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The Impact of COVID-19 on the Microfinance Sector

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EXECUTIVE SUMMARY:

Extreme poverty all around the world has been on the rise in 2020 for the first time in over 20 years. Currently, around 36% of the population lives with less than \$1.90 per day. The COVID-19 pandemic is expected to increase the number of individuals living in extreme poverty by up to 150 million people more. Services designed to combat poverty, such as microfinance institutions (herein referred to as MFIs), need to face this situation and find ways to improve it as quickly as possible.

This dissertation examines the current situation of the microfinance sector in light of the COVID-19 pandemic. Ever since Muhammad Yunus founded the first microfinance program in 1974, MFIs have been alleviating poverty while still earning financial returns. After quickly expanding, most microfinance institutions are found in Asia, South America and Africa, with the majority of clients being women and small farmers in rural areas. The main goals of MFIs are to promote financial inclusion, women's empowerment, and the development of the rural communities of small farmers.

The COVID-19 pandemic has, for the most part, negatively impacted the microfinance sector. After the analysis of secondary surveys and previous research, it is proven that the pandemic has had a big impact on increasing poverty, lower income and a wide variety of governmental restrictions all over the world. Loans have become riskier and defaults more frequent, with just a few of the MFIs being able to use restrictive measures to their advantage. In light of the above, the necessity for tailored services, digital innovation and entering new markets can be arguably the next steps the sector must follow to adapt and overcome the current challenges.

Keywords: *COVID 19, microfinance, women's empowerment, poverty, rural areas.*

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LIST OF ABBREVIATIONS:

- **MFI:** Microfinance Institution
- **NGO:** Non-Governmental Organizations
- **G8:** Group of the eight most wealthy countries of the world
- **WWB:** Women's World Banking
- **USAID:** United States Agency for International Development
- **IFAD:** International Fund for Agricultural Development
- **FAO:** Food and Agriculture Organization
- **UNDP:** United Nations Development Program
- **OECD:** Organisation for Economic Co-operation and Development
- **UNECE:** United Nations Economic Commissions for Europe
- **MSME:** Micro, Small and Medium Enterprise
- **GDP:** Gross Domestic Product
- **GEP:** Global Economic Prospects
- **IDB:** International Development Bank
- **ADA Microfinance:** *Appui au Développement Autonome* (Support to Autonomous Development)
- **PAR 30:** Portfolio at Risk (repayment overdue by 30 days or more)

1. INTRODUCTION

1.1 Overview

“Everyone has the right to a standard of living adequate for the health and well-being of himself and his family, including food, clothing, housing and medical care, and necessary social services, and the right to security in the event of unemployment, sickness, disability, widowhood, old age, or other lack of livelihood in circumstances beyond his control.”

– The Universal Declaration of Human Rights (Article 25). (UN General Assembly, 1948).

Noble prize winner and economics professor, Muhammad Yunus, originated what is now known as “microfinance” with the objective of fighting poverty in India. He considered that poverty creates a social condition which deprives people from basic human rights. During the extended famine of 1974 in Bangladesh, Muhammad Yunus started questioning the economic theories he had been teaching. He believed that the best way to comprehend the necessities of the situation was to opt for what he calls the “worm’s eye view”, which entailed going to the poor households himself and talking to the people that were suffering from hunger. That is how he came to know Sufia Begum, a young woman who survived thanks to her business of building bamboo stools. The business consisted of buying the bamboo for 5 *taka* (equivalent to 22 US cents) and building the stools in order to sell them. However, the only way of being able to get the money to buy the raw materials was to borrow it from what they called the *paikars*. The deal was that she would sell the stools back to them as a repayment of her loan. She made a total profit of 50 *paisa*, or 2 US cents a day. The continuous amounts of labor allowed her and her family to eat barely enough to survive (Yunus, M., 2013).

Seeing that this situation was something that was well extended within the families of his village, Muhammad Yunus decided to make it his life’s mission to change it. He lent 42 families enough money for them to be able to buy the materials needed for their respective businesses and he decided not to charge interest or establish a specific time frame to the loan. The loan, or what we will call “microcredit” added up to a total amount of what would be \$27. The families, most of the borrowers being women, would pay back whenever they saw fit and

could afford to. Muhammad chose to trust these people, since he found that the problem was not personal, but structural. People were not poor because they were lazy or stupid, they were poor because their access to credit was inexistant. The idea worked, these families took advantage of the loans, boosted productivity and were able to repay them in their entirety. Even though people were paying back what they owed, Muhammad was not able to convince the banks to lend money to the poor, as they were still seen as uncreditworthy. Therefore, in 1976, he acted as an interim guarantor and took a loan from the local bank to be able to lend the money to poor individuals in Bangladesh. After realizing that the experiment kept on being successful, he expanded to a total of 100 villages (Yunus, M., 2013). This model of microfinance is currently being used all over the world and it has helped millions of people get out of extreme poverty and hunger, which will be further explained in the sections to come.

1.2. Aims and Objectives:

Historically, Microfinance institutions have been consistently fighting against poverty. Nevertheless, in light of the COVID-19 pandemic they have had to adapt to the new situation. In tandem to the pervasive effect of the health crisis, poverty rates all over the world have been rising, and with them, the need for financial aid. Fighting poverty has always been a struggle, and in the recent years poverty rates appeared to be decreasing. However, the virus has turned the tide, and now the microfinance sector is facing great difficulties to overcome this challenge. Consequently, it is imperative to understand what kind of poverty MFIs are battling, what services they offer and what needs to be done to prosper in the current landscape. The aim of this dissertation is to investigate the difficulties that microfinance institutions have been dealing with since the virus originated, as well as to understand what they can do in order to provide better services in the future and maintain the sector's growth.

The first objective is to understand why microfinance is needed, it's role in reducing poverty, and what type of regions and clients are the services mainly focused on. Moving on, and once the sector is understood as a whole, the origin, as well as the consequent effects of the health crisis will be considered. These include, amongst others, changes in households' income, job loss and government restrictions. Hence, a variety of secondary surveys will be analyzed. These surveys include interviews with microfinance institution owners, loan officers, and clients who have suffered the consequences of the virus and its impact on the economy. The data will be displayed in graphs and will be summarized in order to extract the main

conclusions. The aim of the research not only includes studying how microfinance institutions have been affected, but also how they are, or will be, adapting to the situation at hand. Finally, a series of conclusions and recommendations will be drawn for businesses and institutions regarding what the next steps should be to keep the sector afloat.

2. LITERATURE REVIEW

2.1. The economic necessity for Microfinance

Half of the adults in low-income countries rely on the informal financial system for loans or, in other words, are “unbanked”. This means that they rely on borrowing money from friends and family. Most of the times, there is no interest attached to the credit, while in some cases, informal institutions may charge a minimal interest. Therefore, borrowers that lack collateral and are looking for low interest rates, normally lean on the informal system for financial help, which can potentially lead to market failures in the long term (Demirguc-Kunt & Kappler, 2013).

The theoretical economic explanation for people relying on informal financing is based on five main arguments:

a) The financial repression argument:

This argument derives from the “financial repression” theory (McKinnon & Shaw, 1973). The theory considers that informal finance is a consequence of the State’s intervention in the financial markets. The State sets up a series of regulations and restrictions, including non-market related ones, creating a financially repressed environment. Some of these policies include credit controls, high liquidity ratio requirements, interest rate ceilings, or restrictions on entering new markets. Consequently, the allocation of capital in the financial system turns out to be inefficient, with the supply of credit being reduced and savings discouraged. With the restrictions in mind, many people that demand loans are not able to access credit and, instead, they turn towards the informal financial market as a residual option (Van Wijngbergen, 1983).

b) The information asymmetry argument:

The previous argument blames the external factors of the economy (the State) for the financial repression and market failure. However, Stiglitz and Weiss (1981), consider that the causes are internal. The authors attribute the problem to the existing information asymmetry between borrowers and lenders. The above can be best defined as situations where the lender knows more than the borrower about the content of the credit deal, which can lead to credit rationing and unbalanced loan contracts. Some examples include: i) when within a group of borrowers of the same risk appetite and characteristics, some are offered loans while others are not; ii) the amount of the loan being less than what was required or asked for, and finally, iii) groups of borrowers are excluded from obtaining loans, no matter the interest rate. This asymmetry makes it difficult to identify the risk profile of the borrowers and, therefore, leads to inefficient credit loans. Since the lender does not have enough information about the borrowers' repayment ability and the borrower does not hold full knowledge about the terms of the contract, it can lead to defaults and untailored services. When this occurs, borrowers tend to lose trust in the system and rely on informal practices (Demirguc-Kunt & Kappler, 2013).

c) Transaction costs argument:

This argument defends the idea that sometimes people may choose informal financing even if they have access to the formal banking system. The transaction costs associated to the formal markets are the fundamental cause for this preference (Barham et al., 1996; Chung, 1995). Transaction costs may lead to credit rationing, or dual financing (formal and informal services at the same time). According to Guia-Abiad (1993), transaction costs are “*all non-interest rates expenses incurred by the borrower in applying for, getting the approval and repaying their loans as well as the costs incurred by the lenders in evaluating, disbursing and collecting loans*”. For example, the lender charges the borrower the complete cost of what it takes to prepare a contract. These extra costs can be significant enough for the borrower not to want to take out a loan, especially when the loans that low-income borrowers ask for are usually small amounts. When the transaction costs are larger than the interest associated with the credit, people turn to the ‘unbanked’ system for loans.

d) Contractual risks argument:

The risks that come with the formal loan contracts can also be an explanation to the demand for informal financial services (Boucher, Carter & Guirkingner, 2008). One of the main risks is the one that comes with the collateral clause in financial contracts. Requiring collateral

means that in case of default, the lender gets to keep the asset that the borrower pledged as collateral in the contract, which entails the extra risk for the borrower of losing that asset. In the informal system, people have the option to borrow without collateral, which would diminish the borrower's risk. The higher the collateral required for the formal loans is, the more probable that the low-income borrowers will resort to informal practices.

e) The commitment argument:

Apart from credit, saving is also a very important service demanded within informal finance. Members of the financial systems have declared that it is hard for them to save and that they turn to the informal system in order to achieve a strict savings routine (Besley, Coate & Loury, 1993; Baland & Siwan, 2002; Ambec & Treich, 2003). Individuals prefer to take out a loan and spend the money instead of saving it for the future, when the reward could be greater (Frederick, George & Ted, 2002). As a consequence, they require an independent service that complicates expenditure and advocates saving. This form of external commitment is mostly found in informal practices by most low-income individuals.

Microfinance institutions serve as a response to the afore mentioned issues and provide clients with better adapted financial solutions and tailored products more suited to their needs. In order to provide the right insights, MFIs must understand these necessities. Many times, this entails accepting that clients require mixed financing, which may include a formal bank account and other forms of financing, or saving, to the side that are considered informal. With this in mind, it is clear that there is a door open for the microfinance sector to explore the specific products that would help their clients and come up with new ways to improve the system. Financial inclusion for all has been one of the main objectives of MFIs since the beginning, when the first official institution was founded: the Grameen Bank.

2.2. The Origins of the Sector

2.2.1. Microfinance Sector in Bangladesh

The Grameen Bank (known as the "Bank for the poor") was first founded in 1983 by Muhammad Yunus as a separate bank to help the impoverished of Bangladesh when the traditional banks would not. The Grameen system completely disrupted traditional banking, by

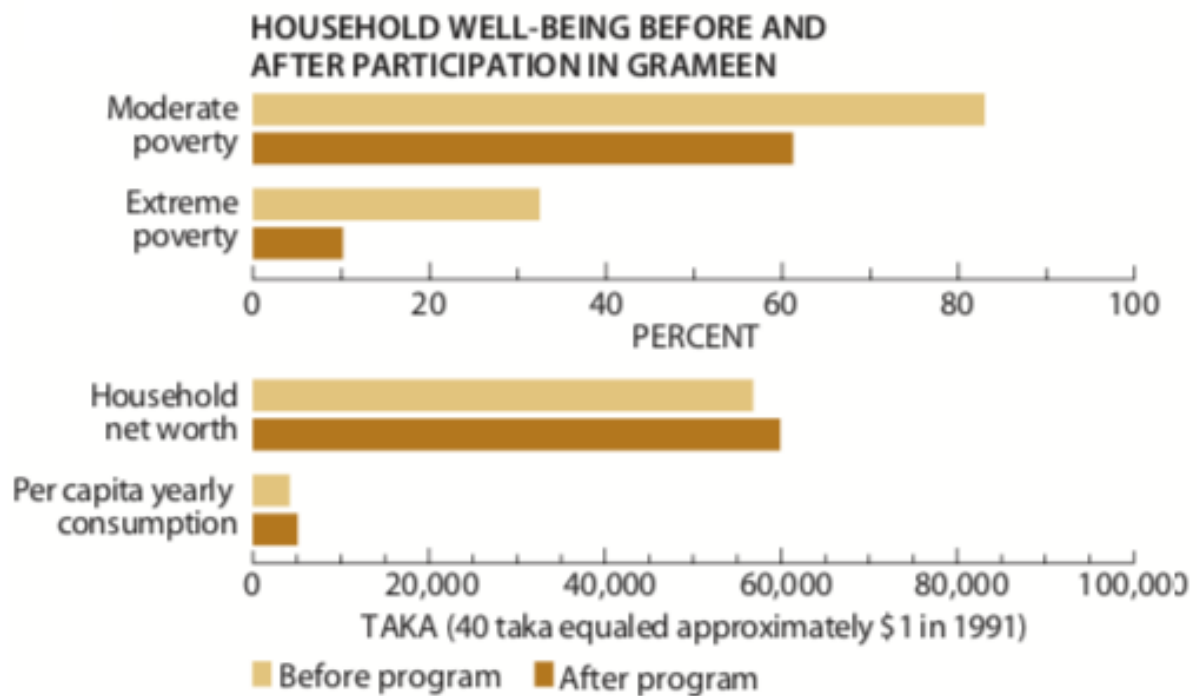
offering small loans to poor populations with no financial guarantees required in return. The system was based on the principle of joint responsibility, where solidarity between the members of beneficiary groups was essential. Women who had been excluded from the financial systems served as the main client target since the beginning. The main reason as to why women were financially excluded all over the world is because they were considered unreliable borrowers. The associated economic dependence towards their husbands, as well as the social pressures imposed against them, stopped these women from being able to start their own businesses and contribute to their household's income (Ajwani-Ramchandani, 2017). Overcoming society's deterrents and helping women gain more economic independence was one of Grameen's main goals.

The bank required no collateral from its borrowers, which was something never seen in the conventional world of banking. Instead, it required them to join by self-forming groups of five in which the group members would provide each other support in the form of assistance and advice for their businesses. After evaluating all of the businesses' viability and ensuring that the groups would be able to repay their loans, they were accepted as part of the Grameen Bank program. In case one member failed to repay their loan, everyone in the group would risk their line of credit, which could be suspended or reduced. Although it was risky, the program turned out to be successful (Yunus, 1999). Since then, the bank has opened branches in over 80,000 villages, extending credit access to over seven million beneficiaries just in Bangladesh (97% of whom are women) (BNP Paribas, 2017).

The program started off with a unique procedure in which the new group of borrowers asks for loans for just two of their members, each one of them between \$25 and \$100. After these two borrowers have repaid their installments in the first five weeks, the next two group members are allowed to apply for their loans. Finally, when the latter couple has successfully paid their first five debts, the last member of the group may apply. After one of the borrowers in the group has reached the target of 50 repayments, that borrower pays his or her interest, which is usually slightly higher than the commercial rate. At this point, the borrower becomes eligible for a bigger loan. What makes the process unusual, apart from the procedure described above, is the fact that Grameen staff "brings the bank to the people", in other words, they travel to the villages themselves and meet with people to provide them with their services and help. Moreover, they often visit current borrowers in order to check the state of their businesses, their financial health, if they are profitable or not, and if they need additional aid. This could be analogous to services of due diligence and consulting.

The efficiency of the bank during its first years in terms of reducing poverty, both moderate and extreme, is shown on Figure 1 below. Extreme poverty shows the biggest impact after the program is established, being reduced by more than 50%. In addition, the implementation of the new bank was able to increase household net worth and per capita yearly consumption.

Figure 1: Levels of poverty and net worth before and after The Grameen Bank service



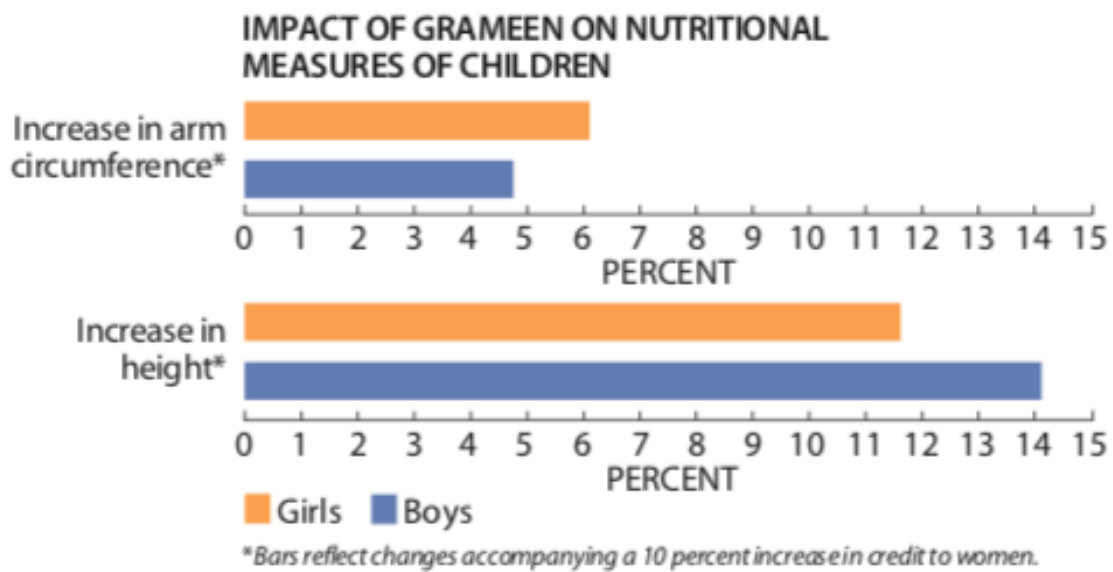
The Grameen Bank

Source: *The Grameen Bank. Scientific American, 1999, p116*

However, it is not just the credit that defines the benefits of the service. The Grameen Bank also provided non-financial services for their members. All the way through to 1999, in order to join the bank, members were required to memorize 16 resolutions regarding common hygiene and health, such as drinking clean water and eating vegetables, as well as social covenants, like managing family size and refusing dowry (money given to men in arranged marriages) (Yunus, 1999). These resolutions, although not always met, have benefited, both for the women who recite them and borrow from the bank, and for those around them. Thanks to these initiatives, women started adopting contraception and the population growth rate in Bangladesh decreased in the upcoming years. Figure 2 portrays the impact of the service on

children’s health (weight and height) due to better nutrition. Girls gained more weight in comparison to the boys, who increased more in height. Various additional studies were carried at the time by authors such as Schuler and Khandeker, who proved the loans’ effectiveness when it came to improving women’s economic security and status within their family, as well as the nutrition and schooling of their children. The statistics of these studies show that in a typical year, 5% of borrowers, which would amount to 125,000 families, rise above the poverty level. In practice, things are not as easy as they seem and many times the money lent to a woman would be appropriated by her husband (The Financial Times). As a way of ensuring that the bank only serves the poorest, clients were limited to those that were living at less than half the poverty line conditions. Otherwise, by mixing poor clients with wealthier borrowers, the latter would have taken up the majority of the groups, for they are considered to be more reliable financially.

Figure 2: Impact of Grameen’s service on nutritional measures of children



Source: *The Grameen Bank. Scientific American. 1999, p.118*

As time progressed, the Grameen Bank evolved in many ways. With its expansion, came the necessity for hiring managers in the different branches and a University degree was required for the position, which led to most of the roles being filled by men. Even after being criticized for the majority of managers being men and for it being a profit-making institution instead of charity, its status remained strong and, with it, its viability. The accountability of the bank has been key to its success. By not allowing defaults, but instead making exceptional cases in which they would issue new loans and give borrowers more time, the program has

been distinguished as accountable (Yunus, 1999). In addition, the Grameen Bank has been self-sufficient since 1995, with 96% of it owned by its borrowers and the remaining 4%, by the government (Khandeker, 1995).

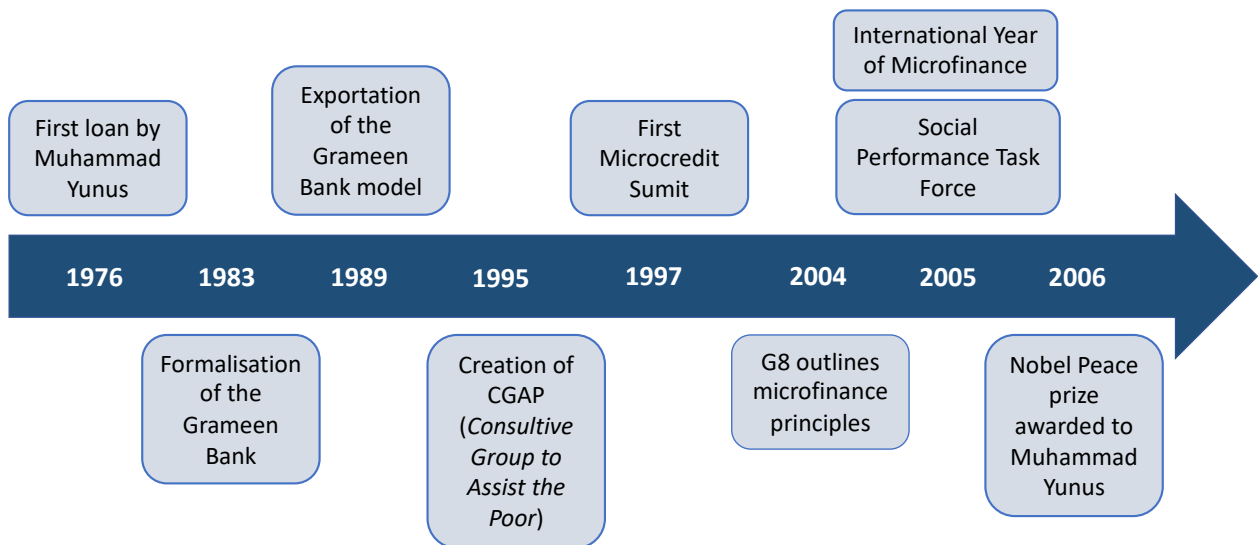
2.2.2. Global Microfinance Sector:

During the 1980s and 1990s, Grameen Bank's model of microcredit lending was mimicked all around the world with the help of various financial institutions, as well as some non-governmental organizations or NGOs. Gradually, a fully integrated microfinance sector was created within developing countries. Institutions were being built with the intent of expanding the global microfinance network. In due time, dozens of microfinance institutions (MFIs) were set up in India, and in South America the company ACCION created the initiative "BancoSol" as a nonprofit organization for financial inclusivity and impact investing. The global rise of microcredit took part in the early 21st century. In 2004, seven years after the first microcredit summit, which took place in Washington D.C., the G8 (group of the eight most wealthy countries of the world) outlined the principles of microfinance for the first time. Microfinance was being considered as a potential new economic sector. 2005 came to be known as the "International Year of Microcredit", and in 2006, Muhammad Yunus was awarded with the Nobel Peace Prize (BNP Paribas, 2017).

By 2016, the global sector counted with over \$10 billion, invested solely by firms within the private sector (BBVA, 2016). At the time, analysts forecasted a growth rate of 15.56% for the global microfinance market between 2016 and 2020, which would now make an approximate amount of \$11.6 billion invested in the sector (*Global Microfinance Market*, 2016). Moreover, due to the help of MFIs over time, more than 700 million people have been able to access the formal financial market (BBVA, 2016).

The following timeline illustrates the evolution of microfinance since its origins and highlights some of the most prominent events throughout history:

Figure 3: The Evolution of Microfinance timeline



Source: Preceden – The Evolution of Microfinance

2.3. Principal target sectors:

Microfinance institutions offer their services to two main types of clients: entrepreneurs and farmers. All of them share similar characteristics: the lack of collateral, credit history, or other assets to enter the formal financial system (Datar, Epstein & Yuthas, 2008). Within these two groups of clients, MFIs target two, more specific, niches of borrowers: women and small farmers in rural areas (Schuler et al., 2010). As has been mentioned herein, the main target for the microcredit loans have always been women in need. However, there is an additional and important geographical target to be discussed, which focuses on rural areas. More concisely, the rural areas within the three main continents covered by microfinance services: Asia, Africa and South America (*Center for Financial Inclusion, ACCION*). These regions will be the geographical areas of focus of this dissertation, and the main clients considered when talking about MFIs will be women and small famers in rural areas.

2.3.1. Sector by gender: Women

Women are, in most cases, the main target client for MFIs. Microfinance is meant to empower women and allow them the opportunity to set up their own businesses whilst contributing to the economy of both, their households and their region. However, there are different opinions on the issue. The following section will provide some of the arguments, both for and against, women being the main client group for MFIs. Both opinions are valid and,

hence, not necessarily mutually exclusive. They simply outline that for microfinance institutions to be profitable, both repayment and operating costs must be taken into account.

- *Arguments for targeting women:*

In principle, according to most microcredit lenders, women have historically been considered to be a better target than men. The main three arguments for this are: gender equality, reducing poverty and the continuing efficiency of MFIs (Mayoux, 2001). As for gender equality, microfinance allows women to feel more empowered by enabling them to undertake income-generating activities, which increase their earnings and, in turn, allows them to have more control over the family income and in-house decisions (Flores-Anchundia & Valdés-Peréz, 2020). These effects are reflected in social, psychological and political frameworks. Women gain self-esteem, self-confidence, a higher status within both the family and the community, increased mobility and a greater presence in public spaces (Cheston & Kuhn, 2002). Regarding poverty reduction, women, in comparison to men, invest a larger part of their income into the wellbeing of their families. This causes a domino-effect where a dollar loaned to a woman has a greater impact on development rather than a dollar loaned to a man, as speculated by the World Bank in 2007. Moving on to the efficiency of MFIs, a vast majority of experts argue that women tend to be more disciplined and docile than men, which ensures better repayment rates, meaning higher MFI efficiency and profitability (Armendariz and Morduch, 2005; Mayoux, 2011; Molyneux, 2002; Rankin, 2002; Fernando, 2006). Large international organizations, such as Women's World Banking (WWB), Microcredit summit, USAID and the World Bank, agree that microfinance should primarily target women (Mayoux, 2001; Fernando, 2006).

Since the year 2000, when the Millennium Development Goals were established, the expectations for improvements on women's empowerment have been increasing. The third goal of the afore mentioned objectives, stresses promoting gender equality and the empowerment of women. Microfinance programmes are playing an important role in supporting this goal. However, the change is still difficult to measure. In order to keep track of the change various studies have taken place, with only a few them being able to measure the impact rigorously (Pitt et al. 2006). Women's empowerment is a complicated concept to accurately measure, since it is unquantifiable, so it is treated as a latent variable instead. Considering empowerment as a measurable variable by creating indices would be an

inappropriate technique, since it would drag along arbitrary weights (Khandker, 2006). Therefore, reflections on the subject have led to definitions of what is considered to be 'women's empowerment'. Kabeer (1999) describes it as "the process by which those who have been denied the ability to make strategic life choices acquire such ability." This ability refers to three main concepts: the ability to access and claim material and social resources; being able to take part in the decision-making process; and the ability to take on projects and achievements that carry well-being consequences within.

Self-confidence is one of the attributable consequences to the empowerment of women, however it does not necessarily mean that a self-confident woman is automatically empowered (Cheston & Kuhn, 2002). The true empowerment of women in low-income countries with restrictive policies comes from the ability to challenge those norms and cultures that oppress women and, eventually, be able to improve their lifestyle. Self-confidence is an important factor in order to be able to develop this mentality. In other words, as women become more self-confident, financially stable and independent, they gain bargaining power within the family, which in turn, leads to their empowerment. Nonetheless, this process takes time and microfinance programs are aware that it may take years until women's empowerment can be observable in a significant manner.

Finally, and as a way of highlighting the relevance of the issue, these are some quotes from authority figures regarding the importance of women's empowerment through microfinance services and the economy:

"Everyone benefits when women have the resources they need to participate fully in our economies and societies"

- (Canadian Prime Minister Justin Trudeau, 2017)

"Women's economic empowerment is critical to achieve the inclusive economic growth required to end extreme poverty, which is why it has been such a longstanding priority for us"

- (World Bank Group Ex-President Jim Yong Kim, 2017).

- *Arguments against targeting women:*

There are of course, differing points of view on the matter. Some authors may suggest that focusing on women actually pushes MFIs to drift away from their mission. They argue that the institutions should be helping a more profitable client sector, such as urban male, which

would provide better financial stability to repay loans (Copestake, 2007; Cull et al., 2008). These authors treat women as a burden to the microfinance sector and they consider that they should be excluded from financial services.

Targeting women leads to contrasting conclusions: “Women pay better but cost more” (D’espallier, et al., 2013). The nature of women is considered to be more risk adverse (Jianakoplos & Bernasek, 1998; Schubert et al., 1999) and with a more cooperative behavior than men in terms of repaying the loans (Hartmann-Wendels et al., 2009). As for the cost effect, it is not so much driven by gender, but rather by the size of the loan that is given out. Women are more inclined to childbearing responsibilities in many cultures, which leads them to adopt more prudent decisions when taking on risk, which in turn leads to them requesting smaller loans that do not surpass their repayment capacity (Armendariz and Morduch, 2005; Phillips and Bhatia-Panthaki, 2007). On one hand, small loans carry minimal interest, which is not ideal for the MFI’s financial return. However, borrowing prudent amounts of money can be seen as an advantage in risky and unpredictable circumstances, such as COVID-19. In this case, by being more cautious, women have had lower default rates than men during the pandemic (Azar & Mejía, 2020).

Furthermore, women deal with more discrimination and adverse treatment due to a feeling of self-exclusion in which they are not able to ask for what they are entitled to. In addition, gender stereotypes also influence financial loan officers and managers, who might be inclined to believe that women are less likely to succeed in the entrepreneurial world, due to a lack of leadership or decision-making skills (Treichel and Scott, 2006). Discrimination serves as another argument underscoring that women receive less financial help than men (Agier and Sfaraz, 2010).

2.3.2 Sector by geographical location: Rural Areas

a) Investing in agriculture and its impact on reducing poverty:

According to the IFAD (International Fund for Agricultural Development), the best way to end poverty and hunger is by targeting the rural sector. The rural population of developing countries consists of around 3.1 billion people, which, in turn, accounts for approximately 40% of the global population (FAO, 2017). On the other hand, out of the number

of people living in extreme poverty (defined as surviving on less than a \$1.90 per day), 80% of them come from rural areas, mainly concentrated in South Asia and sub-Saharan Africa (UNDP). These poor families depend on their farms for income and survival; they also have the responsibility to support their communities. That being so, by investing in small farmers' businesses within rural areas, several of the current hunger problems would be solved. It is considered to be a long-term investment. Small farms not only provide food for the citizens, but they can also create labor for unskilled workers. By stimulating the rural economies at their core and providing food for the rest of the civilization, it has been confirmed that investing in rural areas, especially in the area of agriculture, is an effective way to contribute to the wealth, peace and security of the most needed (FAO Investment Officer, 2016). Just in sub-Saharan Africa, investment in agriculture has turned out to be "11 times more effective in reducing extreme poverty than investment in any other sector" (IFAD, 2020).

In 2009, the OECD (Organisation for Economic Co-operation and Development) carried out a study in which 25 developing countries were chosen in order to estimate the correlation between investing in agriculture and poverty reduction. People were interviewed from different sectors, including both, agricultural and non-agricultural ones (ex: industrial). Another form of aid that was taken into account, were remittances, whose effect was contrasted with that of agricultural investing. Remittances are constituted by the money that family or friends working abroad send over to their loved ones in developing countries. The latter has been one of the most efficient ways of reducing poverty as of today. However, the study concludes with the idea that investing in agriculture is more efficient when it comes to reducing poverty from a group rather than an individual perspective, thus being more beneficial to the community as a whole. Out of the twenty-five countries (all of them included in the continents of focus), the decrease in poverty throughout 1980-2005 was 35% due to remittances, 52% due to agriculture and just 13% of the decrease came from non-agricultural sectors.

b) The necessity for tailoring services:

Although investment in agriculture has had a great impact on improving lifestyles, financial solutions require customization to meet specific client needs. Rural activities are highly dependent on weather conditions, and so is the income they provide, which is why MFIs that focus on rural areas are required to apply innovative, cost-effective services that adapt to clients' needs and conditions. Moreover, rural populations are widely dispersed over large

areas of land and they usually lack proper infrastructure (roads or buildings). Microfinance institutions frequently have trouble reaching these areas, so they need to come up with innovative ways to tailor their services to the needs of their clients and that of their respective communities. Additionally, development organizations have to consider clients' mobility impediments as well as cultural beliefs and religions. A couple of common solutions to this type of tailored service are decentralized management and mobile branches, which constitute a higher cost for the MFI. A rural finance network in a remote area is around 80% more costly than it would be in a more accessible region (IFAD,2020).

The need for financial innovation and customization increases with time as the unmet demand becomes a real issue. In comparison to the number of people who need financial aid, the actual access that these people have to the services is minimal. Despite recent changes, agriculture is still believed to be a sector with high operational and transaction costs, as well as a sector that is characterized by, not only low returns, but also a lack of information for credit assessment. These are the main reasons why commercial banks are still reluctant to provide services in rural areas. What is more, despite high governmental subsidies, lending programs for agricultural countries have normally given sub-par results. Other governmental directives have restricted development banks from innovation, leading to rural financial products that are unsuited for their clients' needs. In contrast, small farmers, or the borrowers in this case, experience constraints to access financial aid due to their credit history, poor financial literacy and lack of collateral. Since MFIs do not possess enough variety of services or financial instruments within the rural industry, official loan providers rely on heavy amounts of collateral from agricultural workers. The collateral, in itself, has its own policies and relies mostly on land tenure as to preserve livelihood assets of the community. However, the different policies and restrictions prevent farmers from accessing the low-interest loans, which require higher collateral. Instead, they turn to higher interest loan, which ask for less collateral in return but have a higher risk of default, all adding up to decreasing the efficiency of MFIs.

As a solution to the challenges mentioned above, regarding the unmet demand in rural areas, microfinance institutions have been focusing on developing different financial instruments and alternatives in order to help the most needed farmers and be able to adapt to their individual necessities. Amongst these alternatives, microfinance institutions have been increasingly adopting what is called the "Value Chain Approach". This approach relies on the

internal relationships of the business and how valuable these are for the purpose of reducing default risk (instead of simply focusing on the borrower-lender relationship). The most common value chain for microfinance consists of four levels: investors, microfinance fund, microfinance institutions (MFIs), and micro-entrepreneurs (Fanconi and Scheurle, 2017). By regarding the interrelationships between these four players and the capability of lending and repayment, it is easier to get a sense of what the default risk is. Furthermore, the fact that the borrower does not simply depend on one single lender, and vice versa, reduces credit risk for all parties involved. The agricultural sector's uncertainty and, therefore, higher perceived risk, has to take advantage of this approach as a way of complementing – and not replacing – the conventional financing solution (Pera, 2016). Involvement in value-chain financing has proven to expand credit access for rural families in need of customized financial products that are more diverse, cheaper, and flexible (Hernandez, 2015).

2.4. COVID-19 pandemic and its impact in the sector

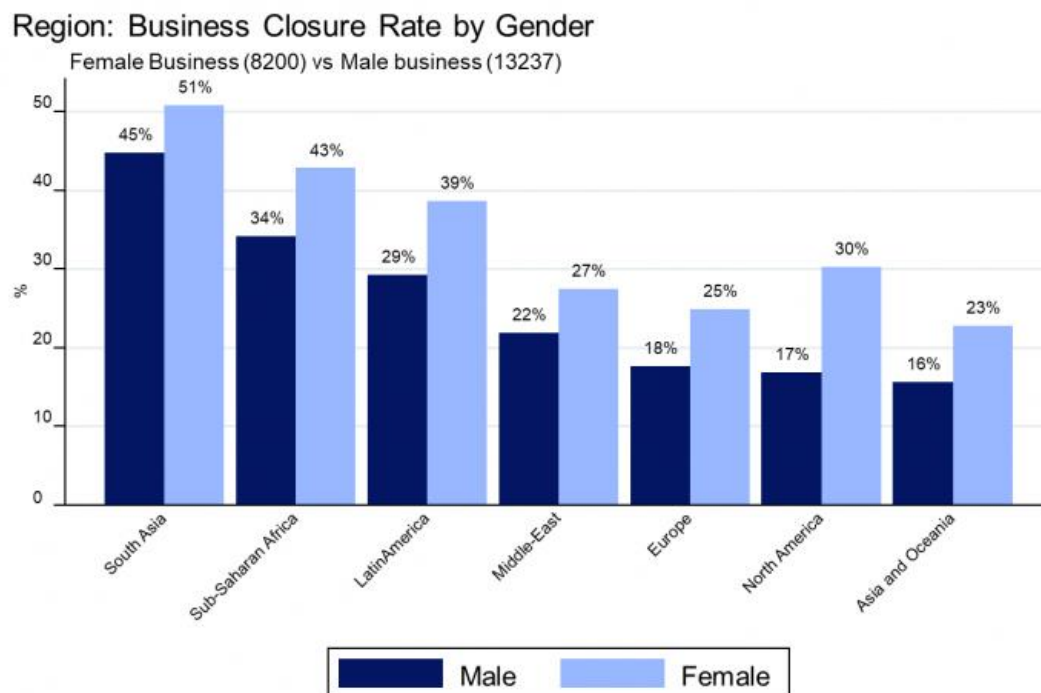
The world was excelling at reducing poverty by 2019, with its lowest numbers yet. 15 countries had managed to lift over 802 million people out of extreme poverty and the poorest nations had greater access to water, electricity and sanitation (Barne and Wadhwa, 2019). However, by the end of the year, a new virus struck the human population and with it, people started dying and losing their jobs. SARS-CoV-2, also known as COVID-19 is a virus that has managed to infect over 130 million people, killing approximately 2.8 million people all around the world (The New York Times, 2021). The origins of the pandemic have been studied by many experts and they have come to track it down to a virus that leapt from animals to humans (National Geographic). A report that was released recently (March of 2021) by the World Health Organization states that the virus most probably originated in a bat or a pangolin (similar to anteaters or armadillos). The first cases were recorded in China in December 2019. Having said that, it is important to highlight that all hypotheses on the matter are still being explored and there are no certain conclusions about its origins at the moment.

With the virus came a wave of deaths, economic depressions and a need for financial help all over the world. As a preventive measure and a manner of controlling the pandemic, most countries have been tackling the situation by imposing lockdowns on their respective populations. This means that people are required to stay at their homes by law for months

without being able to leave their households for any reason except for essential matters, such as going to the pharmacy, hospital or supermarket (BBC News, 2021). Due to the lack of economic activity, the pandemic is causing profound effects on poverty and widening the gap between the rich and the poor (United Nations Economic Commissions for Europe (UNECE)). Lockdowns have been the cause for many business closures, especially the smaller ones. At this point in time, the health crisis is estimated to increase extreme poverty by an additional 88 to 115 million people, summing up to a potential 150 million by 2021 (The World Bank). Moreover, exposure to infection, and therefore, economic crisis, has not been the same for everyone. People who live in decadent, lower paid, manual jobs in the retail and service sectors have been worse off, as their jobs entails a face-to-face business that cannot be done from home. Poorer communities, where the citizens live in overcrowded, low quality housing and densely populated areas have experienced and added risk to the virus. They are also considered to be more vulnerable to severe symptoms due to preexisting illnesses and lack of access to vaccines. The increasing level of infections in developing countries have led to a significant loss of income, fueled by job loss and work disruptions (Goldstein et. al, 2020).

A survey was conducted in May of 2020, where 26,000 observations from business owners and managers were collected around 50 different countries. Already, 26% of the businesses that answered the survey were non-operating due to Covid by that time. The “Future of Business” survey focuses mainly on MSMEs (micro, small and medium enterprises) and their experiences during the pandemic. From the findings of the analysts from Gender Innovation Lab we come to the conclusion that within the businesses that have been affected by the pandemic, female-owned businesses were about 6% more likely to have their business closed than the ones owned by males. The data is shown in the next graph:

Figure 4: Business closure rate by gender during COVID 19



Source: World Bank blogs: The Global State of Small Business during COVID-19: Gender Inequalities. (Goldstein et. al, 2020)

From this recompilation of data, one can be led to think that the sectors afore mentioned, women entrepreneurs and rural areas in developing countries, will also be the ones affected the most by the economic downsides of the pandemic. When looking at microfinance institutions in times of Covid-19, a survey conducted in Pakistan will be considered, with found conclusions serving as reference for the situation at hand. The survey was taken and analyzed by six professionals from the Universities of Oxford, NYU and Lahore (Malik et al., 2020). Pakistan is considered to be a representative region for the rest of the developing countries in which microfinance industries have been affected by Covid-19. This is due to the fact that the conclusions from other surveys in underdeveloped countries are similar to the ones found in this one. The Pakistani survey consists of 1,000 microenterprise owners, 200 microfinance loan officers, and interviews with regulators and representatives of the MFIs. The results will be analyzed in further detail later on.

During any crisis, with the fall of household income, comes the inability to repay loans, which leads to the diminishing efficiency of microfinance businesses. About a week after Pakistan was in lockdown, weekly household income fell by around 90%, and the main concern was to secure food. Therefore, 70% of the borrowers ended up reporting that they could not

repay their loans, resulting in a repayment rate of a merely 34% by April of 2020. Microfinance institutions were struggling to stand tall in low-income communities more than ever (Malik et al.). At this point in time, MFIs felt the need to reconsider the future of microfinance in the new worldwide situational crisis due to the pandemic. With any crisis comes the increase of demand for services of liquidity and savings from the borrower side, which means more business for the institutions. Nonetheless, the COVID-19 pandemic is different from previous crisis. The current health crisis disrupts both, the client side and the capital-facing side of microfinance at the same time. This means, that there is no money to lend to the needy, since there is a lack of liquidity and access to capital from the MFIs themselves. Much like the clients, funders and investors are also suffering the lower income consequences, to which the added risk of default from borrowers does not help. A profound crisis such as the one we are living today could mean that a significant number of MFIs will not make it. A series of innovations and compromises are needed for the modern microfinance sector to continue its development, and for them to be able to offer the help needed in times of trouble.

Another concerning issue in the sector of microfinance is the fact that relationships with clients require face-to-face visits. Due diligences of the businesses have to be in-person, and many of the borrowers do not have the necessary resources to go to the physical institutions themselves, for they may live in remote households outside of cities and in places where communication with civilization is not an easy travel. As Muhammad Yunus did in his day, many of the MFI workers travel to the villages themselves and offer their services to those who need them the most. This also serves as a way of truly experiencing what the businesses are all about and what they entail in order to value the probability of success and the capability of repayment prior to giving them out the loans, in other words, the *due diligence* process. Many of the loans and repayments also took place in physical meetings, where the loan officer meets with the client, and these cannot be replaced by a digital transaction. Consequently, due to Covid and the extended fear of infection, personal meetings have not been taking place in the past few months. All in all, people have not been able to receive loans and institutions have not been able to receive repayments.

On the other hand, MFIs rely on the ability of raising capital. For, without capital, the institutions cannot lend money to customers. This capital is known as “social capital” or “organizational capital”. Such capital is not always easy to raise and losing it can be very costly. The main ingredient for the capital to be put to good use is trust. Trust between the institutions

and the customers is essential for MFIs. In order to preserve this capital, institutions need to be cautious on how they treat their clients, especially in times of economic crisis. The treatment and relationship between these two main factors, shapes the trust that will determine future credit deals. Without trust, the MFI cannot lend money safely, knowing that they will be repaid, and the borrowers will not trust the institution to look for their customers' preferences in terms of interest rates and time horizons. Therefore, communication has to be transparent at all times and loan officers should be awarded with incentives as a way of making sure that they put their customer's needs and interests first. Furthermore, microfinance institutions have always had the need to limit losses, nonetheless, in times of trouble, some opt for taking on debt obligations with the idea of making an impact on their struggling customers and relief them from further misery. Some refer to this alternative as "charitable resources" during an economic crisis. Other MFIs write off, or forgive loan repayments, discounting them as a loss for the institution. Although this benefits the clients, for they are liberated from repaying the amount borrowed, microfinance institutions need to be careful not to excessively write off loans, since it can have serious implications in terms of their viability and continuing liquidity.

To wrap up, it must be addressed that sometimes the best practices in normal times can be considered to be bad practices during a crisis. For example, the way that loan officers are paid. Generally, as a way of motivating hard work and maximizing effort, large incentives are given out to loan officers. This entails that in most MFIs, a large part of the total salary paid to loan officers depends on their performance when taking care of new loan disbursements and handling repayments (Pakistan Microfinance Network, 2019). Economists refer to this method of payment as giving out "high-powered incentives". These incentives are useful when objectives are clear, and the outcomes are aligned with the best interests of the communities they serve. When the economy is stable, these measures are meant to enhance the efficiency of organizations. Nevertheless, it has been observed that with high-powered incentives in place, some loan officers continue demanding customer repayments, even after senior staff has established write-off policies. Therefore, in times of crisis, such as the one reigning at the moment due to the pandemic, circumstances may call for "low-powered incentives". With low powered incentives, loan officers are offered a fixed income that does not depend on loan disbursements, collections, nor on the quality of the service they offer. This alternative allows loan officers focus less on their own outcomes and more on the main goal, which is helping customers in the most effective way possible.

3. METHODOLOGY

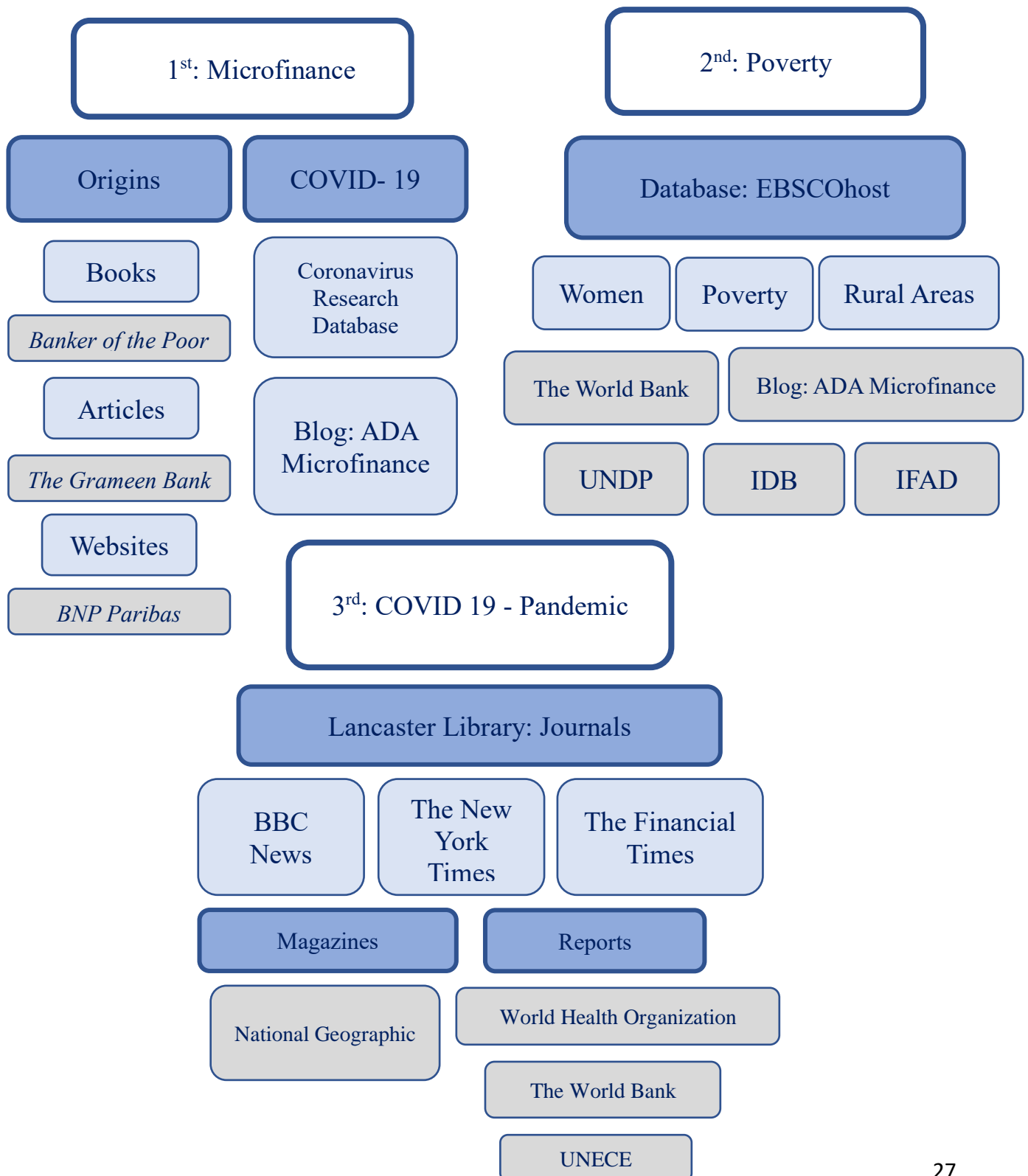
Starting from the main research question: how has COVID-19 impacted the microfinance sector? The first goal was to understand the world of microfinance, its origins, development, and implications. Then, moving on to understand the pandemic in itself and the governmental measures imposed by the different regions, a conclusion is drawn about what the consequences of the pandemic meant for microfinance. The approach is mainly based on qualitative research through a dynamic process of inquiry.

The literature review is primarily library based, for there is a lot of information about the issue in question and I found it to be the best way to maintain an objective and rigorous point of view. Most of the sources used are secondary, coming from the own words of Muhammad Yunus in his book “Banker of the Poor” and the article “The Grameen Bank”. There are also some numbers and statistics gathered from professional and public sources such as the IFAD, UNECE and The World Bank. All of them, dedicated to the world of finance and investing in developing countries. Additionally, there is data readily available on poverty and microfinance that has been gathered from current experts. Scholars, who have studied the influence of the virus in a variety of MFIs and others that have focused their attention on the reasons to why the main client sectors formed by women and rural workers. Lastly, within the literature review, information about the origins of the pandemic was extracted from journals, (The Financial Times) and magazines (National Geographic). They give away an idea on how the media portrays the situation of the pandemic and its effects on world poverty, as well as how institutions plan to confront the issue.

As for the interpretation and analysis of findings, research was conducted through a recompilation of previous surveys that had already been taken by institutions and professionals. The reason for this being that the amount of people needed as respondents in order to get an approximately accurate idea of the situation is more than the scope of this dissertation can manage. In addition, all of the people that were interviewed (loan officers, microenterprise owners, MFI managers, etc.) are geographically hard to allocate. Surveys took place in Pakistan, South Asia, and Latin America, amongst other regions. Therefore, the most reasonable way to get this information was to come up with the conclusions from previous studies. Secondary surveys used for the results analysis and the graphs, were found through the Coronavirus Research Database and the ADA Microfinance website. These platforms and

websites were retrieved from Lancaster University’s library and the wide variety of databases that it holds (EBSCO, OneSearch, Economic Journals, etc.). For a more visual representation of the methodology followed, the main sources used, and the chronological order of the process, take a look at the graph below.

Figure 5: Methodology graph



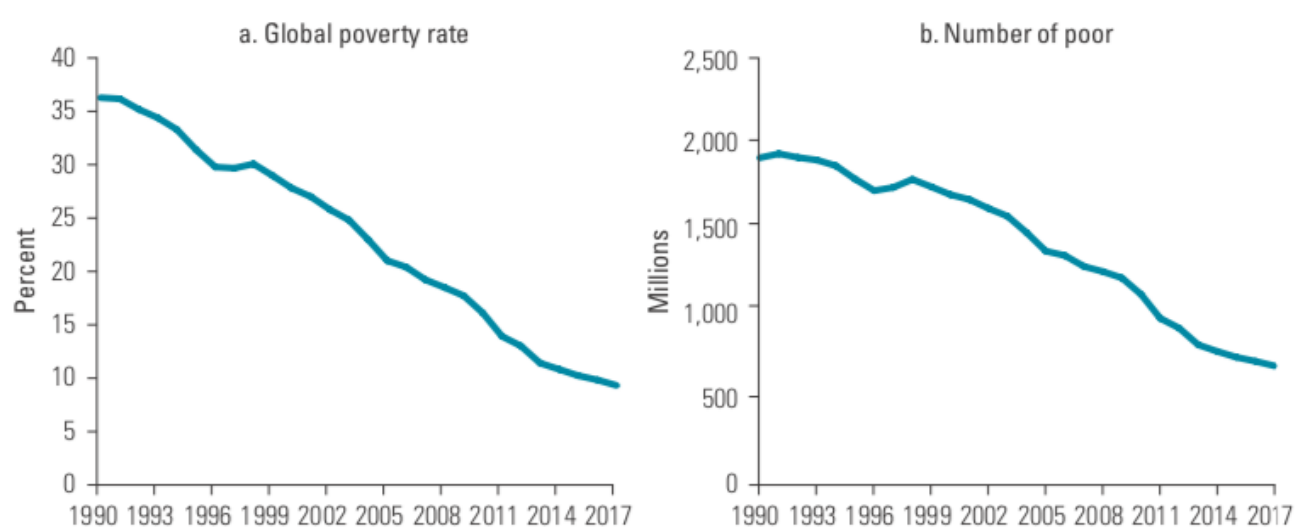
4. INTERPRETATION AND ANALYSIS OF FINDINGS

Considering the different surveys¹ conducted by experts in the microfinance sector, and based on the results obtained, relevant information is gathered about the impact of the COVID 19 pandemic on today's global poverty rate, the decrease of household income, and the difficulties that microfinance institutions are facing. Moreover, the consequences, both positive and negative, derived from governmental measures will be analyzed. Later on, the implications of COVID-19 on the functioning of microfinance institutions will be studied. The current health crisis has caused operational, financial, and non-financial struggles in the microfinance sector. MFIs need to learn how to overcome these challenges, for their future development depends on it.

4.1. Impact of COVID 19 on global poverty:

4.1.1. Global poverty before and after the pandemic:

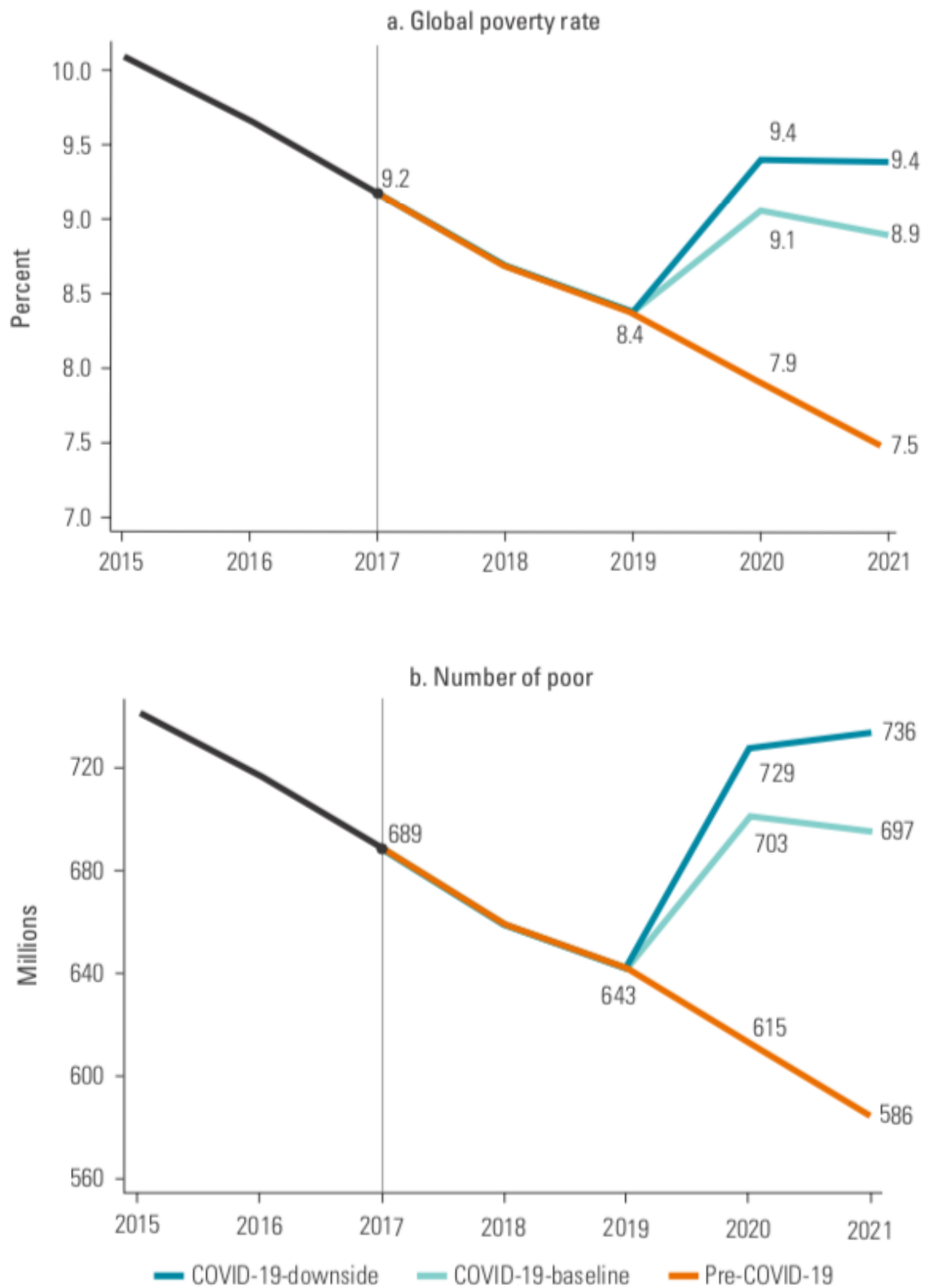
Figure 6: Global poverty rate and number of poor (US \$1.90-a-Day) from 1999 to 2017



Source: *Poverty and Shared Prosperity Report*, The World Bank, 2020

¹ A) *Poverty and Shared Prosperity report* (World Bank, 2020).
B) *The Unequal Impact of the Coronavirus Pandemic*, IDB, 2020.
C) *COVID-19 and the future of microfinance: evidence and insights from Pakistan*. *Oxford Review of Economic Policy*.
D) ADA, Inpulse and Foundation Grameen Credit Agricole, 2020. *Covid-19: different impacts depending on the size of the microfinancial institutions*.

Figure 7: Global poverty rate and number of poor (US \$1.90-a-Day) from 2015 to 2021

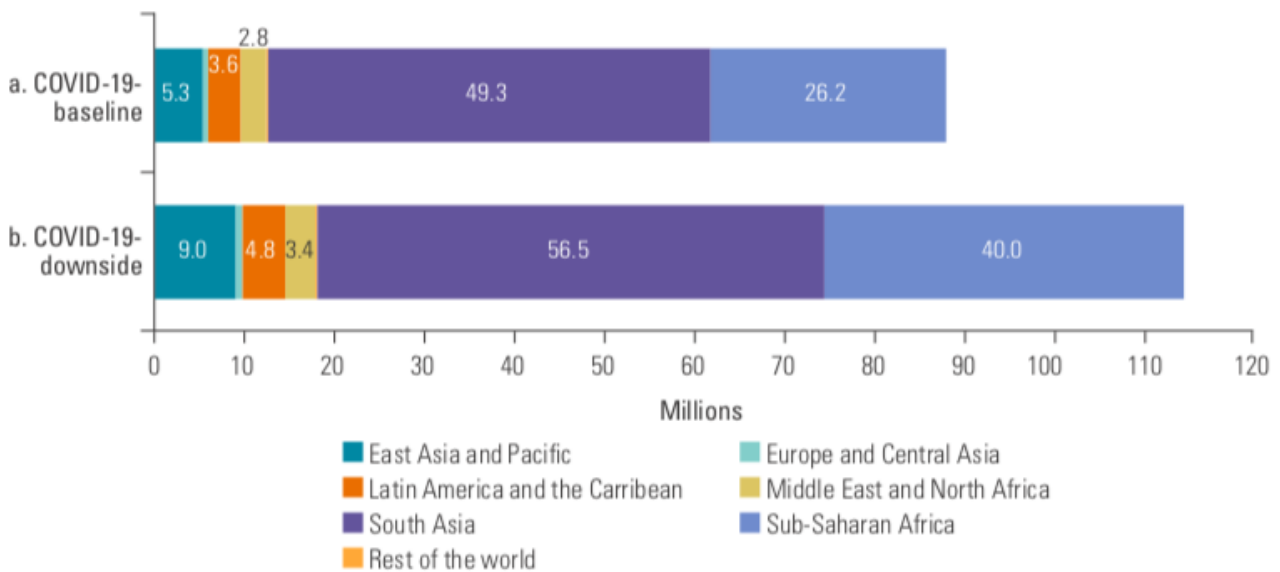


Source: Poverty and Shared Prosperity Report, The World Bank, 2020

A study conducted by the World Bank in their 2020 *Poverty and Shared Prosperity* report, forecasts global poverty since the COVID-19 pandemic. Although the degree at which poverty will increase is still highly uncertain, it is known to be the first increase in world poverty since the Asian financial crisis of 1998. During the Asian crisis poverty increased by 0.4 percentage point, which meant an additional 47 million people suffering from extreme poverty in the world. In comparison, the pandemic caused by COVID-19 is significantly larger, estimated to cause an increase of around 1.1 to 1.5 percentage points relative to the scenario pre-pandemic. The figures above (Figure 6 and 7) illustrate an evolution of the global poverty rate and the number of poor according to the \$1.90-a-Day poverty line. Figure 6 illustrates poverty data from 1999 to 2017 and Figure 7 represents the nowcasts of the same data from 2015 to 2021. The latter graph has been updated from Mahler et al. (2020), which was based on Lakner et al. (2020). As we can see by comparing both figures, although the current poverty rate is lower than in 1997, the increase in poverty is larger in both, absolute, and relative terms. In order to understand the effects of the crisis on global poverty as a whole, the study carries out three different scenarios in Figure 7.

The first scenario (or “Pre-covid-19”) estimates the nowcast” of 2020 and 2021 through the GDP (gross domestic product) measure. The information for this first scenario is gathered from the *Global Economic Prospects* (GEP) January 2020 World Bank report. The report precedes the pandemic, and it overlooks any possible consequences from the crisis, which were not imaginable at the time. Although poverty reduction was expected to slow down, there was a positive forecast of the global poverty rate decreasing from 8.4% in 2019 to 7.9% in 2020 and reaching a 7.5% in 2021. In other words, poverty was supposed to be reduced by 29 million (from 615 million to 568 million all over the world). Instead, the virus caused all of these forecasts to turn on their head. The second and third scenarios (“COVID-19-Baseline” and “COVID-19 Downside”) are more up to date, since they are compiled from the more recent report of the June 2020 edition of the GEP, and they include the effects of the virus on the growth of global poverty. From a GDP standpoint of view, the forecasts predicted a contraction of the global per capita growth in 2020 from 5% to 8%. This, in turn, increases the expected global poverty rate between 9.1% and 9.4% in 2020, which would mean going back to the levels stated four years ago, in 2017.

Figure 8: Additional poor (US \$1.90-a-Day Poverty Line) in 2020, Covid-19 Baseline and Covid-19 Downside Scenario



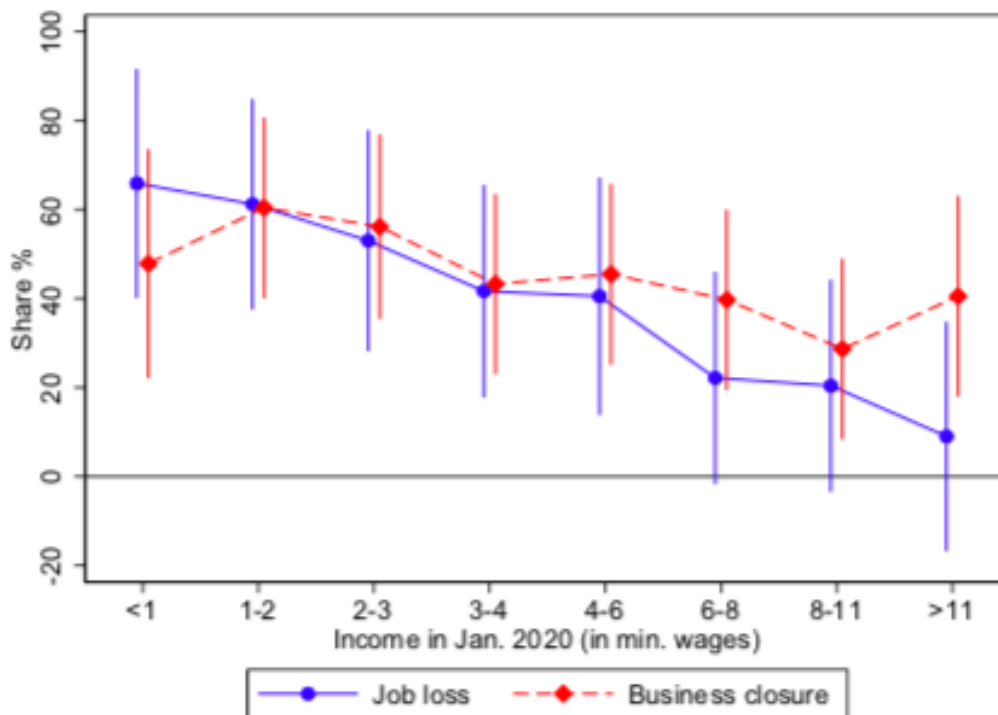
Source: *Poverty and Shared Prosperity Report*, The World Bank, 2020

Using the data obtained from the study, it is also possible to estimate the additional number of people that were considered part of the extreme poverty community during the pandemic in 2020. The approximations are achieved by comparing the poverty the pre-COVID-19 growth rates with the post-COVID-19 ones. The general results translate into an estimate of 88 million people being driven into poverty in the baseline scenario and up to 115 million people if we consider the downside scenario. As for geographical impact, the evaluation suggests that South Asia will have the gravest consequences poverty wise, with an additional 49 million people pushed into extreme poverty and nearly 57 million in the worst-case scenario. Following South Asia, the next most affected area is Sub-Saharan Africa, with up to 40 million additional poor people. Furthermore, if we consider the poverty line to be built by the amount of people who live on \$3.20 a day, the numbers would be around an additional 175 million people living in poor conditions, and 223 million in the downside scenario, with South Asia continuing to be the principal victim. The casts of the figures shown above assume that the increase of poverty is independent from existing inequalities. In contrast, various authors have found that the effects of COVID-19 will have more damaging economic consequences on the poor, deepening current inequalities and, most probably, creating new ones (as it is reflected in Figure 8). All in all, the precise impact on inequality is difficult to predict, since there is not sufficient data on how the pandemic has truly affected the population on a global scale.

4.1.2. Household income in developing countries and job loss:

On an attempt to assess the unequal impact of the pandemic more deeply, the Inter-American Development Bank (IDB) released a report about the issue in June of 2020: *The Unequal Impact of the Coronavirus Pandemic*, by Bottan., et al. The study covers evidence from seventeen developing countries in Latin America and the Caribbean. It holds a sample of 230,540 answers to surveys related to the impact of COVID-19. As stated before, the pandemic has caused negative economic impact for a large amount of the world population, being exponentially larger in areas with lower income. This aggregation of results from current surveys, underscores how the pandemic causes the need for financial help in low-income groups.

Figure 9: Job loss rate and business closure depending on the income group



Source: *The Unequal Impact of the Coronavirus Pandemic*, IDB, 2020

Out of the entire survey, 45% of respondents report that, during the pandemic, a household member lost a job. As for the participants owning small family businesses, 58% of them reported that they had felt obliged to close their business. As one can tell from Figure 9, the effects are highly unequal within the different income level groups in January of 2020, prior to

the pandemic. Especially when addressing job loss, where the percentage of people that lost their job declines substantially as the numbers for income move upwards. Considering business closures, although the rate declines with higher levels of income, the trend is less dramatic. On one hand, households with income below the national monthly minimum wage in January 2020 suffered the largest impact. Approximately, 71% of them reported that a household member lost their job and 61% confirmed that someone in their family had to close down their business. On the other hand, the impacts acknowledged by those with the higher income experienced a lesser impact. Among the wealthiest households, a merely 14% reported a member losing their job, and 54% of them had to close down the family business.

From the patterns presented in the graph, there are a series of findings that can serve as explanations for the afore mentioned inequality. First of all, the level of informality in the most vulnerable households correlates with the lack of ability to keep a stable source of income. As an estimate for the number of “informal workers” we will refer to them as self-employed workers. Figure 10 illustrates the direct relationship between informality in the labor market and the loss of livelihood, or essential money to live. Informality rates are highest in developing countries, which, according to the relationship just described, explains why labor markets in these areas are hit the hardest in times of economic crisis.

Figure 10: Countries with higher informality showing higher rates of livelihood loss



Source: *The Unequal Impact of the Coronavirus Pandemic*, IDB, 2020

The data collected suggests two possible explanations to why developing countries, with a higher number of self-employed workers, are more vulnerable to the effects of the pandemic. Firstly, policies and measures released in order to prevent the virus spreading seem to affect self-employed workers more. The survey gathers information from two groups of countries, those with restrictions such as quarantines and the closure of non-essential businesses (Bolivia or Peru), and those that have not had any mobility-restrictions or curfews (Uruguay). Due to the fact that informal or self-employed workers are usually dedicated to jobs within the retail or services sectors, which require face-to-face contact, they have been prone to suffer greater disruptions in those countries with more stringent restrictions. What's more, the results indicate that within the countries that adopted quarantine measures, 69% of the respondents reported suffering from job loss. As opposed to a 34% of respondents in the countries with no mobility-restriction policies and a 54% in those that only imposed a curfew. Secondly, the access to telework has an important role when it comes to the negative impacts of COVID-19 amongst low-income households. The survey portrays a clear inequality between individuals with higher incomes, within which, 76% are able to work from home, and those with lower incomes, with merely 30% of them able to telework. All in all, the final effect can be explained by a temporary loop. Low-income households have less resources to telework and are more prone to be self-employed, both of which serve as characteristics that make them a weak link to job loss and business closure.

Further on, job loss does not only imply lower income in the future, but also increasing poverty with its consequential hunger and increasing demand for loans and transfers. Therefore, the IDB set up a statistical study analyzing the consequences of those job losses and business closures and the correlation they have with the increasing hunger and the need for financial loans. The results of the study can be summarized in the following table:

Figure 11: Loss of livelihood during the pandemic linked to income, nutrition and policies

Panel A: Impacts on income, food security, and health			
	(1)	(2)	(3)
	Decreased income	Went hungry	Eats less healthy
Lost job or closed business	0.241***	0.127***	0.085***
	(0.008)	(0.008)	(0.008)
Observations	186,058	198,190	173,956
Adjusted R2	0.487	0.602	0.430
Panel B: Impacts on transfers and policy support			
	(1)	(2)	(3)
	Gift/Loan	Gov. Priority	Lockdown (>=month)
Lost job or closed business	0.225***	-0.027***	-0.042***
	(0.008)	(0.008)	(0.010)
Observations	198,017	196,076	125,359
Adjusted R2	0.479	0.482	0.540
* $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$			

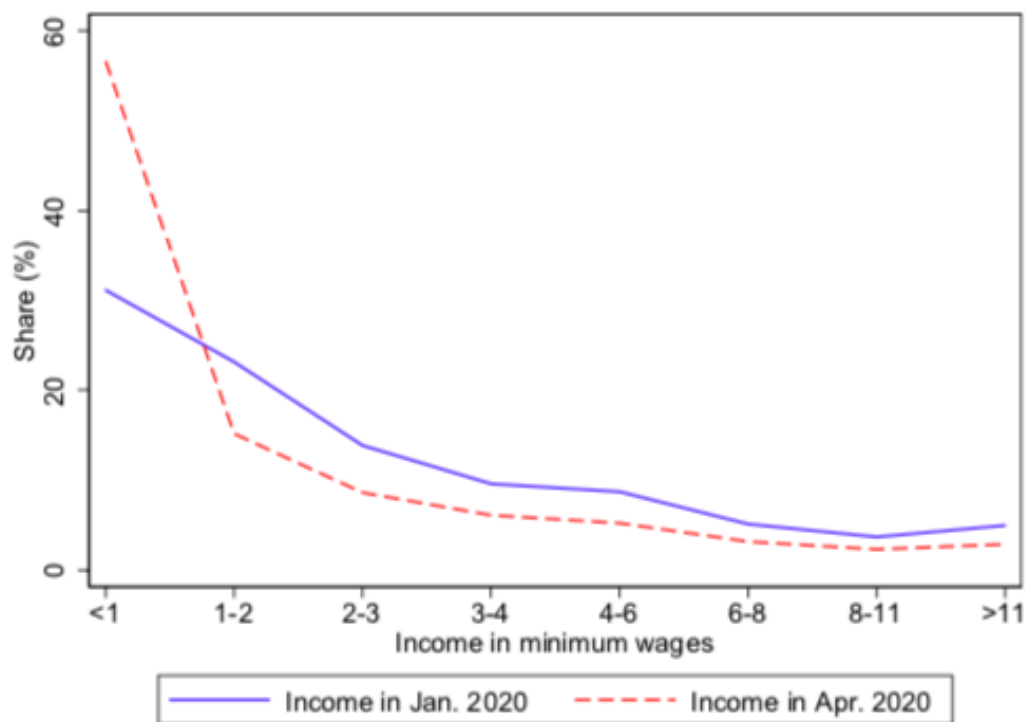
Source: *The Unequal Impact of the Coronavirus Pandemic*, IDB, 2020

Panel A illustrates that out of the participants that lost their jobs or had to close their businesses, 24% of them reported an income loss later on. The p-value of < 0.01 is just a way of measuring the certainty of this fact. There is very little probability of rejecting the contrary statement, or hypothesis, therefore we are able to conclude that losing your job or closing down your business due to the pandemic is directly correlated to a reduction in income. The same is true for those who suffered from malnutrition. Observations state that the correlation between losing your job and being hungry or eating less healthy food is also positive. As for Panel B, those who lost their job or closed their businesses turned to transfers and loans for help. The positive correlation of these two events is also statistically significant (p-value < 0.01).

Additionally, the survey asked participants about their income expectations following the pandemic. Around 71% of the respondents expected their household income to decrease by

April 2020 in comparison to what they earned in January of 2020. Moreover, around 31% of the people who answered the survey claim to be earning less than the monthly minimum wage in January 2020; the number is expected to increase to 56% by April 2020. In Figure 12 a graph is shown, representing the situation of the households before and after the consequences of the pandemic (January to April of 2020) in terms of expectations for minimum wages. April is represented as a leftward shift in comparison to January, meaning that a large number of vulnerable households were getting ready to fall into poverty conditions after the virus struck in January 2020.

Figure 12: Shares of households and expectations on minimum income (Jan-April 2020)



Source: *The Unequal Impact of the Coronavirus Pandemic*, IDB, 2020

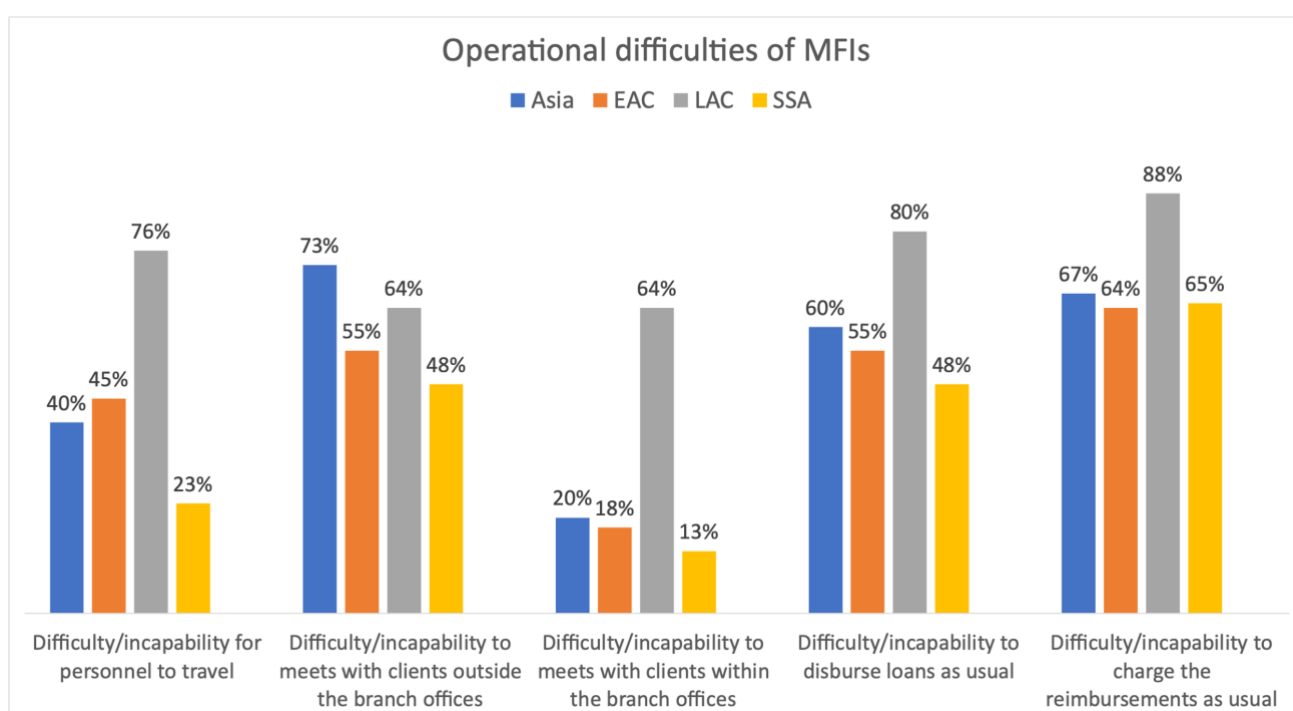
4.2. Biggest consequences on Microfinance Institutions

Different aspects within the microfinance sector have been affected by the pandemic. In this section we will cover some of the operational and financial difficulties experienced by the MFIs, as well as non-financial aspects, such as the levels of stress that the pandemic has generated for those working in the institutions. At last, some of the benefits derived from the governmental measures imposed since COVID-19 will be examined.

4.2.1. Operational and financial difficulties:

As a way of investigating what the biggest operational and financial consequences of the COVID-19 pandemic have been on the microfinance sector, a sample of answers, from 108 microfinance institutions (MFIs), has been gathered by the Foundation Grameen Agricole, Inpulse, and ADA Microfinance. The MFIs are divided by region in some charts and by size or level in the others. On the following figures and graphs, different conclusions can be drawn from the results obtained:

Figure 13: Operational difficulties of MFIs during the COVID-19 crisis by region



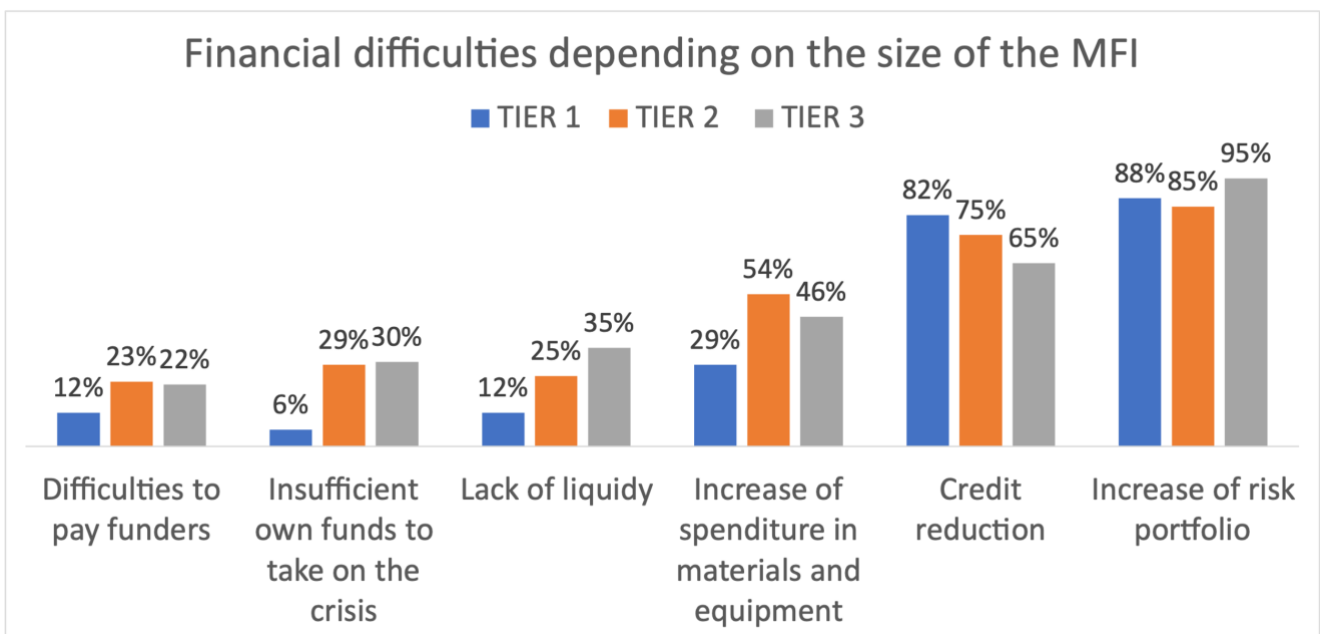
Source: Covid-19: different impacts on MFIs depending on size (ADA, Inpulse, and Fondation Grameen Credit Agricole, 2020)

In this case, the graphs are divided by regions. They include Asia, Eurasia, Latin America and Sub-Saharan Africa. Overall, Latin America seems to be having the highest number of operational difficulties. When comparing the incapability of traveling due to the pandemic, there is a clear difference between Latin America, with 76% of the MFIs suffering this consequence, and those in Sub-Saharan Africa, where only 23% of the institutions had restrictions to travel. Sub-Saharan Africa seems to be the region with less operational difficulties in their MFIs as a consequence of COVID-19. This could be explained by the fact that constraining policies imposed in self-employed, agriculturally based areas of Africa seem

to have had less aggressive consequences, particularly when referring to monetary losses (Mueller et al., 2020). Undeniably, the highest operational difficulty, spread across all continents, is the incapability to charge reimbursements as usual. People are earning less income, and hence, are not able to repay debt.

After looking at the consequences of the pandemic from the operational side of things, a deeper insight into the financial difficulties derived from this new situation shall be considered. This time, instead of segmenting the MFIs by region, they will be segmented by size. Being, Tier 1 the largest size with over \$50 million in assets, through to Tier 3, representing the smallest MFIs from the sample with just under \$5 million value in assets (MicroRate, 2013). The data is summed up in the following chart:

Figure 14: Financial difficulties of MFIs during COVID-19 crisis by size

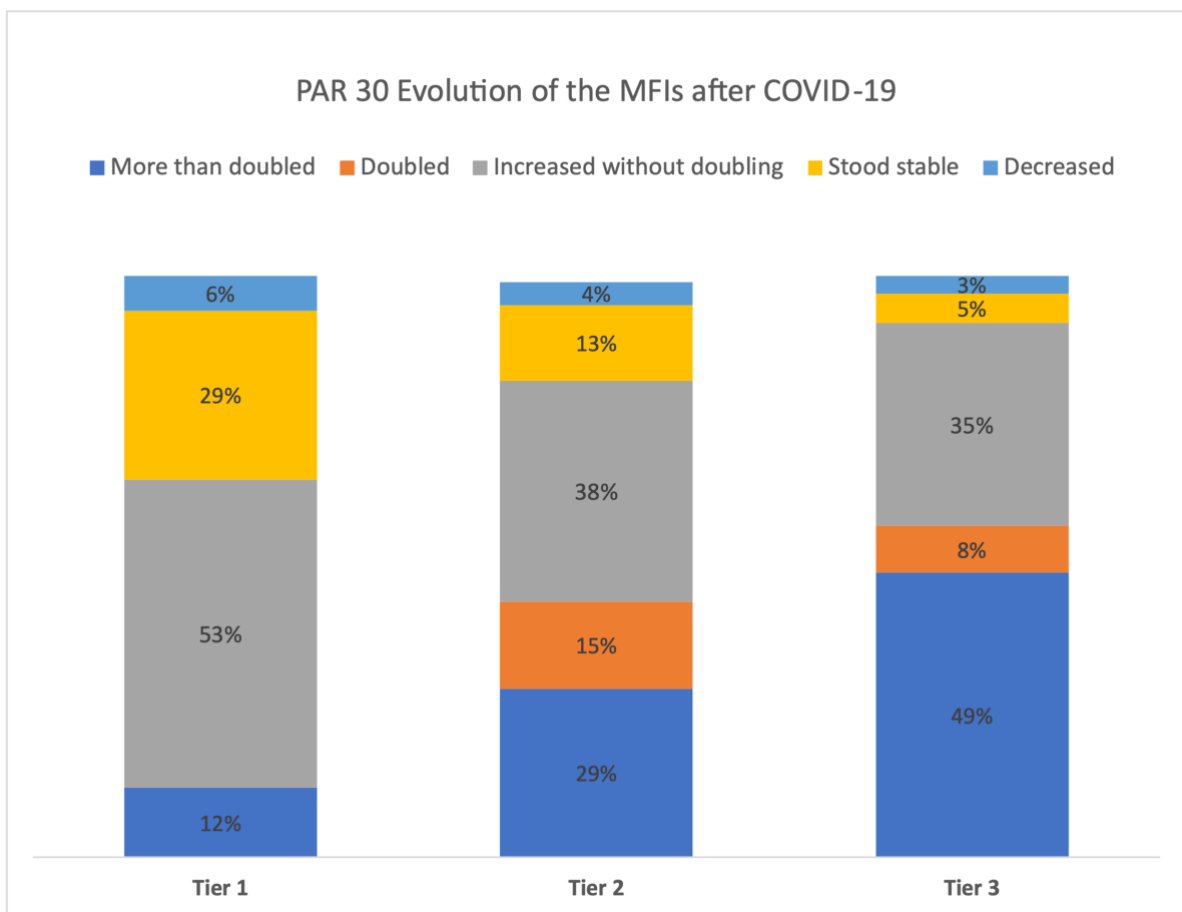


Source: Covid-19: different impacts on MFIs depending on size (ADA, Inpulse, and Fondation Grameen Credit Agricole, 2020)

As was expected, the biggest financial difficulties that MFIs suffered, independently of their sizes, were credit reduction and the increase of portfolio risk. The fundamental reason for this is the inability of borrowers to repay their loans, due to their decreasing income. Withal, this time acknowledging the difference in size, it is clear that the smaller the MFI is, the more risk it entails towards the pandemic’s repercussions. The decreasing ability of repayment ends up having consequences in all of the financial capabilities of the institutions. Borrowers defaulting, leads to the decrease of liquidity within the MFI and the incapability of these to

payback back funders or give out more loans to other customers. 82% of the Tier 1 firms decreased their credit loans, compared to a 65% of the Tier 3, or smaller MFIs. This can be explained by the fact that Tier 1 firms give out more abundant credit loans than Tier 3 institutions, which means that their respective financial cuts from the pandemic had to be more substantial. Nevertheless, Tier 1 MFIs seem to have been able to take on the crisis with less difficulties overall. As for Tier 2 and Tier 3 institutions, 30% of them do not have sufficient funds to face the COVID-19 crisis.

Figure 15: Impact of COVID-19 on MFIs’ PAR 30 (depending on size)



Source: Covid-19: different impacts on MFIs depending on size (ADA, Inpulse, and Fondation Grameen Credit Agricole, 2020)

Figure 15 also divides the microfinance institutions by size (Tiers 1,2, and 3). In this case, the factor being studied is the PAR 30 or “Portfolio at Risk 30”. The measure considers the percentage of the overall loan portfolio that repayments are overdue by more than 30 days. With the pandemic, people have been slower to repay their loans, due to the increasing levels of poverty that have come as a direct consequence. From what can be observed in the figure above, nearly half (49%) of the smaller MFIs (Tier 3) have doubled their PAR 30, which means

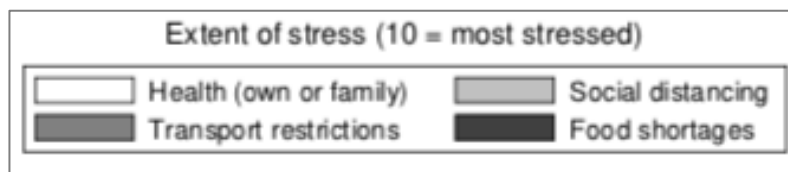
that the number of borrowers that are over 30 days late with their repayments has doubled. As for the rest of the MFIs, most of them have suffered increases in their PAR 30, except a merely 8% of Tier 3, 17% of Tier 2 and a more substantial amount of 35% within the Tier 1 group, whose PAR 30 has remained as it was before the pandemic. Only 6% of the Tier 1 MFIs have managed to decrease their PAR 30.

4.2.2. Effects on stress levels within MFIs:

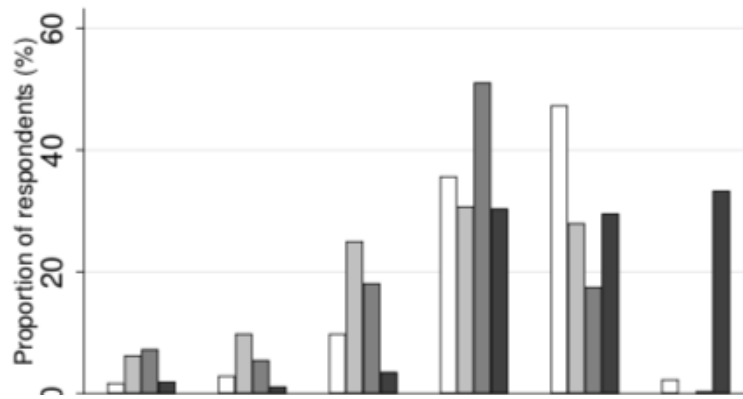
Once the largest consequences in the operational and financial side of things have been analyzed, other surveys were taken with the purpose of understanding the internal problems of MFIs and start offering assistance and support. The first aspect that came across as relevant was stress. Results have been gathered from phone surveys and interviews, with answers from one thousand microenterprise owners, two hundred loan officers, and other senior representatives and microfinance institution regulators (Oxford Review, 2020). The region targeted in this case is Pakistan. South Asia, as shown before in Figure 8, is one of the most affected areas by COVID-19 in terms of poverty and low income. Therefore, it serves as a good sample to study the main impacts of the pandemic on low-income communities and their respective microfinance related institutions.

Stress was measured on a scale of 1 to 10 and participants were asked about how different areas of change after COVID 19, both in their personal and professional lives, had impacted their stress levels. The sample is divided in three main groups of respondents: regular microfinance clients, graduated borrowers, and loan officers. The areas covered are health (their own or their family's), transport restrictions, social distancing, and food shortages. Final results from the interviews are shown in the following charts:

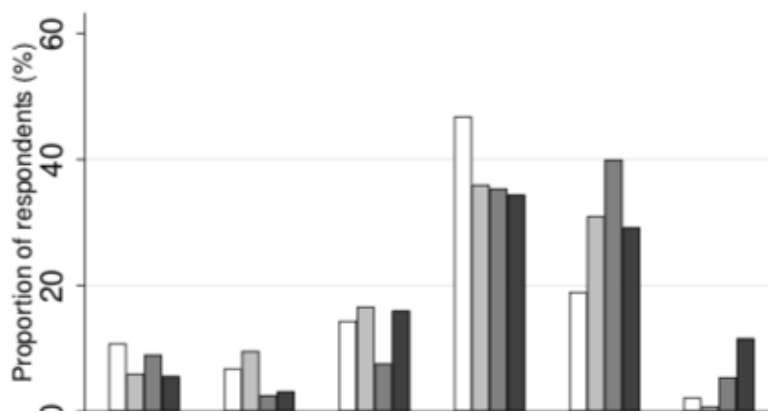
Figure 16: Reported stress caused by the pandemic - three samples of respondents



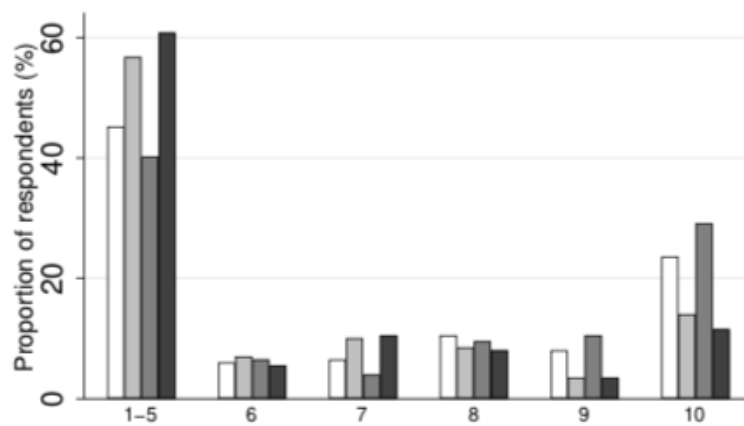
SAMPLE A: REGULAR MICROFINANCE CLIENTS



SAMPLE B: GRADUATED BORROWERS



LOAN OFFICER REPORTS



Source: COVID-19 and the future of microfinance: evidence and insights from Pakistan. Oxford Review of Economic Policy, 2020

As illustrated in Figure 16, the highest stress levels were reported in the first two samples (regular microfinance clients and graduated borrowers), with high numbers in each of the four areas highlighted before. The average level of stress related to one’s health or its family’s was 8, stress from restrictions regarding social distancing mounts up to 7.7, and 7.9 when asked about transport constraints. Food shortages caused the most stress for microfinance

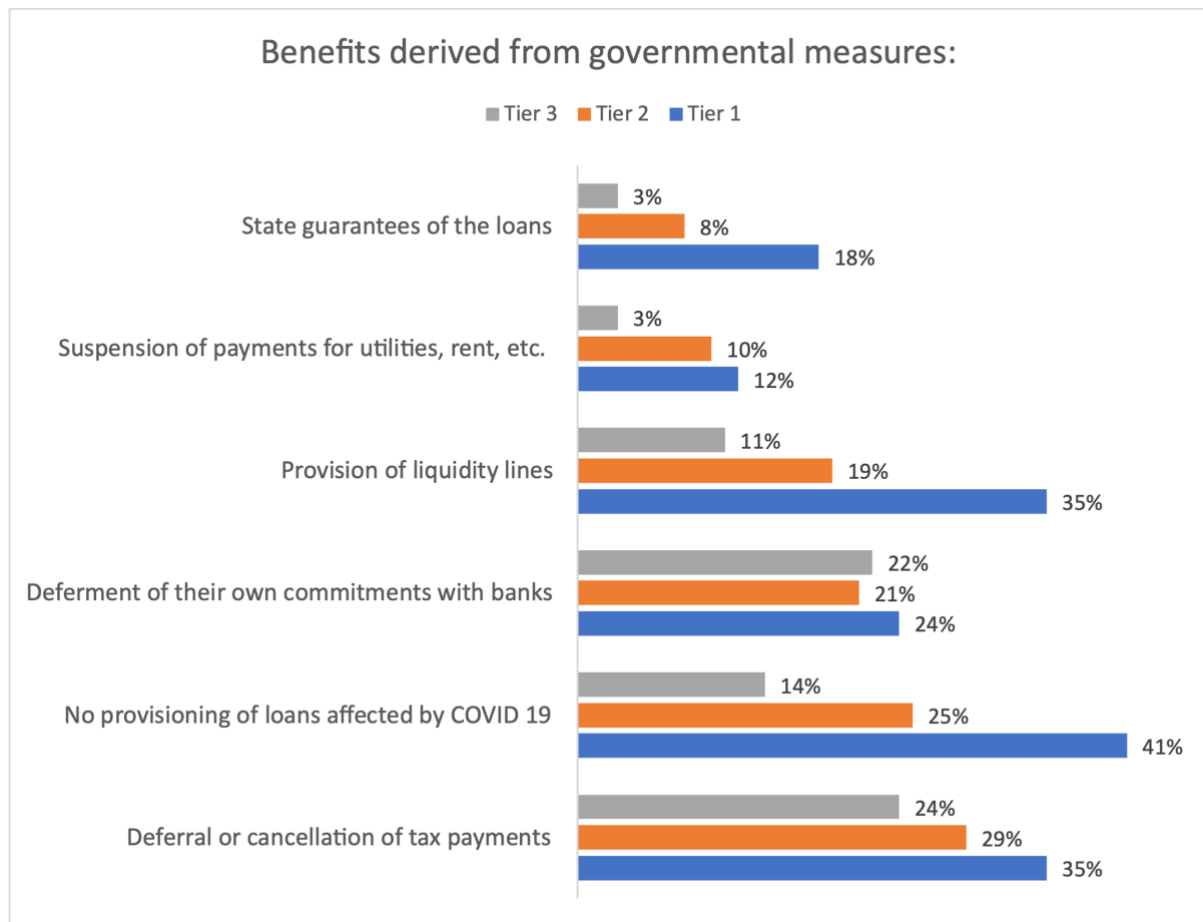
clients and graduated borrowers, with an 8.4 average. Moving on to the sample including loan officers' responses, stress levels turned out to be slightly lower. On average, food shortages caused a stress level of 5, health worries rounded the 6.2, social distancing stood at 5, and the largest factor of stress in this case were transport restrictions, with a 6.5. Apart from these factors of consideration, loan officers have also reported that they worry about their own income decreasing. The income stressor concluded with a moderate measure of 5.3.

Once the official questions from the survey were answered, loan officers were asked more "open-ended" qualitative questions regarding their feelings about the COVID-19 situation and the implied pressures that come with it. The assessment highlights that loan officers were facing many changes within their professional activity, and therefore, elicit personal consequences as well. Answers were gathered and summarized in three main problems: 1) local authorities and restrictions impede them from traveling to meet with clients and, in some cases, cause them to close down their offices; 2) relationships with clients have been more tense, especially when comparing with services of other MFIs that were putting on an extra effort giving out food and aid packages for their clients; and 3) female loan officers had an extra worry in mind, for they have bigger social restrictions than men in terms of transporting themselves without public transport available (Adeel, 2016).

4.2.3 Benefits derived from governmental measures:

Most countries have taken on governmental measures to ensure that microfinance institutions can face the health crisis smoothly. However, some MFIs have benefited more than others. Region played an important role in this aspect, since depending on the country, measures were imposed in a more or less efficient manner. According to the study executed by ADA and Grameen Foundation, MFIs in Asia seemed to have benefited more from the imposed measures than in other regions. Another key factor to take into consideration is the size of the MFIs, or Tier. In the following figure, the MFIs and their respective beneficial measures, will be examined depending on their size.

Figure 17: government COVID-19 measures and their beneficial effects on MFIs by size



Source: Covid-19: different impacts on MFIs depending on size (ADA, Inpulse, and Fondation Grameen Credit Agricole, 2020)

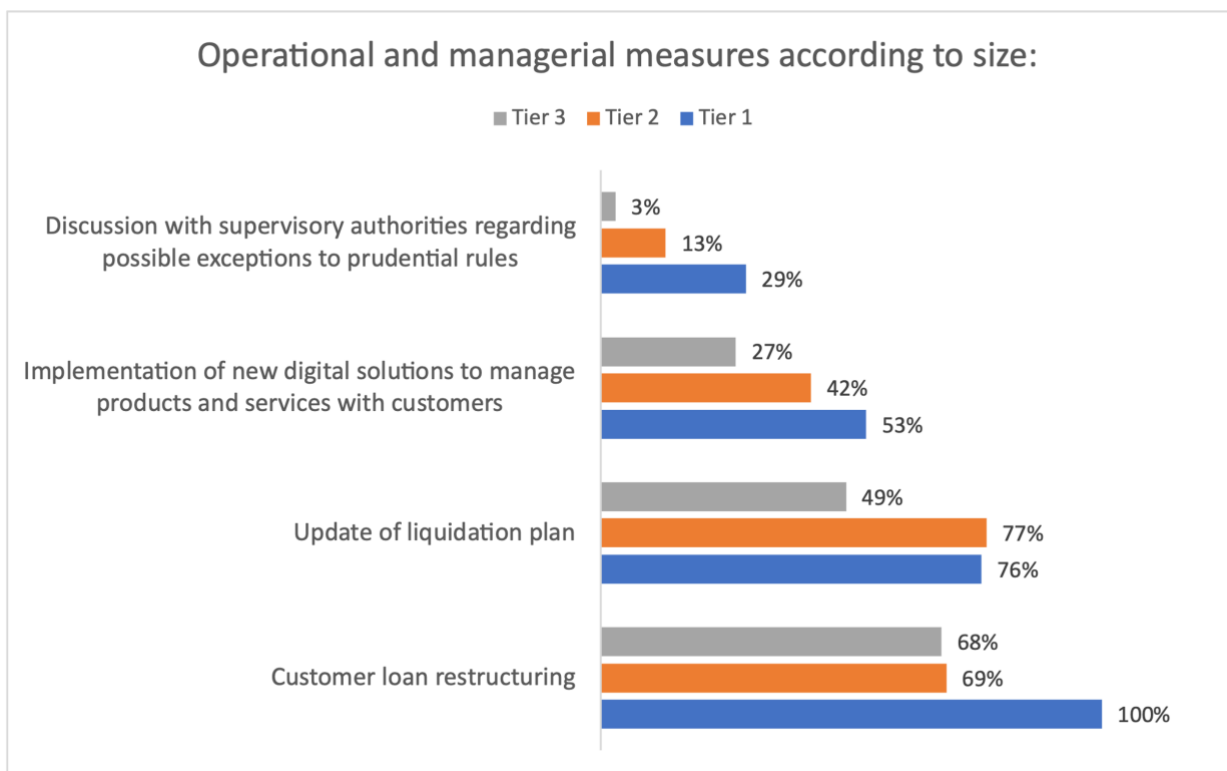
From a first glance, it is clear that Tier 1 institutions benefited more than the rest from the COVID-19 measures. The proposal that seemed to have the greatest significance was the fact that MFIs are not provisioning loans that have been affected by COVID-19. By not provisioning risky loans affected by the pandemic, MFIs avoided situations of defaults and potential write-offs. Deferral and cancellation of tax payments have also been helpful for the liquidity of the institutions. For example, even though Tier 1 MFIs are lacking in the regions of Asia and Sub-Saharan Africa, they still seem to benefit from measures regarding tax payments and liquidity provisions, respectively.

4.3. Measures taken to face the pandemic and next steps

4.3.1. Operational and managerial measures according to size:

Out of the 108 microfinance institutions that the Grameen Foundation and ADA interviewed, all of the Tier 1 firms had to restructure their loan agreements with clients. More than half of the respondents had to update their liquidity plans, for they did not hold enough assets to meet their own liabilities with bigger banks or other funds. There is also a movement towards the digitalization process of possible solutions to take care of this changing situation. Transport restrictions and other impediments to physically meet clients, have pushed MFIs to digitalize some of their operations and products in order to make them available for clients. Digitalization processes must also consider the availability of clients to these types of services, for not all of them, especially in low-income communities, have access to a smart phone or internet.

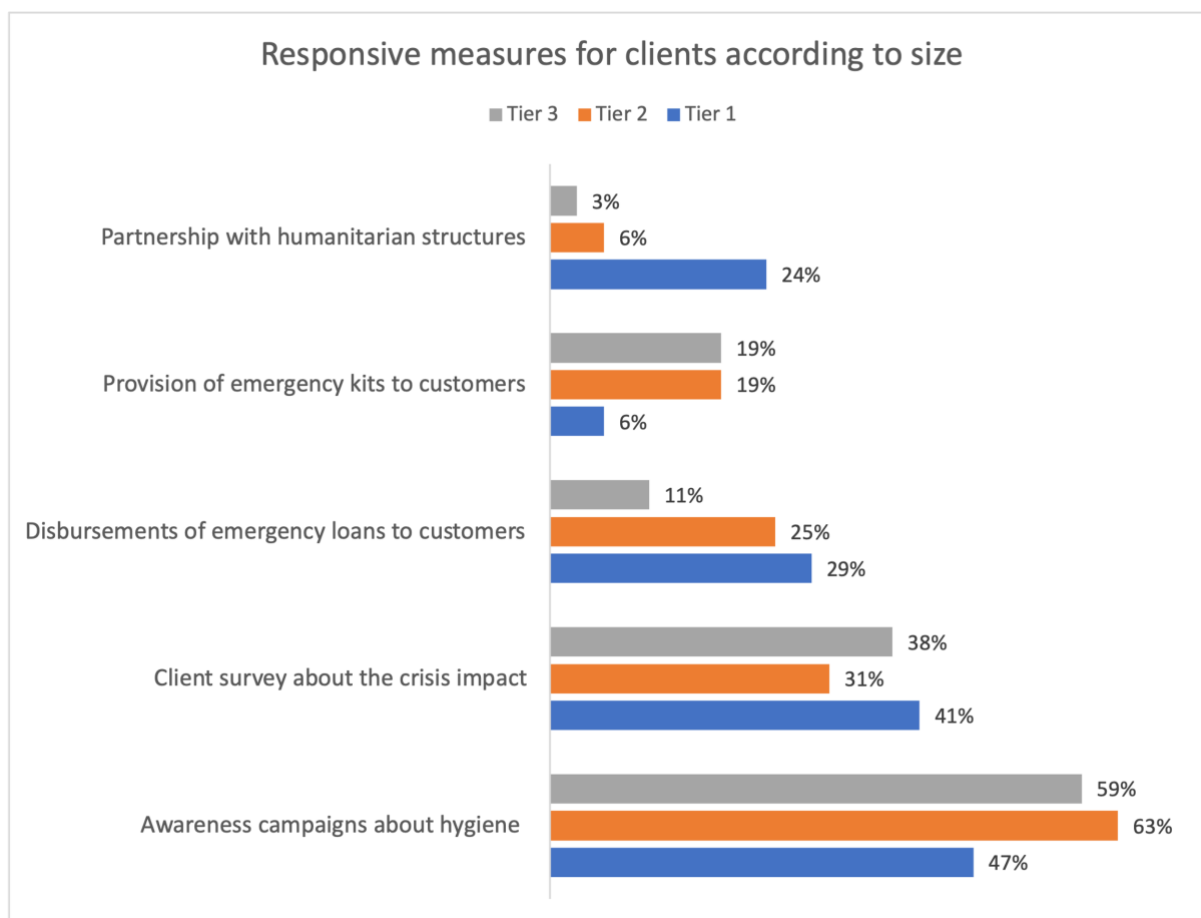
Figure 18: operational and managerial measures taken by MFIs due to COVID-19



Source: Covid-19: different impacts on MFIs depending on size (ADA, Inpulse, and Fondation Grameen Credit Agricole, 2020)

Following this line of thought, due to the increasing lack of liquidity and funds, MFIs have been less responsive in granting urgent loans to those in need, which is something fairly common when their activity is running smoothly. Nonetheless, as a way of adapting to the health crisis, many MFIs have given out other types of non-financial help, such as hygiene and wellness awareness campaigns and emergency kits with sanitary products. Personal support has also been an important service provided by the MFI employees. Surveys have been conducted to understand how clients or borrowers are feeling about the situation and the economic crisis that will follow. In turn, this serves as another way of improving their services through a better understanding of current needs. Additionally, some of the MFIs, the majority being Tier 1 institutions, have formed alliances with humanitarian organizations to help their clients. The distribution of these alternative, non-financial services, is segregated in terms of the size of the MFIs in the following graph:

Figure 19: MFIs’ non-financial responsive measures towards their clients



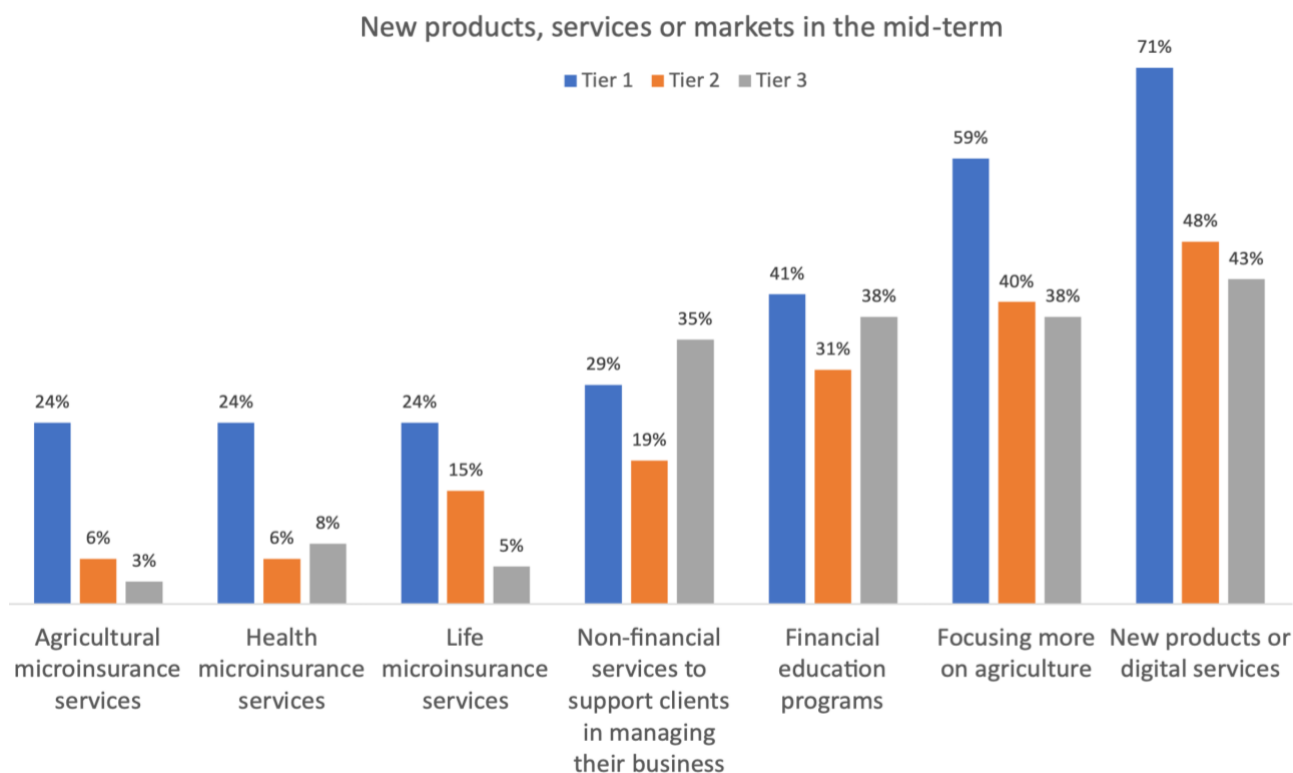
Source: Covid-19: different impacts on MFIs depending on size (ADA, Inpulse, and Fondation Grameen Credit Agricole, 2020)

As a way of understanding the needs of MFI clients' in depth, the survey conducted by Oxford Review in Pakistan asked microenterprise owners about what would constitute as a bigger aid for them through this crisis. The majority of the respondents answered that a donation would be of most help. 51% of them asked for cash donations, while 9% were in need of food donations or a new loan which they would use to cover basic needs. Regarding regular borrowers, the numbers were significantly different, with 26% needing cash and 13% prioritizing food donations. Other demands from regular borrowers refer to debt forgiveness (35%) and rescheduling (18%). These numbers reflect the initial concerns. Low-income individuals live on a day-to-day basis where their main goal is to have food on the table. Microfinance institutions are needed for many of them to be able to reach this modest threshold. The crisis has made it hard for borrowers to pay back their debts but their dependability towards the institutions has become an essential element for their ability to survive (Malik, et al.).

4.3.2. New products, services and market entries for MFIs in the mid-term:

The COVID-19 pandemic has led to increasing repayment defaults and increasing lack of liquidity for MFIs. This means that the microfinance institutions and the investing funds that support them, are in need to adapt to these changes. Coming up with different solutions to survive the imminent economic crisis is crucial at this point in time. Following through with the interviews, Grameen Foundation and ADA have managed to investigate more about what these solutions are. As for new products, services, and markets, the main areas of focus are represented in the following chart:

Figure 20: MFIs’ new products, services and markets in the mid-term

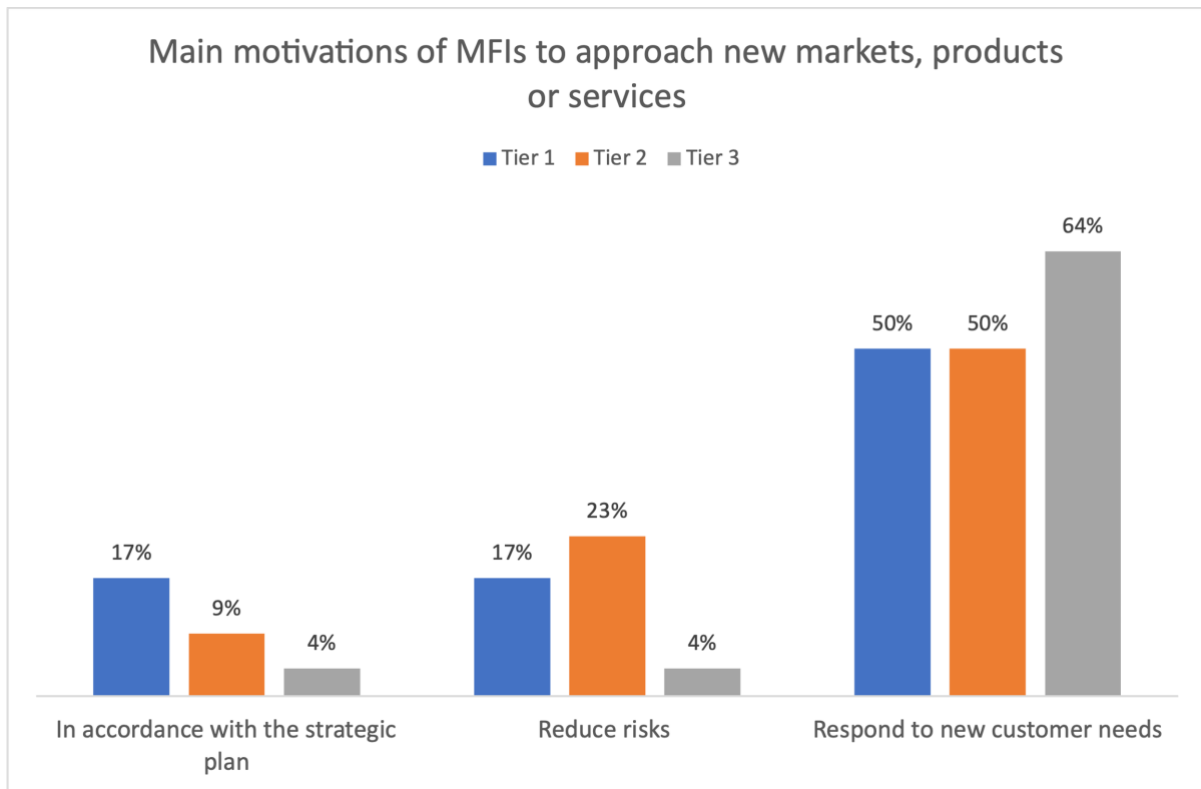


Source: Covid-19: different impacts on MFIs depending on size (ADA, Inpulse, and Fondation Grameen Credit Agricole, 2020)

In global terms, Tier 1 MFIs are the ones that mainly planned to launch new products and services in the medium term; given that their financial restrictions are lower. As shown above, Tier 1 MFIs probably have more room for maneuvering towards this direction (Figure 20). Likewise, whilst few MFIs are contemplating launching microinsurance products in the future, Tier 1 MFIs are the most likely to do so. They are also the MFIs most probable to want to focus more on agriculture or to launch new digital products and services. On the other hand, smaller MFIs are also considering implementing non-financial services, whether they are services for financial education or Business Development Services (BDS).

Digging deeper into why the MFIs were looking to switch their main focus, the study proceeds to observe differences amongst MFIs. Continuing with the segregation according to the different sizes, these are the responses that came through when we inquired about their motivations for orienting their activities toward new markets or developing new products or services:

Figure 21: Three main motivations of MFIs to diversify (depending on size)



Source: Covid-19: different impacts on MFIs depending on size (ADA, Inpulse, and Fondation Grameen Credit Agricole, 2020)

Thus, amongst those who stated that they wanted to launch at least one new product or service, whilst explaining their motivations (76 MFIs out of the 108 that responded to the survey), the desire to respond to new client needs and/or to follow new market trends is cited relatively more frequently by Tier 3 MFIs than the other institutions. On the contrary, they are the least likely to justify their decision by relying on strategic plans or the need to reduce risks. It is worth mentioning that this special focus towards diversifying into new market trends and client’s needs will potentially set an advantage for Tier 3 institutions in the current crisis.

5. CONCLUSIONS AND RECOMMENDATIONS:

COVID-19 has led to people losing their jobs, and consequently, having lower incomes in their households. Poverty rates have increased all over the world, but specially in underdeveloped countries, where most of the people are self-employed and have lost their only source of income. With less income, comes the need for financial help. Microfinance

institutions are meant to be of service in this area. However, lower income in households also implies a lower capacity to repay existing loans that have already been granted by MFIs. Microfinance institutions have been struggling to recuperate the credit that was lent before the pandemic and are currently facing imminent challenges regarding write-offs, repayment delays, and taking on innovation to endure the current crisis. Many of the institutions have been helping those affected by the pandemic with other non-financial services, such as emergency kits with sanitary products and financial education programs. Nonetheless, MFIs have to take into consideration restructuring methods in order to be able to solve the financial and operational problems that have worsened due to the crisis.

Following strategic plan in response to client's new needs, MFIs are considering entering new markets, as well as launching new products. On one hand, the importance of investing in the agricultural sector has been highlighted, due to its increasing efficiency towards accelerating the economy of rural areas in low-income regions. On the other hand, new products are being considered in the mid-term, with many institutions investing in technology, generating digital platforms and creating products that can improve the efficiency of their services, as well as lower costs in the long run. The latter measure is a popular recommendation within the sector, for "innovation is the central issue in economic prosperity" (Michael Porter, 2015). Moreover, MFIs are also acknowledging the increasing necessity for financial aid in certain sectors within developed countries in the EU and US (Zheng & Zhang, 2020). Many are strongly considering reaching out to higher-income borrowers that would provide a lower risk portfolio, whilst still maintaining the essence of the service, small loans with relatively low interest rates. All in all, by understanding clients' needs and keeping an open mind in terms of creative solutions, microfinance institutions should continue growing in the long-run and expanding into developed countries, as well as underdeveloped ones, with improved and more efficient services.

5.1. Further Research

The development of microfinance is not over yet. In fact, there is a lot more research to be done. Considering the pandemic and the global situation in terms of poverty, it is important to find accurate ways of measuring the impact of the services offered by MFIs. Previous studies and investigations on the matter have been carried out, coming to a series of raw

conclusions that leave certain questions unanswered. For example, accurate indexes in order to measure the direct consequences of MFIs towards women's empowerment are essential. Similarly, there is a need to prove that investing in small farmers in agricultural areas is in fact the most efficient way of alleviating poverty in underdeveloped rural countries. Both of these investigations could be taken from a 'worm's eye' point of view, referencing Muhammad Yunus, which would entail sampling a specific village, and observing the effects on the people that have been helped by MFIs: how has their income changed? Do they feel more empowered? Are women truly more reliable than men?

Finally, focusing more on the innovation aspect of microfinance development, MFIs could potentially include digitalized services and products, such as phone applications or banks that can be accessed through the internet. Nonetheless, it is important to cover a comprehensive research about the availability of these products to their customers and potential clients in underdeveloped countries. Also, in case digitalization gains momentum, rigorous research should take place in order to discover if their services are becoming more efficient with digital products. New products and services should adapt to client's necessities and make their lives easier, not harder. Therefore, digitalization requires vast amounts of research and field studies before it can be implemented.

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