The minimum time for the epidemic to play out in a particular country / community is 3 months.

WHEN CORONA COMES TO DEVELOPING COUNTRIES



- Indian migrant workers rushing home to their villages before big cities go into lockdown.

Here is what other MSME Finance Providers are doing right now.

1) Taking Care of Clients.

2) Taking Care of Employees.

3) Maintaining Liquidity.

1) Taking Care of Clients

- **Switch to mobile money** / non-cash disbursements and collections.
- **Keep clients informed** of what you are doing for them by SMS / texts / social media.
- **Stop any new client acquisition** and business prospecting activities.
- **3-month (principal) payment holiday** to existing consumer / micro borrowers.
- **Disburse small cash emergency loan** to existing borrowers not in arrears pre-Corona.
- **Assist government or international donors in distributing disaster relief cash** to small businesses, pensioners, rural households through your network.
- **Make client service areas infection proof.** Set up waiting areas and queue ticket dispensers outdoors in tents or under shade roofs to avoid crowding indoors.

2) Taking Care of Employees and Agents

- **Promptly pay current wages and agent commissions due.** Consider a top-up payroll to agents and staff, so that they can take care of the home front first and then focus on clients.
- **Freeze new hiring** and recruitment, stop all non-essential projects and capex, see also “Liquidity”.
- **Stop all in-person training**, non-essential travel and personal meetings.
- **A/B teams:** Split all functional areas top-down into A and B teams who will no longer share the same office space or otherwise interact personally. This should avoid an entire core process / function coming to a halt, once a team member is diagnosed with COVID-19.
- **Maximize remote work arrangements**, set up additional VPN connection interfaces and bandwidth for connecting to your servers.
- **Office hygiene:** extra cleaning shifts around the office, additional glass barriers, distribute masks to staff and clients, additional ventilation, not sharing pens between staff and clients etc.

3) In crisis, there are three things that matter: (1) Liquidity, (2) Liquidity and (3) Liquidity

- **Liquidity is king in any crisis.** Defer any cash expenses that are not directly related to taking care of clients and staff.
- **Draw down any available / committed funding** while you still can. Don't worry about the cost of funding. Liquidity beats profitability.
- **Communicate proactively with investors and key creditors**, obtain covenant waivers, secure emergency funding lines, tap into international crisis response programs, liaise with local authorities and central banks. This applies to banks, MFIs and NBFIs alike.
- **Deposit-taking institutions** need to pay special attention to stabilizing the deposit base: client communication, retention incentives etc. Golden rule in retail deposits: the easier / cheaper you make it to withdraw, the less will be withdrawn.
- **Currency crisis:** In many markets, there will be an additional currency crisis that complicates the liquidity situation: devaluation, convertibility and transfer restrictions.

Forget your business plan. Kiss your bonus 2020 goodbye. Start planning for “the day after”.

The key take-aways

- There will be massive losses in 2020. It's all about seeing the day after as a going concern. Not all institutions will make it. Be one of the survivors!
- The good news is that you are providing an essential service to micro and small-entrepreneurs whose livelihood depends on continued access to finance.
- This is a powerful argument in discussions with DFIs and MSME funders: when this is all over, we still need to be there and come out swinging, so that our clients can relaunch their livelihoods.
- Hold on to your core clients, they will remember you. Hold on to your core staff, they are working hard for you. Hold on to your cash, you will need it.

3 – What is Different for the PAYGo Solar Industry?

Some good news for the PAYGo tech-driven business model.

Some not so good news.

The Good News

- The PAYGo installed base benefits from remote management capability, mobile money payment and call center-based client support. That's a big plus in a pandemic compared to a traditional high-touch microfinance operation.
- The rural client footprint could see slower COVID-19 transmission compared to high density low-income urban areas. But in the end, no village will be spared.
- Don't worry about the equipment supply chain. Chinese manufacturing is coming back on stream. Besides, you will not be selling and installing much high-value equipment during the crisis, because your clients are running out of cash quickly.
- There could be an opportunity to tap into disaster relief grant funds for providing simple self-installed solar lighting and cell-phone charging kits.
- We hear that in Rwanda and in other African markets, authorities have already designated Solar PayGo as an essential service that must continue during crisis. - This may actually be bad news for near-term revenue.

The Bad News

- The PAYGo Solar Industry goes into this crisis with a preexisting condition of poor payment performance, high expense overheads and heavy cash burn.
- If you implement the lights-on payment holiday, it will be difficult to end it and get clients to pay again.
- Your DFI funders and development partners are overwhelmed with requests for emergency funding, rescheduling, covenant waivers from across the globe all at the same time.
- While MSME finance providers can make the argument that it's not about saving the institution, but about preserving access to finance for micro and small entrepreneurs and sustaining their livelihoods, that argument is more of a stretch for the PAYGo industry.
- However, the essential service designation underscores how off-grid solar enables emergency preparedness and communication.

What to do? - Some Ideas

- Liquidity, liquidity, liquidity.
- Reach out to your shareholders, funders, DFI partners early and try to secure emergency funding. Stop the cash bleeding as best as you can.
- Develop plausible scenarios and try to quantify the impact on liquidity and capital, even if the picture is bleak. Creditors and investors appreciate proactivity and analytical clarity.
- No sales promotions, new installs or repos during an active outbreak and the attendant lockdown.
- You might favor cash sales of smaller equipment instead of selling larger items on lease terms.
- Even if clients still have income, they see trouble coming and will hold on to their cash for absolute essentials. Hence, the idea of mobilizing donor funds for small emergency solar kits.
- Unless the lockdowns have already started, one could accelerate pending repossessions while agents can still be deployed in the field. This gives a supply of refurbished equipment that could be monetized in cash sales.
- Plan for the day after and how you might relaunch the solar asset finance business once the crisis is over.

Lessons from the MSME Finance Experience during Crisis

2011 Arab Spring in Tunisia

2015/2016 oil price shock and devaluation in Azerbaijan

2018/19 Kivu Ebola Epidemic in DRC

2015/2016 Remittances Crisis in Tajikistan

2020 Locust Crisis in East Africa

.....

For lessons from past crises, see also: <https://www.cgap.org/topics/collections/covid-19-inclusive-finance>

- MSME Portfolios are more granular and less exposed to first-round crisis effects under many scenarios.
- Geographic diversification beats superficial sectoral diversification every time.
- Strong positive correlation between PD and LGD.
- Behavioral contagion and free ridership are common.
- Stress Loss Rates ($PD \times LGD$) in sectors and geographies impacted by crisis are 3-5 times normal expected loss.
- Quick bounce-back is more likely when crisis trigger is localized, or at least brief and simultaneous, if global.
- Crisis brings out the best in some people, the worst in many. Expect more fraud and crime.

Stress Testing and Analytical Tools

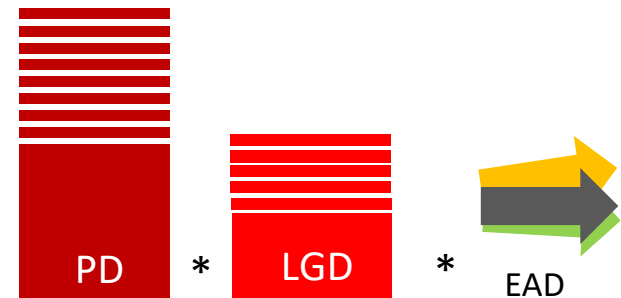
Traditional Unsecured Micro or Consumer Credit

Low-Income Asset Finance

In Normal Operating Environment



Under Economic Crisis Conditions

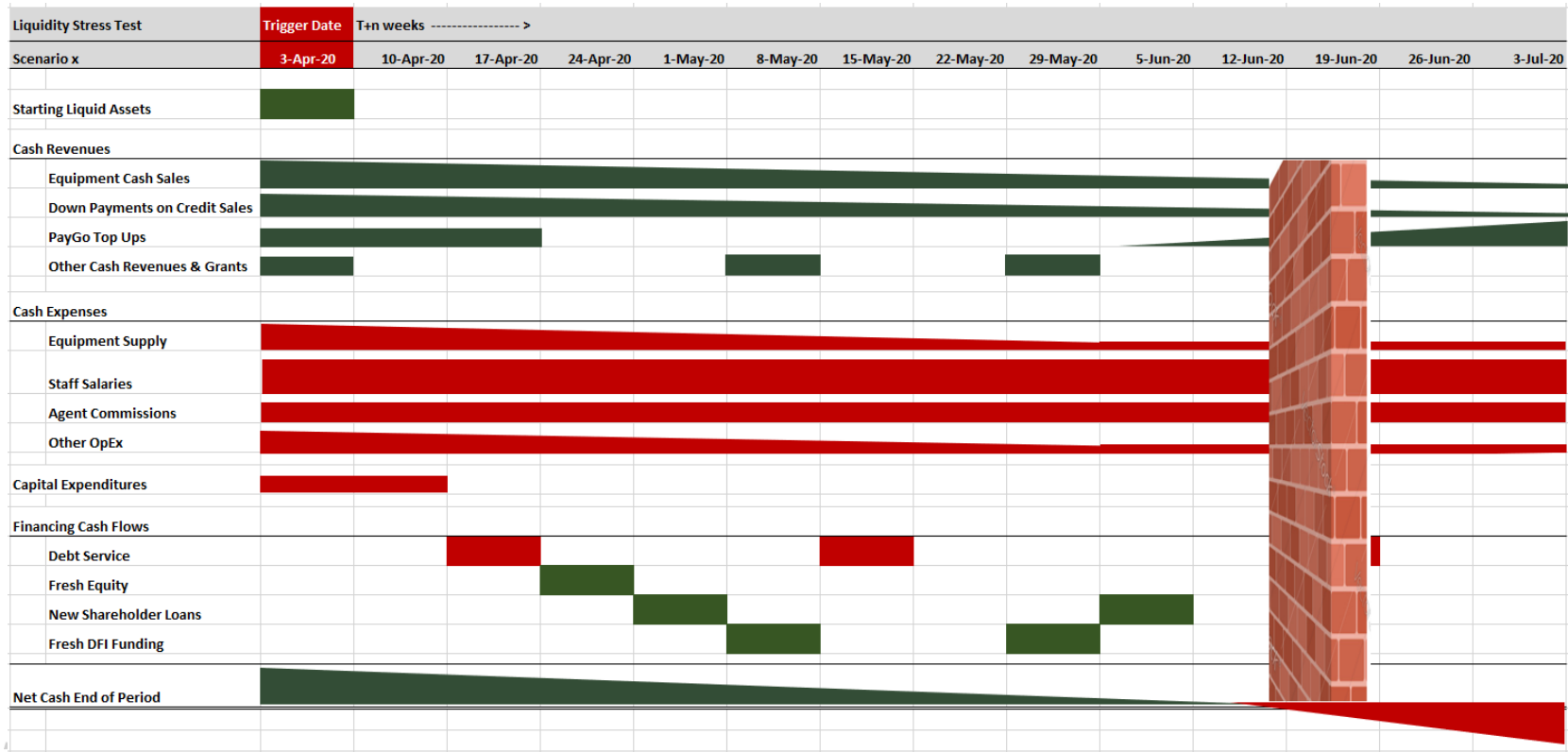


PD = Probability of Default % p.a.
LGD = Loss Given Default % of EAD
EAD = Exposure at Default in Currency Units

Stress Testing and Analytical Tools

Liquidity Stress Testing: Survival Time Horizon given Scenario

(Remaining time to wall)



Frankfurt School of Finance & Management gGmbH

Adickesallee 32-34

60322 Frankfurt am Main

Dr. Joachim Bald

Practice Leader Risk Management / Academic Director Certified Expert in Risk Management

Phone: +49 69 154008 - 634

E-Mail: j.bald@int.fs.de

www.frankfurt-school.de



@frankfurtschool



facebook.com/FrankfurtSchool



youtube.com/FrankfurtSchoolLive



linkedin.com/company/frankfurtschool



instagram.com/frankfurtschool



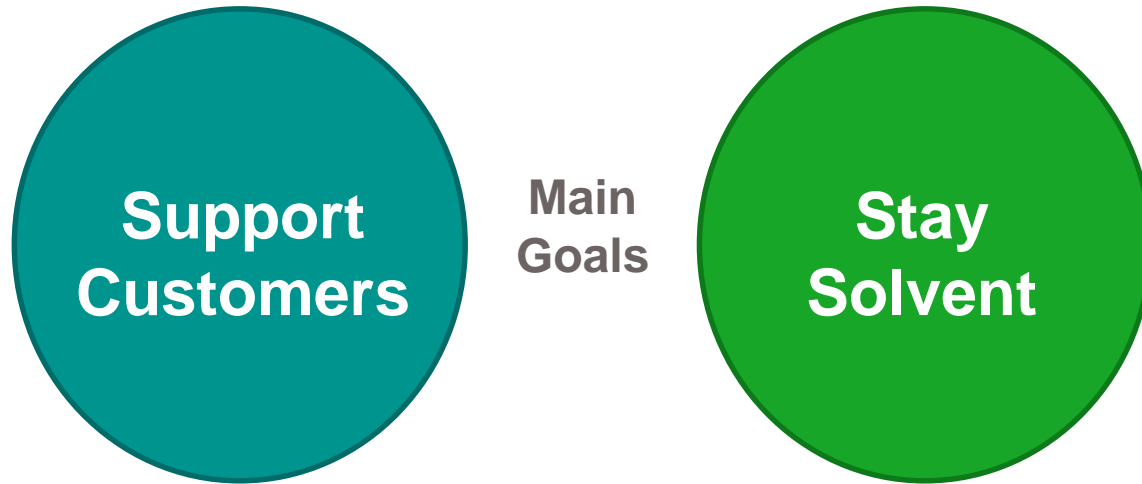


Managing PAYGo Credit Risk in Crisis

Daniel Waldron
April 2, 2020



What are our goals?

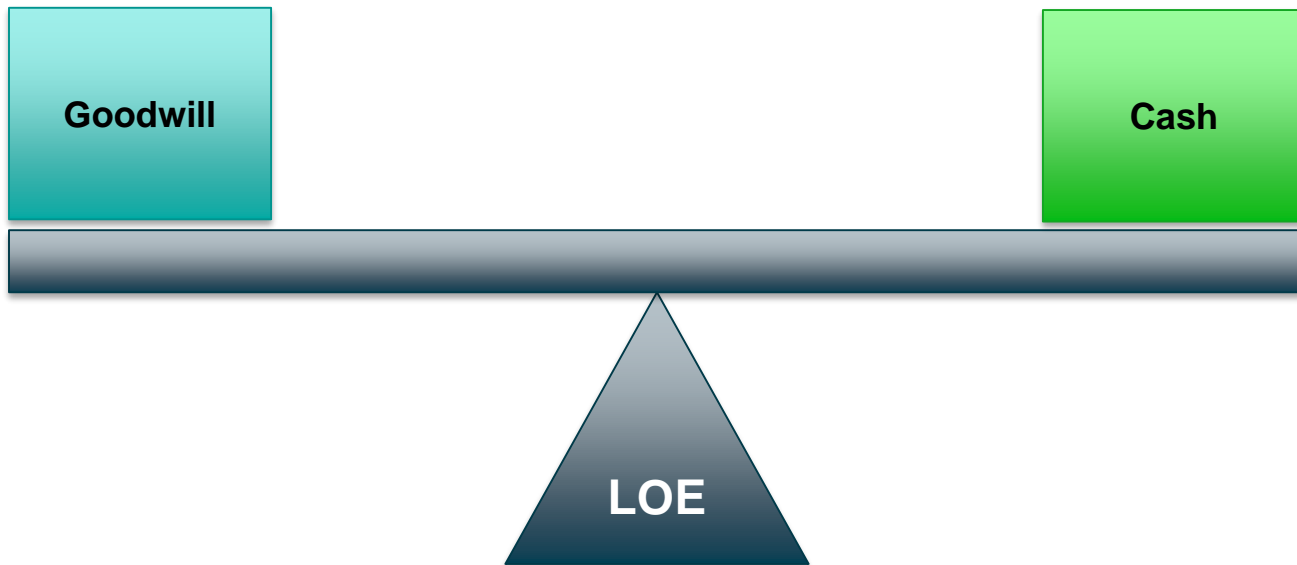


Ideally, we want:

- Customers who can pay to continue doing so,
- To keep the lights on for those who cannot,
- Respond when customers move from one state to the other,
- Resume business-as-usual when the crisis passes.

Cash and Goodwill: finding the balance

- Insistence on repayment from struggling households could lead to reputational issues later
- At the same time, a blanket payment holiday moves 'the wall' much closer
- And complicated compromises may be too costly to implement



Finding the balance

- Simple heuristics can help guide responses to key questions:
 - Who is asked to pay?
 - How much?
 - What are the penalties for nonpayment?
- Edge cases are more complicated:
 - New clients (be wary)
 - Existing but low-utilization clients
- Managing customer expectations is critical, both pre-crisis and pre-normalcy

Additional thoughts

- Well-structured customer feedback can inform credit risk management in these times
 - How are they impacted?
 - How are incomes/expenses changing?
 - Where does solar rank in their priorities?
- There will be a demand for cash loans during the crisis (risky, but valuable) and after it is over
 - MSME lending could help customers get back on feet
 - Opportunity to cross-sell with other lenders



THE GOVERNMENT
OF THE GRAND DUCHY OF LUXEMBOURG



Global Affairs
Canada



Federal Ministry
for Economic Cooperation
and Development



AGENZIA ITALIANA
PER LA COOPERAZIONE
ALLO SVILUPPO



USAID
FROM THE AMERICAN PEOPLE



Korea International
Cooperation Agency



BILL & MELINDA
GATES foundation



Schweizerische Eidgenossenschaft
Confédération suisse
Confederazione Svizzera
Confederaziun svizra

Swiss Agency for Development
and Cooperation SDC



OMIDYAR NETWORK™



Australian Government
Department of Foreign Affairs and Trade



Ministry of Foreign Affairs of the
Netherlands



UDENRIGSMINISTERIET
MINISTRY OF FOREIGN AFFAIRS OF DENMARK



Michael & Susan Dell
FOUNDATION



THE WORLD BANK
IBRD • IDA | WORLD BANK GROUP



Italian Development
Cooperation
Ministry of Foreign Affairs
and International Cooperation



International
Finance Corporation



Entrepreneurial
Development
Bank



Citi Foundation



Q&A



Further Resources

GOGLA: <https://www.gogla.org/covid-19-resource-center>

CGAP: <https://www.cgap.org/topics/collections/covid-19-inclusive-finance>

Please feel free to reach out for additional support:

- IFC: Bill Gallery (bgallery@ifc.org) and Miguel Soriano (msoriano1@ifc.org)
- Frankfurt School: Dr. Joachim Bald (j.bald@int.fs.de)
- CGAP: Dan Waldron (dwaldron@worldbank.org)