

Inclusive Insurance: Closing the Protection Gap for Emerging Customers

A joint report from the Center for Financial Inclusion at Accion and the Institute of International Finance

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Inclusive Insurance: Closing the Protection Gap for Emerging Customers

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Foreword

It is a common saying amongst professionals in our industry that insurance is not bought, it's sold. And the industry as a whole is working hard to reverse that dynamic: any product or service that sustainably brings value to a client should only be bought.

There is one caveat though, another industry commonality: the customers we traditionally sell to across emerging economies are at the top of the pyramid, at best at the top of the middle. No lower. Right below is where the unserved, the so-called new segments, are and they have a very real demand for protection. In the absence of formal safety nets, these more vulnerable populations have informal risk management strategies, based on the multiplication of revenue sources, and precautionary savings or loans from their families and communities. These strategies have limitations. The number floating around is that informal risk management is ten times less efficient than formal protection mechanisms, and one single emergency can force families to sell productive assets, move back to the village, remove children from school to help the household earn extra income or go back into poverty. This is the reality for the lion's share of people —7 out of 10—in emerging markets. In India for instance, while the RSBY public health insurance scheme covers some odd 15% below-the-poverty line cardholders, private health insurance is restricted to the top 5 to 10% of the population, leaving a huge gap and endangering the emergence of the middle class.

But planets are aligning to expand access to insurance. Compared to ten or even five years ago, the industry has made great strides thanks to increased mobile phone penetration, access to education—particularly for women—and the focus of governments on financial inclusion. Insuring the emerging middle has become a real opportunity in these markets, and I am proud that AXA is striving to take a leadership position to seize it. We are thankfully not alone, several leading insurers are increasingly focusing on serving this segment through various initiatives, including innovative new business models, investing in and collaborating with insurtech companies, and tailoring value propositions.

To succeed in this business at scale, we need to be driven by several convictions. The first, that the outcome must serve two purposes: financial profitability and social impact. Our industry needs to build public-private partnerships to educate unserved customer segments about the benefits and risks of insurance products, and to kickstart the market through initiatives like the Insurance Development Forum. Second, we need to change our mindsets and challenge our way of thinking. We cannot simply downsize traditional products. We must spend time in the field to understand customer realities, build appropriate products, and innovate beyond credit life towards health, property, and micro-savings. We must move towards value-added services such as a free call-a-doctor for non-claimants. We must go from just being a payer of claims to a customer-empowering partner. We are creating a market, not entering an existing one in a different way.

I welcome this report by the Center for Financial Inclusion at Accion and the Institute of International Finance, and applaud the efforts of both organizations to highlight both the commercial opportunity presented by inclusive insurance as well as the positive social impact it brings. I recommend this report to financial service providers, governments and all those who strive to close the protection gap. Insurance is a social good which cannot be restricted to the happy few, and the time to act is now.

Denis Duverne, Chairman of the Board of Directors, AXA

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We note with gratitude the insights and guidance of the Research Advisory Group: Hannah Grant, head, Secretariat, A2ii; Garance Wattez-Richard, head of Emerging Customers, AXA; Bilal Mughal, head of Ventures, Blue Marble Microinsurance (and head of Emerging Consumers, Zurich Insurance); Doubell Chamberlain, founder and managing director, Cenfri; Nigel Walsh, partner, Financial Services Technology, Deloitte; Martin Buehler, principal insurance specialist, International Finance Corporation; Craig Churchill, chief, Social Finance Programme, International Labour Organization; Michael McCord, president, MicroInsurance Centre; and Paula Pagniez, senior microinsurance specialist and vice president, Global Partnerships, Swiss Re. Their strong support and thoughtful insights have been essential to this project.

This report is part of a two-year initiative, *Mainstreaming Financial Inclusion: Best Practices*, that aims to advance financial institutions' efforts to reach customers at the base of the economic pyramid. It is the second of six reports in this series. The initiative and this report were made possible by generous financial support from MetLife Foundation. CFI is also grateful for generous support from its founding partner, Credit Suisse. However, the views and opinions expressed in the report are those of the authors and do not reflect the views and opinions of the interviewees, the Advisory Group members, or MetLife Foundation. All errors are our own.

Introduction: What Is Inclusive Insurance, and Why Does It Matter?

Emerging consumers present a promising market for insurance, and creative insurance companies have been developing promising models to reach this market for years. Since the 1990s, the microinsurance movement has demonstrated the benefits of insurance for low-income people, as well as exploring new business models to serve these customers profitably in frontier and emerging markets. Microinsurance pioneers, as well as social insurance programs, targeted customers in the informal economy who were underserved by mainstream commercial insurance. Microinsurance models matched their premiums and benefits to the needs of these groups. Today, *inclusive insurance* expands this market and product-development work to all those who have not been served by traditional insurance, including the lower middle class, while retaining a particular emphasis on vulnerable and low-income populations.

A number of terms related to inclusive insurance are in circulation. Market leaders such as Allianz and AXA refer to emerging consumers or emerging customers. Others refer to mass insurance or popular insurance, a term often used in Latin America. Mexican mobile payments platform Saldo.mx focuses not on the market itself but on changes to the claims process and the claims adjuster in order to serve this market, with the term nonadjustable insurance. The International Labour Organization (ILO) has championed what it terms impact insurance. In this paper, we use the term inclusive insurance to encompass all of the above. We define inclusive insurance as access to and use of appropriate and affordable insurance products for the unserved and underserved, with a particular emphasis on vulnerable and low-income populations. Whatever the language or specific target, it is clear that both traditional and new insurers are breaking open new markets through new business models, technologies, product design, and partnerships, all made possible by enabling regulatory environments.

This report is based on written submissions and in-depth interviews with thirty insurers and insurance experts who are making inclusive insurance work as a profitable business model. Their optimism about inclusive insurance stems from both the sheer size of the potential market and the fact that rising incomes equip a large segment of the global population with the incomes needed to benefit from insurance services and afford the relevant premiums. Increasingly, real-world experience backs up the notion that inclusive insurance is commercially viable, as Part 3 of this paper discusses. Yet most of our interviewees maintained a high degree of commitment to social impact, recognizing both the social value of insurance and the special attention needed when working with vulnerable groups.

Even among people with very little disposable income, insurance can be a vital tool to manage financial risks, as many reports demonstrate. Insurance can help people at the base of the economic pyramid manage the stresses of illness, crop failures, natural disasters, or income loss due to the death of a wage earner.¹ The Insurance Development Forum has compiled evidence about the role of insurance in addressing natural disasters and developing resilience (see Part 3).² Insurance products help people respond to shocks and can even motivate them to invest to avoid shocks before they happen, or to mitigate them once they do. For instance, health insurance encourages people with low incomes to visit the doctor, resulting in reduced maternal and infant mortality. Farmers who have insurance can often qualify for credit that allows them to purchase higher-yield, drought-resistant seeds—so that if they do experience a drought, they can avoid selling precious assets. Insurance can help families avoid resorting to drastic coping strategies when they experience a shock, such as taking children out of school and putting them to work.³

^{1.} Leora Klapper, Asli Demirguc-Kunt, and Dorothe Singer, "Financial Inclusion and Inclusive Growth: A Review of Recent Empirical Evidence," World Bank, April 25, 2017.

^{2.} For more information, see TheIDF.org.

^{3.} Klapper, Demirguc-Kunt, and Singer, "Financial Inclusion and Inclusive Growth."

Part 1 of this paper describes the market for inclusive insurance, informed by available data and research and the views of insurers who are making a play in this space. This market is vast, largely untapped, and potentially profitable. We say this not only based on the sheer numbers of those who are unserved and underserved—estimated at 3.8 billion—but also on the confluence of rising incomes in emerging markets and technology that is bringing down the cost of distributing insurance and measuring risk. These trends together create a large new addressable market. In Part 2, we focus on what insurers believe to be the most important challenges to reaching this market. We also look at solutions: new distribution channels and aggregators, an array of "insurtech" innovations and digital channels, and new business models and products all yield gains in both access and value for customers. Part 3 describes innovative product lines, starting with life products, especially credit life, and then discusses models in health and climate/weather-related insurance that show promise. We also look briefly at insurers' vital role in mitigating climate risk, particularly for vulnerable people in emerging economies. In Part 4 we look at the regulatory environment, focusing on what has worked, as well as practical recommendations from insurers about how regulators can ease the way for inclusive insurance.

Finally, we have curated a Resource List of organizations and publications that provide a complete landscape of the industry, which you can find as a separate document here. We particularly look to the ILO Impact Insurance Facility, the MicroInsurance Centre, the International Finance Corporation, the Centre for Financial Regulation and Inclusion (Cenfri), Access to Insurance Initiative (A2ii), and the Microinsurance Network, each of which contributed to this paper through our Advisory Group. These organizations turn out a steady stream of knowledge. Instead of duplicating their and others' excellent work on inclusive insurance, this paper focuses on innovations from institutions that are members of the Institute for International Finance (IIF) with guidance from a few select experts.

We are bullish on the prospects for inclusive insurance in emerging markets, yet keenly aware of the many players that need to come together in order to realize its promise. We are also encouraged by the tremendous pace of innovation and the potential for mature markets to learn from those innovations. And we tip our hats to the industry pioneers whose vision goes far beyond serving new markets and harks back to the earliest days of insurance as a way for people to share and mitigate risk.

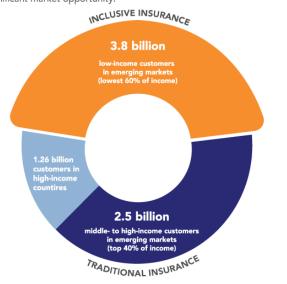
Insurers have often been seers, looking ahead of most of the population to anticipate risk and spurring changes to prevent harm. While adapting traditional models to serve the unserved and underserved is on its own an impressive feat, many of the insurers we talked with go far beyond that, with models that rethink the concept of insurance and its fundamental role in society. It is our hope that this paper will add to the many voices that acknowledge the critical role of insurance as part of a fabric of financial strategies that promote the well-being of individuals, families, communities, and economies.

Part 1: The Market

FIGURE 1.1

GLOBAL MARKET SIZE FOR INCLUSIVE INSURANCE

Traditional insurance providers do not reach 3.8 billion customers in emerging markets. This represents a significant market opportunity.



Source: Adapted from Allianz, Emerging Consumers 2016 Full Year Insurance Report, using updated World Bank population number.

Mainstream financial services providers are increasingly confident about the vast market size for inclusive insurance products. Existing data on insurance and interviews with leading providers offer some clues about the size of this market. While the estimated premium value is not large in comparison to the global insurance industry, its opportunities are noteworthy and growing. We pull together highlights from existing studies and combine them with our interview research to offer an illustrative assessment. Our survey of existing data and interview research support three related findings:

- 1. Estimates of the size of the prospective inclusive insurance market vary, but evidence consistently confirms that it is significant and growing, given rising incomes among emerging consumers. One reasonable estimate is that the potential inclusive insurance market covers around 3.8 billion people in emerging markets globally⁴ (see Figure 1.1). Within this broad market, insurers are beginning to pursue the most addressable segments, particularly those in the fast-growing emerging middle class, a group of no-longer-poor but still vulnerable families rapidly becoming the biggest segment of the world's population.
- 2. The market is on the verge of a new, significantly more inclusive equilibrium. Trends in insurance and in understanding low-income consumers are driving this recognition. For example, online and mobile channels are reducing distribution costs, while data technology is transforming the very nature of risk—the core element of the industry's business model—by enabling new ways to create, capture, and analyze valuable information that can help insurers better calculate and manage the risk associated with new types of customers. We will explore these supply-side innovation trends later in the report.
- **3. Some products are easier for emerging consumers to access and use.** Data confirm that some products are more readily offered than others. The usage statistics reflect this disparity, with life, accident, and credit life insurance dominating the inclusive insurance market—although other products show great potential.

The following section will turn to each of these three findings and provide insights on each.

^{4.} Methodology from Martin Hintz, "Emerging Consumers 2016 Full Year Report" (Berlin: Allianz SE, April 3, 2017). Figure 1.1 has been updated based on updated population figures from World Bank, "Databank" (Washington, DC: World Bank, 2017).

1A. Describing the Market

There is wide agreement that the addressable market for inclusive insurance is noteworthy—and growing. Allianz, for example, believes that the global inclusive insurance market has the potential to cover up to 3.8 billion people through market-based risk transfer solutions and public-private partnerships.⁵

How studies define this market segment varies—for some, like Cenfri, it is consumers making less than \$15 per day,⁶ sandwiched between the middle- or upper-income segments who can afford conventional insurance and the consumer segment whose insurance is subsidized through government aid. Allianz defines this segment as the lowest 60 percent of populations in emerging markets, or about 3.8 billion people.⁷

Much of this market is untapped, even though insurance is growing at the top end of emerging markets. According to Swiss Re, emerging-market premiums accounted for 19.7 percent of global premiums in 2016. The year 2016 saw an increase of 14 percent in insurance premiums written in emerging markets overall, compared to 9.8 percent growth the previous year, though most of these premiums come from the upper tiers of their societies. Premiums in emerging markets overall totaled \$934 billion by the end of 2016.8 Projected growth in inclusive insurance is consistent with high growth in insurance in emerging markets overall, but this growth is starting from a low level. The most recent estimates on the microinsurance market show 600 million lives currently insured (less than 20 percent of the total population in the relevant segment). While inclusive insurance still reaches a small fraction of the potential market, it is growing and gaining momentum.

FIGURE 1.2
MICROINSURANCE COVERAGE RATIOS, 2016



^{5.} Hintz, "Emerging Consumers 2016."

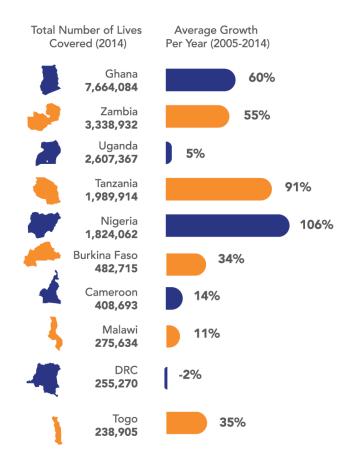
^{6.} Throughout this report, \$ denotes US dollars.

^{7.} Hintz, "Emerging Consumers 2016."

^{8.} Daniel Staib, Darren Pain, and Mahesh Puttaiah, "World Insurance in 2016: The China Growth Engine Steams Ahead," Sigma (Zurich: Swiss Re, March 2017).

^{9.} Dennis Ferenzy, et al., "Insurance Inclusion: Reaching Underserved Populations with Tech" (Washington, DC: Institute of International Finance, September 2016).

FIGURE 1.3
GROWTH IN MICROINSURANCE COVERAGE IN SELECT AFRICAN COUNTRIES, 2005-2014



Source: World Map of Microinsurance, 2016

The gap between access in emerging markets and access in high-income markets is notable as a benchmark for estimating the addressable market. Swiss Re's National Catastrophe Database shows that in high-income markets, 42 percent of losses resulting from natural catastrophes were covered by insurance. In contrast, in emerging markets, only 11 percent of losses from natural catastrophes were covered by insurance.¹⁰ These figures suggest high potential for growth.

The market varies across regions. Latin America has the highest uptake rates, but the number of Asian and African people accessing insurance is growing quickly. Microinsurance coverage ratios vary from 5.5 percent in Africa to 7 percent in Asia and 7.9 percent in Latin America and the Caribbean (see Figure 1.2; p.9). To give a sense of scale vis-à-vis the larger insurance market, in Africa this translates to about \$756 million in gross written premiums, only 1.1 percent of the total insurance industry in the region. The Microinsurance Network suggests that low penetration numbers point toward a market opportunity: in a saturated global insurance industry, institutions need only to reach slightly down market to find an open field and receptive customer base.

The speed of insurance growth at the base of the pyramid is startlingly high in some countries. For example, Nigeria has seen 106 percent growth per year on average between 2005 and 2014 in its coverage, with 1.8 million people receiving microinsurance in 2014. Yearly growth in other countries is nearly as impressive: Tanzania at 91 percent, Ghana at 60 percent, and Zambia at 55 percent (see Figure 1.3).

The insurers we interviewed see the market opportunity as driven largely by growth in the size of the emerging consumer group, as global incomes rise in nearly all markets. Of our interview sample, 62 percent saw the rise of the middle class in emerging market economies as one of the key factors motivating their pursuit of inclusive insurance services (see Figure 1.4; p.11). What this target market can afford is rising with incomes. This growth is most dramatic in East Asia and the Pacific, where incomes in the bottom two quintiles is expected to nearly double between 2010 and 2020. People who were previously considered "poor" are moving into new income strata, enjoying an average increase in income proportionate to national growth.¹¹

Emerging consumers face risks that the insurance industry is well poised to address profitably. Customers recognize the value of protecting against risk and are willing to purchase products that address this need. We know that low- to middle-income consumers who are not using formal products are finding ways to mitigate risk, even if they manage their finances primarily

^{10.} Shailee Pradhan, Zerlina Zeng, and Ashish Dave, "Insurance: Adding Value to Development in Emerging Markets," Sigma (Zurich: Swiss Re, April 2017).

^{11.} Sonja Kelly and Elisabeth Rhyne, "Growing Income, Growing Inclusion: How Rising Incomes at the Base of the Pyramid Will Shape Financial Inclusion," Mapping the Invisible Market (Washington, DC: Center for Financial Inclusion at Accion, June 2013).

FIGURE 1.4 DRIVERS OF INCLUSIVE INSURANCE

We asked the insurers we spoke with what motivates their provisions of inclusive insurance.

Obligatory/compulsory products such as credit life	8%
Compliance	15%
Government	15%
Niche market	15%
Increase efficiency of traditional market by developing tools for mass markets	38%
Cross-selling strategy	46%
CSR/social impact	46%
Base of the pyramid market size	62%
Rise of middle class in emerging market economies	62%

outside of the traditional financial sector. These consumers manage volatility with a mix of informal and social tools in addition to the few formal products to which they have access. Researchers from the Consultative Group to Assist the Poor (CGAP), for example, found that in response to illness, deaths of family members, livestock loss, and poor harvests, low-income households were able to rely on their own savings, reduce their food consumption, sell crops that they had in storage, and borrow from family or friends.¹²

Survey research confirms that emerging consumers are able to save enough to cover the cost of an emergency. Nearly 40 percent of people in emerging markets reported that, faced with an emergency costing nearly a month's salary, they would be able to secure the necessary funds from their own savings.¹³ Evidence of saving for emergencies reveals both risk-mitigating behavior and an ability to pay for insurance that offers a more efficient

way to mitigate risk. Paula Pagniez, senior microinsurance specialist and vice president of partnerships at Swiss Re, shares that, on average, it costs a customer seven times more to recover from a shock than to prepare for it.¹⁴ The stakes are high for these potential customers. Shawn Cole of Harvard Business School found, in a "willingness to pay" study focused on farmers in India, that the average willingness to pay for weather-indexed crop insurance generally exceeded the actuarial value of the premium.¹⁵ These data point to the reality of a notable and growing market for inclusive insurance.

1B. Industry Moving Toward a New Equilibrium

The insurance industry is responding to this market opportunity in a significant way. According to the Insurance Information Institute, in 2005, only seven of the major insurance players were involved in microinsurance; in 2011, there were thirty-three. By 2016, sixty major insurers, including AIG, Allianz, AXA, MetLife, and Zurich, were active in microinsurance¹⁶ (see Figure 1.5; p.12).

While institutions assess the market's size differently, they agree that the business case for inclusive insurance is driving their participation. Martin Hintz, head of Emerging Consumers for Allianz SE,¹⁷ says, simply, "There is a clear business case, and the margins are good." Doubell Chamberlain of Cenfri argues that, given limited capacity and capital, viability is not sufficient, "inclusive insurance must be one of the top three most profitable opportunities for insurers in order for them to pursue it in a significant way." Some insurers do view the market as a business—

^{12.} Megan Gash and Bobbi Gray, "The Role of Financial Services in Building Household Resilience" (Washington, DC: CGAP, March 2016).

^{13.} Asli Demirguc-Kunt, et al., "The Global Findex Database 2014: Measuring Financial Inclusion Around the World" (Washington, DC: World Bank, May 2015).

^{14.} This figure is widely quoted, and while it is more an estimate than precise calculation, it illustrates the usefulness of insurance for particularly vulnerable customers. See C.M. Shreve and Ilan Kelman, "Does Mitigation Save? Reviewing Cost-Benefit Analyses of Disaster Risk Reduction," International Journal of Disaster Risk Reduction 10, Part A (December 1, 2014): 213–35.

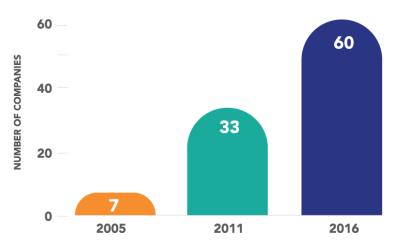
^{15.} Shawn Cole, "Panel on Insurance," Advancing the Research Agenda for Financial Inclusion, World Bank, June 28, 2016.

¹⁶ Ferenzy et al., "Insurance Inclusion."

^{17.} At the time of this interview, Hintz was head of Emerging Consumers at Allianz. He has since left the company. Given that his responses to our interview questions were given in the context of his former position at Allianz, we will refer to him in that role throughout the report.

FIGURE 1.5
NUMBER OF MAJOR INSURANCE COMPANIES INVOLVED IN
INCLUSIVE INSURANCE

Recognizing the market potential, major insurance companies are increasingly engaging in inclusive insurance.



Source: Insurance Inclusion: Reaching Underserved Populations with Tech, IIF

rather than as a charitable—opportunity, taking the time to pilot and test products for profitability. It also promises even greater profitability in the future with follow-on benefits for first movers."

Insurers are viewing the market as a business—rather than as a charitable—opportunity, taking the time to pilot and test products for profitability.

A growing number of insurers and investors are taking advantage of this potential for profit. On the provider side, global insurer AXA's Emerging Customers team targets those "too rich to be poor and too

poor to be rich," whom they estimate compose approximately 75 percent of the population in emerging markets. The company aims to serve people whose income is generally below \$20 per day, but high enough to purchase insurance. Within the next three years, AXA hopes to serve 45 million of these customers, "protecting the middle class of tomorrow," according to Garance Wattez-Richard, head of AXA Emerging Customers. On the investment side, LeapFrog Investments bought a 15 percent share in Mahindra Insurance Brokers India. At Mahindra, 95 percent of customers have low incomes and 83 percent have no health insurance. Through a national survey, LeapFrog and Mahindra found that 40 percent of their target market falls ill in a given month, while 45 percent of the market reports that illness always leads to financial problems. For 25 percent of people living above the poverty line in India, one hospitalization could send their household back below the poverty line. LeapFrog determined that existing Mahindra customers would be willing to pay up to \$2 per month for coverage.

Insurers are also making efforts to reach traditionally underserved populations such as women, rural dwellers, and owners of small and medium-sized enterprises (SMEs). AXA's groundbreaking study in 2015 identified the untapped global market for insurance among women as being up to \$1.7 trillion by 2030—of which a remarkable \$874 billion in annual premium value would come from women in emerging markets. MetLife is actively pursuing rural populations through its Met99 product in Mexico, with cooperation from the federal government. The governments of India and China—the two countries with the greatest numbers of unserved people—are offering insurers incentives to reach rural areas. In a more purely private, but strongly social, effort, Blue Marble Microinsurance's initial offers have focused specifically on farmers. SMEs are another significantly underserved group.

The ILO's Impact Insurance Facility has championed insurance for SMEs and provides resources on how insurance can help address both personal and business risks along the value chain.¹⁹ The International Finance Corporation (IFC) has worked closely with a number of banks on gender-smart solutions for women business owners and has helped to identify their interest in insurance as well as human-centered design practices to meet their needs.20 (See sections 2C, 3A, and 3B for more on Banco BHD León and Centenary Bank, which have each designed insurance products for women business owners.)

^{18.} Nirman Bhawan, "National Rural Health Mission Framework for Implementation 2005–2012" (New Delhi: Ministry of Health and Family Welfare, Government of India, 2005).

^{19.} ILO, "What Is Impact Insurance?," accessed October 19, 2017, impactinsurance.org/about/what-is-impact-insurance.

^{20.} Alexa Roscoe, "Investing in Women: New Evidence for the Business Case" (Washington, DC: IFC, March 2017).

1C. Unequal Access and Usage among Product Types

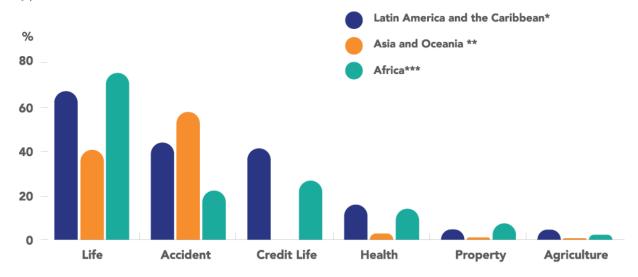
Not all products are equal in availability and uptake—and these trends vary by region. In Africa and Latin America, life insurance is the most prevalent microinsurance product, whereas in Asia and Oceania, accident insurance is the most prevalent. Overall, life, accident, and credit life insurance dominate the inclusive insurance landscape, with health, property, and agriculture insurance seeing a lower number of lives covered.

Swiss Re sees the highest global market potential as being for life microinsurance, including credit life, funeral coverage, savings, and pension products. Health protection, which is regarded as the most relevant coverage for the low-income population, is a close second; penetration is expected to increase in the underdeveloped and emerging economies of Africa and Asia. Agriculture insurance, including crop, livestock, and index-based weather microinsurance, has strong growth prospects and is expected to be further leveraged as an effective way to deal with agricultural risks. Asset microinsurance, which includes vehicle insurance and property coverage for households and personal/business assets, is likely to grow as the income and wealth of current low-income households increases.²¹ And insurance to address climate risk cuts across business lines and is now focusing on helping the most vulnerable build resilience. See Figure 1.6 for a picture of what this inequality of product type looks like across three regions.

Doubell Chamberlain of Cenfri points out that there are benefits for the first movers to enter a market. We now turn our attention to the work of some of those first movers.

FIGURE 1.6
NUMBER OF MAJOR INSURANCE COMPANIES INVOLVED IN INCLUSIVE INSURANCE

There are regional disparities in microinsurance's coverage. This chart documents the percent of total lives covered, by product.



Source: World Map of Microinsurance, 2016. Figures add up to more than 100 because some people have mulitple products.

***Data from 2014

Part 2: Business Challenges and Solutions

In the broadest terms, the challenges of providing insurance to lower-income population segments are similar to those of providing mainstream insurance: identifying and connecting with customers, providing relevant products, and carrying out the administrative work of collecting premiums and paying claims.

^{*}Data from 2013

^{**}Data from 2015, with the exception of health data which is from 2012

^{21.} MIC, "The Landscape of Microinsurance: Africa 2015," World Map of Microinsurance (Luxembourg: Micro Insurance Network and Munich Re Foundation, 2016).

For customers at the base of the economic pyramid, the small incomes from which premiums must come require insurers to solve these challenges in highly cost-efficient ways. Adding to the intensive cost pressure, several factors amplify the challenge of connecting with these customers, including remote locations, lower education levels, and lack of experience with formal institutions. This section of the paper illustrates how inclusive insurers are solving these challenges.

We focus on three categories of solutions based on the practical experience of the providers we interviewed: distribution, technology, and innovations in product design.

2A. Distribution Partnerships for Connecting with Customers

Good distribution partners are by far the most important issue.

—Martin Hintz, Allianz

If you don't have a good product and a good distribution partner, you are very unlikely to succeed.

-Richard Leftley, MicroEnsure

Group insurance—policies that cover all employees of a company or members of an affinity group—is a time-honored strategy to bring down administrative costs and reduce adverse selection for the insurer. It also brings clients greater bargaining power and cheaper rates. For inclusive insurers, groups—including nontraditional aggregators—are even more important. Inclusive insurers generally cannot afford to go directly to customers; they must attract and identify new customers through organizations that already interact with them. If aggregators can offer great scale and inexpensive means of contact, the prospects are good for a solution that works for insurer, aggregator, and customer, even when premiums are very small.

In the best cases, aggregators enable insurers to reach scale very quickly. According to Leftley, when MicroEnsure (which creates partnerships between aggregators and insurers) starts work with a new bank or telco, it first gets to know the partner's needs and the ways customers interact with it in order to create the business case for the insurer. Once aggregator and insurer connect around an articulated case, it can be a fast process, sometimes requiring only twelve weeks to set up an entity, hire a team, and launch.

We asked providers about their preferred distribution channels. Financial institutions have been—and still are—the most frequent partners, especially those with experience in low-income market segments, such as rural banks and microfinance institutions (see Figure 2.1; p.15). Their advantages include their systems and expertise in managing financial operations, their customer base and outreach networks, and the trust of their customers regarding money matters. Wattez-Richard notes that such providers bring "proximity to the financial world and financial products, the ability to explain products, and access to cash." In short, they know how to sell financial products to new markets. They are known, trusted, and "not frightening."

Microinsurance, one of the earliest widespread inclusive insurance innovations, involves partnerships between microfinance institutions and insurance companies. In India, SBI Life offers Grameen Super Suraksha, a group pure-term microinsurance product featuring affordable premiums, flexible payment options, and easy enrollment, with no medical exam required and term coverage of five years. In 2007, Pioneer, a large commercial insurer in the Philippines, entered a strategic partnership with microfinance institution CARD MRI to expand its reach to the broad C and D markets. Years later, in 2013, Pioneer and CARD MRI entered a joint venture, creating CARD-Pioneer Microinsurance Inc. Today, Pioneer Microinsurance works with more than seventy institutional partners, including rural banks, cooperatives, microfinance institutions, pawn shops, and associations.

Those distribution partners yielded more than 18 million policies in 2016, generating \$18 million in premiums.²²

Banking-agent networks have also partnered with insurance companies in some specific markets, such as SBI Life in India and Met99 in Mexico. Postal banks, with 1.5 billion financial services customers, are also seen as a distribution channel of great potential.23 And Shaun Tarbuck, CEO of the International Cooperative and Mutual Insurance Federation (ICMIF), points to the importance of mutual and cooperatives not just in terms of their reach and access, but also their connectedness to communities.

FIGURE 2.1
THE CHANGING ECOSYSTEM OF DISTRIBUTION CHANNELS



Few inclusive insurers we spoke with mentioned existing partnerships with mainstream financial institutions, though there was significant interest in building such partnerships. Matthew Myers of LeapFrog Investments notes that banks offer an attractive platform for insurers, given the frequency of transactions that are "orders of magnitude greater in comparison with the lower flow of insurance premiums and withdrawals." A 2012 World Bank working paper noted that bancassurance—the process of using a bank's customer relationship to sell life and non-life insurance products—has significant untapped potential for developing markets. The paper noted that "in some developed countries it has had a dramatic impact on developing sales volumes, attaining market shares in excess of 50 percent in life and more than 10 percent in non-life."²⁴

Michael McCord of MicroInsurance Centre (MIC) has observed several profitable bancassurance models reaching low-income customers, including credit life as well as covering assets purchased with a bank loan.

Several banks have added insurance after learning more about the needs of women—particularly women small-business owners.

^{22.} Aparna Dalal, "Pioneer Microinsurance" (Geneva: ILO, July 2017), http://www.impactinsurance.org/publications/cb10.

^{23.} Guilherme Suedekum, "Advancing Financial Inclusion Through Access to Insurance: The Role of Postal Networks" (Geneva: ILO and Universal Postal Union, 2016).

^{24.} Serap O. Gonulal, Rodney Lester, and Nick Goulder, "Bancassurance—a Valuable Tool for Developing Insurance in Emerging Markets" (Washington, DC: World Bank, September 1, 2012).

Banco BHD León in the Dominican Republic and Centenary Bank in Uganda have each designed a suite of products for women including insurance. Hellen Tomusange, Supervisor of Women Banking for Centenary, reports that working with insurance companies has been good for the bank, which has gained mileage from the insurance companies' promotion of the bank program.

In India, the government-sponsored Pradhan Mantri Jeevan Jyoti Bima Yojana is a pure protection term insurance coverage that pays 200,000 Indian rupees (approximately \$3,000) to dependents in the event of the policyholder's death. It is available to anyone from age eighteen to seventy who has a savings account in a bank, for a premium of 330 Indian rupees (about \$5) a year.

For Fidelity Bank Ghana, insurance was a natural outgrowth of its outreach to low-income customers—and its partnership with Prudential Life Insurance Ghana made it possible. After launching successful Hospital Cash and Farewell Plans in 2015, Fidelity Bank Ghana launched two additional plans in 2017: an Education Plan, which combines an education savings account with assurance in the event of the parent's death or disability; and a Life Plan, offering income protection with unlimited coverage in 2017. All bancassurance products are available to Fidelity Bank Ghana customers throughout any of its seventy-three branches.²⁵

Banco Davivienda, through its partnership with Seguros Bolívar and using its mobile wallet DaviPlata, offers a life microinsurance product focused on rural customers in Colombia with both funeral coverage for \$700 and life coverage for \$1,000 for a premium of \$10. It is also designing a bicycle-insurance product, given the prevalence of bicycles among low-income customers. In Kenya, CBA (Commercial Bank of Africa) considers insurance to be a vital part of its "bouquet" of financial services.

After financial service providers, the second most frequently cited cluster of partners included mobile network operators (MNOs), mobile money providers, and, more rarely, technical service providers (such as technology platforms, call centers, and back-office support firms). Several insurers operating in Asia and East Africa put MNOs at the top of their lists. MNO partnerships provide ready payment systems for premiums, claims, and brand presence. In emerging markets, this form of partnership has so far mainly been used for small life-insurance policies through compulsory auto-enrollment, though a few insurers are beginning voluntary sales. In addition to the obvious benefits of access and convenience, there has been traction with loyalty products that mobile customers find attractive and easy to renew. Retailers such as convenience stores and supermarkets were mentioned as aggregators, particularly in Latin America. According to a FinMark Trust report, their "extensive physical footprint, trusted brands, administrative infrastructure and customer-facing staff are key assets that can be leveraged at low marginal cost to provide financial products and services." ²⁶

Governments can also play a catalytic role. A contract that covers a large number of new and unserved markets can help establish the infrastructure that provides a foundation for further market growth. Met99, MetLife's affordable insurance program in Mexico, was catalyzed by a contract with the government to provide insurance for public employees such as teachers and health workers.

Leveraging that infrastructure, Met99 could reach other low-income people throughout the country.

Workplaces are a very desirable aggregator, but for inclusive insurance they are not as central, because fewer people in the target segment work for formal employers.²⁷

^{25. &}quot;Fidelity Bank, Prudential Launch Insurance Solutions for Ghanaians," *My Joy Online*, March 19, 2017, http://www.myjoyonline.com/business/2017/march-19th/fidelity-bank-prudential-launch-insurance-solutions-for-ghanaians.php.

^{26.} Eighty20, "Why Retailers?" (Cape Town: FinMark Trust, March 2015)

^{27.} ILO, "Informal Economy," accessed October 19, 2017, ilo.org/global/topics/employment-promotion/informal-economy/lang—en/index htm.

Even in a highly formal economy such as the United States, about a third of adults work independently, without eligibility for insurance benefits. In theory, companies could reach beyond full-time employees to contract workers or into their supply chains, but we do not see examples of this yet.

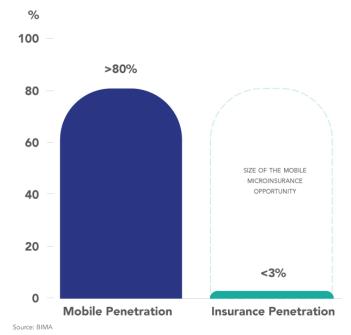
FIGURE 2.2 MOBILE PI EMERGING
There is great channels.

Utilities can also be helpful in certain markets, such as Colombia. Pharmacies, remittance companies, and municipalities are each of interest, but are hard to bring to the table. Insurers also mentioned some less traditional distribution channels. In the Philippines, Pioneer has also worked with pawn shops, mortuaries, and motorcycle dealers.

AXA works with Uber to insure its drivers in Egypt, Mexico, and Nigeria, and Allianz Indonesia provides a lowcost health product for motorcycle

FIGURE 2.2 MOBILE PENETRATION VS. INSURANCE PENETRATION IN EMERGING MARKETS

There is great potential to reach and serve new customers through mobile channels.



drivers in an Uber-style company. Blue Marble Microinsurance is working with farming associations and coffee cooperatives, given its initial focus on agricultural insurance.

Although numerous experiments have been attempted, associations tied to local communities—such as churches, NGOs, and other humanitarian organizations—have not worked well, with rare exceptions, mainly because the organizations lacked experience with managing financial operations.

Not all partnerships cover the entire customer relationship. For example, lead generators, call-center-based agencies, and digital agencies help identify and reach new customers. In China, the Philippines, and other places, linkages to e-commerce companies can help introduce customers to insurance, such as through shipping insurance.

Of course, partnerships are not without risk—including reputational, legal, and financial—as we found in our previous joint report, *How Financial Institutions and Fintechs are Partnering for Inclusion: Lessons from the Frontlines*. Challenges arise around data sharing and alignment of objectives. Cost-sharing can be tough to negotiate, as the usual commission structures are not supported by the small profit margins of lower-income customers. Distributor staff or agents may also lack capacity or incentives to sell insurance. Even though working with a distribution channel that has broad geographic reach brings benefits of scale, geographic dispersion can also hamper quality control. Insurers address these questions by selecting their partners carefully.

Paula Pagniez of Swiss Re says, "If a distributor does not have an inclusive insurance mandate, we don't work with them."

Most insurers simply gear up to provide a lot of training to partner staff, as with Met99's experience in Mexico.

For distributors, inclusive insurance brings direct and indirect benefits well beyond commissions if the products are good for the market, and if partners are clear about what each brings to the table. "In contexts where there are fragmented ecosystems, having the skill to piece together stakeholders in these value chains is important," according to Bilal Mughal, head of Ventures at Blue Marble Microinsurance.

Innovation Spotlight: AXA and MicroEnsure: A Win/Win Partnership

This segment is more addressable than we thought, thanks to digital innovations and the historical shift from low to middle incomes. It is commercially viable and sustainable. This change is recent, so people should revisit old assumptions to recognize that this is now a profitable segment. It reaps benefits in economic growth, better risk management decisions, and empowerment.

—Garance Wattez-Richard, AXA Group

AXA Group has identified financial inclusion as one of its 2020 Growth Pillars, setting a goal of reaching 45 million emerging customers by 2020. To that end, AXA is developing signature products for specific customer segments that are underserved. Garance Wattez-Richard describes these customers as "schoolteachers, bakers, factory workers, farmers, textile workers, police officers . . . They are low to mass market, people with irregular and volatile incomes, risk-aware customers who are not poor but can't afford traditional insurance." AXA's vision is to "accompany the emerging middle class and to help prevent them from slipping back into poverty." The company's strategy includes learning about how these clients manage risk—such as diversifying revenue, leveraging social networks, and focusing on savings—as well as developing payment options and customized, adaptable products to meet those clients' needs.

What has enabled AXA to get traction in this market? Denis Duverne, chair of the AXA Group, points to the importance of creating a dedicated team focused exclusively on this customer segment, with a clear commercial goal.

But AXA didn't start from scratch. It fast-tracked its Emerging Customers work through a 46 percent acquisition of microinsurance pioneer MicroEnsure, announcing an Emerging Customers business initiative to contribute to financial inclusion in February 2016. MicroEnsure is a UK-based company that has registered 56 million customers in twenty countries across Asia and Africa since its founding in 2002 within Opportunity International, a global microfinance network. "They know the products, the risks customers want covered, the customer journey, how to design with no exclusions in a way that avoids anti-selection," explains Garance Wattez-Richard. MicroEnsure brings not only understanding of these customers, but also agility and a fresh approach to product design and delivery. In fact, MicroEnsure CEO Richard Leftley says, "Once we are approached by a potential partner, such as a bank or a telco, we start with understanding what they are trying to achieve and how their customers interact with them. We then create the business case that articulates roles and responsibilities and the customer journey. From there, it's twelve weeks for us to launch."

Wattez-Richard bets that most actuaries in traditional insurance would balk if asked to design a product with no exclusions—yet this is one of several cutting-edge approaches that MicroEnsure and other microinsurance leaders have launched in order to provide simple products with low barriers to entry and claims payments that are fast and easy. AXA is betting that its scale and global reach, combined with MicroEnsure's "boots on the ground," will tap into the growing market of the rising middle class in emerging economies.

Innovation Spotlight: Met99 Leveraging Infrastructure in Mexico

Once we developed the infrastructure, we were able to build capacity to go even deeper to lower-income and smaller niches.

—Pedro Chavelas, MetLife Mexico

MetLife has more than 200 service centers in 128 cities in Mexico, making it well positioned to serve government employees who work all over the country providing healthcare, education, and other services. While Met99 was initially launched to serve those government employees, it turned out that the product also worked for others in the low-income segment, allowing MetLife to further leverage its infrastructure. After starting with large amounts of internal data and information to understand the needs of potential clients and employers, Met99 was able to build the capacity to go even deeper to lower-income and smaller niches.

Pedro Chavelas reports that "each niche is different but most have similar needs and are trying to find solutions—and they are willing to invest part of their budget in the right solutions."

Reaching people in rural areas has been one of the biggest challenges, but also one of the biggest areas of learning. Met99 found success by hiring people from the community who speak local languages, understand customers' needs, and face the same barriers themselves. This has been especially important in rural areas with poor connectivity, where face-to-face interaction not only provides access but also helps build trust. It was clearly essential to make sure that the insurance material was available in straightforward, simple terms and that the local staff could explain it. Met99 has also continuously adapted its products with additional riders and covers based on the needs of specific markets. The portfolio includes life, coverage for accidents, health and disability, and integrated products, including savings. While Met99 has clear business targets, it also meets social objectives, making a difference for individuals, families, and communities.

Chaveles says, "When we first thought about the low-income population, we thought there were so many limitations that the opportunity was not obvious, but we were wrong about that. People at every level of income are willing to make the effort to save and be protected, and to look out for their families and their communities. They are so excited and willing—and that's exciting to us as well."

2B. The Impact of New Technology

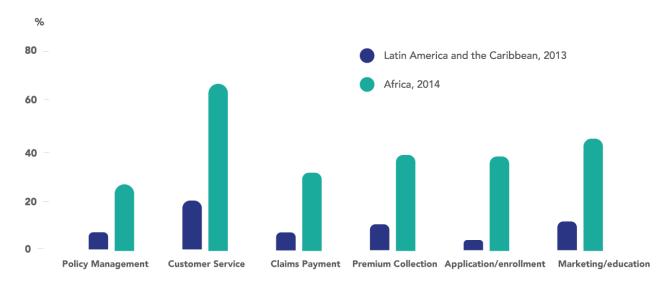
An array of new technologies is dramatically changing the landscape for insurance globally and bringing new developments for inclusive insurance as well. New data sources and analytical tools are changing risk models, machine learning applied to satellite imagery is changing agricultural and disaster insurance, and identity and onboarding solutions are lowering the cost of operations while providing more convenient on-demand service. These innovations are helping the global industry transform from a passive risk-transmission industry into an active risk-mitigation and advisory partner for individuals, businesses, and governments. Salmaan Jaffery, chief business development officer at Dubai International Financial Centre (DIFC) Authority, is keeping a close eye on a number of innovations that he predicts will drive down transaction costs while enhancing service delivery and new product development—all of which will help reach lower and middle-segment customers. He particularly notes that blockchain/distributed ledgers are a key development for operations, claims, and contracts; artificial intelligence and machine learning for product development and risk assessment; and drones and sensors to measure risk and assess damage.

Some technologies will take time to make a difference for inclusive insurance but others are helping change the equation today. One technology that is "old news"—at least, in the context of the fast-moving insurance technology (insurtech) world—is mobile and digital platforms. Mobile phone penetration in emerging markets is now 80 percent—as compared to insurance penetration of three percent (as a percentage of GDP)²⁸ (see Figure 2.2; p.17). The contrast between these two numbers says a lot about the market opportunity. The well-known story is that, in emerging markets, the distribution of microinsurance has multiplied quickly over the past ten years, in tandem with the rapid proliferation of mobile devices. In 2014, Accenture estimated the number of insurance products delivered via mobile channels in emerging economies to have already reached around one hundred, with 54 percent of them in sub-Saharan Africa, 23 percent in South Asia, 20 percent in East Asia, and 4 percent in Latin America.²⁹ Some of these mobile-based products were launched with the help of foundations—although now that the business case has been demonstrated, current partnerships are more often among tech and telecommunication companies, distributors, and insurance firms.

Figure 2.3 shows regional disparities in the use of mobile money for microinsurance. (Note that the landscape studies from which these statistics are drawn are staggered, with one region per year, such that a global comparison in the same year is not possible—but even though Africa was the most recent area surveyed, we expect it would still be on top, given that the region usually takes first place for mobile applications for financial services.)

FIGURE 2.3
USE OF TECHNOLOGY IN MICROINSURANCE AND CLAIMS PAYMENTS IN SUB-SAHARAN AFRICA AND LATIN AMERICA AND THE CARIBBEAN





World Map of Microinsurance

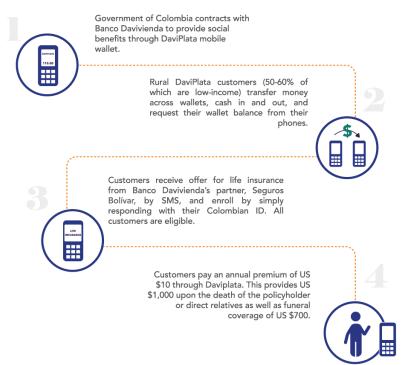
Mobile technology has been important in part because the popularity of loyalty products has made MNOs active distribution channels, and in part because mobile phones are so convenient for making premium and claims payments and enrolling in certain products. That said, this chart shows that mobile phones have also been helpful for customer service, policy management, consumer education, and other vital functions.

^{28.} BIMA, "Our Mission," accessed October 19, 2017, http://www.bimamobile.com/about-bima/mission-and-values/. 29. Ginger Turner, "Mobile Insurance Distribution in Emerging Markets: African Innovations Spreading Globally" (Zurich: Swiss Re, May 2015). Percentages rounded.

BIMA is one example of an insurtech firm specializing in microinsurance in emerging markets. As of September 2017, BIMA's website reported 24 million customers in fifteen countries in Africa, Asia, and Latin America. Notably, 90 percent were first-time insurance customers, and 93 percent live on less than \$10 per day. BIMA's growth has been fueled by partnerships, some of which were brokered by early investor LeapFrog Investments. LeapFrog matched BIMA up with another investee, Express Life in Ghana, fueling Express Life's growth from 12,000 to 423,000 clients in two years—and attracting Prudential PLC to acquire Express Life. BIMA's latest investor is Axiata Digital, the digital-services arm of one of the leading telecommunications groups in Asia, which invested \$16.8 million in April 2017.³⁰

FIGURE 2.4 DAVIPLATA MOBILE LIFE INSURANCE

Banco Davivienda and Seguros Bolívar are working to provide life insurance and funeral coverage to low-income customers in Colombia.



An example of insurance provided through a mobile wallet comes from Banco Davivienda, second largest bank in Colombia. Banco Davivienda currently serves four million customers through its DaviPlata mobile wallet. It estimates that 50 percent to 60 percent of these customers are low income; close to a million came in through a government contract to distribute G2P social-safety-net payments, while other low-income customers came in through employers.31 Through DaviPlata, customers can, at no cost, transfer money across wallets, cash in and out, buy airtime top-ups, and request their wallet balance from their phones.

DaviPlata mobile money customers may buy a life insurance product, with no exclusions, for an annual premium of \$10, which provides \$1,000 upon the death

of the holder or direct relatives as well as funeral coverage of \$700. Enrollment is entirely paper-free. After receiving an SMS, the customer simply enters her Colombian ID number into her phone (see Figure 2.4). Soon an app will make products accessible through smartphones, with mobile Internet paid for by the bank. Currently, DaviPlata has 10,000 microinsurance clients and anticipates growing to 30,000 with the launch of new products.

While mobile insurance products have broken important new ground, there is a much broader array of innovations paving the way for growth. In March 2017, Cenfri released a review of insurtech innovations that have helped open and develop insurance markets in Africa, Asia, and Latin America. The review identifies 157 initiatives that address five key challenges: lack of information on consumers, inadequate access to consumers, different and new consumer needs, consumers inexperienced with formal financial services, and constrained business models.³²

^{30.} Shiwen Yap, "Axiata Digital Invests \$16.8m into Swedish Insurtech BIMA," *DealStreetAsia*, April 17, 2017, https://www.dealstreetasia.com/stories/malaysia-insurtech-firm-bima-secures-16-8m-axiata-digital-70422/.

^{31.} The total population of Colombia is 48 million people, and Davivienda estimates the total potential DaviPlata market as 15 to 20 million customers—up to 70 percent of the adult population twenty-five and older.

^{32.} Herman Smit, Cat Denoon-Stevens, Antonia Esser, "InsurTech for Development: A review of insurance technologies and applications in Africa, Asia and Latin America" (Cenfri, March 2017).

The providers we interviewed for this report are using technology to solve both front-end and back-end challenges. While more details are shared in the specific product examples in the next section of the paper, here are some of the ways these providers are addressing customer and business needs through technology.

Instant enrollment. One major technology application involves making enrollment extremely simple and inexpensive, to the benefit of both providers and customers. In many countries, advances in identification systems have made it possible to enroll customers instantly. Wattez-Richard notes that "national ID is changing everything in China and in India." In Colombia, Margarita Henao Cabrera reports that customers can enroll in DaviPlata's insurance in seconds by entering their national IDs into their mobile phones. Richard Leftley, CEO of MicroEnsure, notes that even basic questions such as the customer's name, age, and other demographics can create a barrier to enrollment, so enrolling customers based only on phone numbers eliminates those barriers. "We don't know anything about them until they make a claim, not even their name or age," says Leftley. YES Bank observes that automatic life insurance coverage through mobile top-ups has a significant degree of success. Depending on the market, automated means of enrollment other than mobile can be important, including Internet-based products in China and point-of-sale devices among retailers in Latin America. Banco Davivienda is among the companies moving toward smartphone apps.

Mobile premium collection. Mobile and other digital technologies also make payment transactions cheaper and easier. Mobile payments allow microinsurance customers to make very small premium payments through mobile platforms in countries as diverse as Kenya, India, and Colombia.

Technology-enabled claims verification and payouts. Since fast distribution of claims builds trust and adds customer value, Allianz is experimenting with payments that do not require customers to submit a claim—for instance, if the distribution partner reports that a customer has been in an accident. These fast payouts are facilitated by mobile payments. Parametric insurance using data from weather satellites enables automatic payments for farmers who have index insurance. (See section 3C.) Claims payouts and management are also being enhanced by drones. The technology allows easy access to isolated and dangerous areas after disasters to collect aerial data and assess loss through cutting-edge imagery analytics. Munich Re has been experimenting with the technology and has partnered with US-based drone company PrecisionHawk to augment insurance evaluations of areas affected by natural disasters by improving reporting precision and response times. The two companies worked together in the aftermath of the April 2016 earthquake in Ecuador. Within days of the devastation, images of all of the affected areas were captured by drones and then analyzed in DataMapper, a drone-based mapping and analytics platform.³³ According to Tobias Büttner, head of claims at Munich Re, "Drone techniques may become standard in loss adjustment and claims management."³⁴

Back-office systems. Modernizing back-office IT systems helps bring down administrative costs, making low-premium products affordable to manage. For example, when AXA acquired MicroEnsure, its first investment was to improve legacy IT infrastructure. LeapFrog Investments also prioritizes IT with its microinsurance investments. To further reduce transaction costs, some experiments use blockchain technology, such as Consuelo, offered by the Mexican-based mobile platform Saldo.mx, in this case to facilitate microinsurance for Mexican migrant workers in the United States. By providing a universal and tamper-proof source of truth, blockchain technology could reduce human error, fraud, data duplication, processing delays, and opaqueness—ultimately increasing efficiency and lowering operational and administrative costs for the insurance industry.

^{33.} Smith, Denoon-Stevens, and Esser, "InsurTech for Development."

^{34.} Tobias Büttner, "The Tianjim Port Explosions and insurance—How Satellites and Drones Will Improve Claims Management of Large Losses," LinkedIn post, November 11, 2015, https://www.linkedin.com/pulse/tianjin-port-explosions-insurance-how-satellites-drones-b%C3%BCttner?trk=mp-reader-card.

Using New Data to Reappraise Risks. Historically, there has not been enough data to feed actuarial analysis that can inform a relevant product at a fair and attractive price. However, data has now become available on people who have a national ID or mobile phone number. Data analytics can then be effective at identifying prospective customers and, as Salmaan Jaffery of DIFC Authority notes, their behavior patterns. He looks forward to using artificial intelligence and machine learning in product development and risk assessment. With new data tools, the sector will look at risk differently. As Jaffery explains, "It may become apparent, through the analysis of behavioral and social data, that lower-income people may not be any greater risk than those with higher income profiles." 35

Wattez-Richard also points out that, whereas traditional insurance was linked to fixed employment or a fixed address, "Data scientists need to think beyond the old risk profile for someone with one employer; pay-as-you-go insurance works for those who are live-as-you-go."

The explosion of data results from a variety of factors, including the proliferation of online devices; new and cheaper solutions to store, manage, and process data; a substantial rise in computing power; a decline in related costs; and the ubiquity of the Internet. Combined with advanced analytics, such as artificial intelligence and machine learning, this will help the industry boost risk transparency, reduce the number of unknowns within risk models, expand insurability, and create novel insurance products and services. Indeed, as risk assessment becomes more data-dependent, insurers will be able to price risk at a more granular level and offer dynamic personalized coverage.

Other examples of uses of technology are found in section 3B, which describes how technology is enabling integrated services for health insurance, such as apps with wellness tips, inexpensive medical tests, and access to teledoctors; and in section 3C, which describes how insurers are using technology to monitor weather conditions to strengthen resilience. Technology solutions are also integral to many of the customer-centered designs and other product innovations we discuss in the next section.

One caveat comes from Met99 in Mexico and CARD-Pioneer Microinsurance in the Philippines, both of which serve customers in remote areas where connectivity is often poor. They have found it hard to offer services online. In part to overcome the connectivity challenges, Met99 relies more on face-to-face interactions, which work especially well with rural customers, and Pioneer relies more on SMS messages than on the Internet. Martin Hintz of Allianz also says that "mobile by itself is not sufficient," adding that "for conversion rates, you need face-to-face follow-up, such as by an MFI." In the next section, we will also give some examples of how high tech can combine with high touch to bring insurance to new markets.

2C. Building Products That Work for Insurer and Customer

With digital channels and effective aggregators, it becomes possible to offer insurance to lower-income segments. But the products themselves must also be designed with the needs of the segment and cost control in mind.

Simplifying Products. Interviewees reiterated the importance of simplicity for this market segment time and again, and many of the products they described are extremely simple. Simplifying user interfaces is, of course, in keeping with trends in product design across companies like Alibaba, Amazon, and Walmart that work to allow consumers to transact with just one click.³⁶ Simple insurance products are easy to understand, easy to enroll in, and easy to claim against. Simplicity is perceived as transparent and "friendly," helping to create trust.

^{35.} Salmaan Jaffery, personal correspondence, September 14, 2017.

^{36.} Amazon's one-click buying—for which its patent expired in September 2017—has been considered key to its success in online shopping.

Simplicity is essential not only because customers love it, but also because streamlined products are easy to manage, cutting administrative costs. The processes involved in assessing claims can eat up premium revenue, particularly when a customer does not have a fixed address, is illiterate, or lacks standard documentation. To achieve extreme simplicity, radical insurance designers make products highly automatic and do away with exclusions. In mainstream insurance, exclusions allow insurance companies to avoid customers with disproportionate risk, bringing down premiums for the majority. However, oversight of exclusions requires expensive verification processes, such as health examinations. With very small-ticket insurance policies, exclusions may simply not be worth the money it takes to manage them. Without exclusions, the amount of data that insurers need to collect can be radically decreased.

MicroEnsure discovered that it could do away with exclusions for mobile-phone customers, and it offers policies without any fine print—another boon to customers. The company has designed life, accident, and hospitalization products based only on phone numbers, without even capturing customer names, ages, or any demographic information. Leftley explains, "It makes more sense to just include them."

Offering Microterms and Micropayments. The same radical thinking can also be applied to the term length of coverage. In pay-as-you-go (PAYG) models, inclusive insurers calibrate time frames to the size of the payments, to meet the consumers' needs in the moment.³⁷ Customers who miss a payment can re-up without penalty. BIMA offers simple PAYG products with life, personal accident or hospital insurance coverage that can be bought in monthly blocks, much like the way mobile credit top-up cards are sold. PAYG products are sold in packages of three, six, or twelve months.³⁸ Pioneer Life president and CEO Lorenzo Chan Jr. has introduced "insurance in a sachet." Throughout the Philippines, as in many parts of the developing world, neighborhood stores sell tiny amounts of detergent, shampoo, spices, and other goods in small, affordable packets, or sachets. Since so many Filipinos buy items in such sizes, the country has become known as a "sachet economy." Insurance "in a sachet" allows low-income customers to purchase lower levels of cover, or for shorter terms, at lower premiums.

Building Customer Acceptance. Insurers are aware that their product is "sold, not bought"— especially by customers who are new to the very concept of insurance. A standard approach to building customer interest is to bring elements of high touch alongside high-tech enrollment and payment interfaces.

This may mean loan officers at MFIs who are trained to explain products. Face-to-face still remains necessary for many new customers, especially in small towns and rural areas where connectivity is poor, as MetLife has found in Mexico. Particularly in rural areas, customers may have strong preferences for interacting with people, especially people they already trust, ³⁹ and may need such interactions on an ongoing basis to create a feeling of connection. High tech can even be used to create a sense of high touch: Allianz Indonesia's fictional character, Mrs. Ali, provides a comfortable, homey interface with clients as "she" sends text messages to customers about their products and their lives. Such tools help educate clients and remind them of the value of their insurance product.

^{37.} In 2016 in Thailand, the fastest-growing insurance product was Pokésurance, which provided personal accident cover for people who might step out into traffic while playing Pokémon Go. While not geared toward low-income customers, the Asia Insurance product was mobile-phone microinsurance, direct-to-consumer and exclusively online. "The Pokésurance service can be bought online and allows people to protect themselves via personal accident insurance for 30 baht for 30 days, their phone for 99 baht, their motorbike for 199 baht and a car for 499 baht." See Charlotte McEleny, "Asia Insurance Launches Special Pokémon Go Insurance," *Drum*, August 29, 2016, http://www.thedrum.com/news/2016/08/29/asia-insurance-launches-special-pok-mon-go-insurance-service.

^{38.} BIMA, "PAYG Insurance," accessed October 19, 2017, http://www.bimamobile.com/our-services/payg-insurance/.
39. Alexis Beggs-Olsen, "Effective Human Touch in Kenya's Digital Age" (Washington, DC: Center for Financial Inclusion at Accion, November 2017).

FIGURE 2.5

Mrs. Ali makes Allianz Customers Feel Connected



"Mrs. Ali" is deployed by Allianz Indonesia to help new insurance policyholders understand their products and feel connected to the company. Esih Kurniasih, a first-time insurance customer, recently received a call from Mrs. Ali. At first she tried to speak back, but then realized Mrs. Ali was a recorded

message. Since December 2016, customers have received automated post-sales calls to educate them about their microinsurance product—and to begin to close the trust gap. On a recent call, Mrs. Ali asked Mrs. Kurniasih if she had told her family about her insurance purchase. Mrs. Kurniasih had trouble pressing buttons to answer but is getting the hang of it now. She says, "It makes me proud. It shows me that I am officially a customer of Allianz."

Building Trust and Understanding. Customers lack awareness of basic concepts of insurance, much less understanding of specific products. Particularly for low-income people, it is hard to consider putting the little money they have into something that may never yield a tangible benefit. As Matthew Myers of LeapFrog Investments puts it, customers view the insurer's pitch as: "Give me money and I'll give you a promise, rather than anything tangible right now." Customers may purchase insurance, but if they can't see a benefit, they often do not renew. Even when the concept is understood, lack of trust is a major stumbling block. Craig Churchill, based on years of work on defining and accelerating the market for low-income customers in his capacity as team leader for the ILO's Impact Insurance Facility, says that trust is the main problem.

As part of Cenfri's research on the financial sector, surveys on consumers' attitudes toward financial services. These surveys often find that insurance is the least trusted product, at the very bottom of the list, with banks much higher on the list in a number of countries (see for example, Malawi, Swaziland, and Zimbabwe). Doubell Chamberlain, founder and managing director of Cenfri, notes, "The only place people did not say scathing things about insurance is where they had no exposure, such as Myanmar."

ACRE Africa developed a product in which farmers received a free seed-replanting benefit at no charge to them, triggered by a weather index, so they did not even need to file a claim. Yet, despite the insurance being free, many farmers did not activate it. It turned out that they had not read or understood the card with the activation code and instructions. To address this issue, the insurance card was redesigned to make it clearer. Furthermore, field promoters—who are themselves farmers—were hired each season to raise farmers' awareness about insurance and explain the product.⁴⁰

Auto-enrollment can be a breakthrough—but not if customers don't know they have been enrolled. Michael McCord of MIC notes that a very low rate of claims (such as five percent) is a sign that customers either do not understand the product or, in some cases, even realize they have coverage. As hard as enrolling a new customer is, many providers find that getting customers to renew is equally challenging. One response is educating clients about the products and their benefits, not just to get customers on board but also to help them stay.

^{40.} Jenny Glaesener-Nasr, "The State of Microinsurance: The Insider's Guide to Understanding the Sector" (Luxembourg: Micro Insurance Network, July 2017).

It is often especially difficult to obtain renewals from those who purchased insurance but subsequently did not need to submit a claim. Lorenzo Chan Jr. mentions, "At Pioneer, we look for ways to settle all legitimate claims. During the early years of Pioneer Microinsurance and with little knowledge about how the micro market would react toward insurance, the company realized that client trust is built when the insurer keeps its promise, i.e., payment of claims." Indeed, Pioneer's success in reaching new markets can be summed up by one critical factor: "They know we pay claims." As Martin Hintz notes, personal-accident insurance can be an easier follow-on to credit life, in part because there are more examples of claims payouts. For MicroEnsure, the second product after credit life was hospital cash—selected in part because of more frequent payouts. Products with more frequent payouts also result in more contact with the insurer.

As with parametric insurance that triggers payouts for weather events without claim submissions, Allianz is experimenting with other proactive claims payments, enabled by data analytics and other technology. Hintz envisions a time when the distribution partner gets a commission not for a sale, but for paying a claim.

Bundling and Cross-selling. One of Hintz's solutions to increasing uptake is to "sell something else, then attach insurance into the package." He adds, "Bundling makes a lot of sense." Many new customers have begun with compulsory products, such as credit life or loyalty products. "Freemium" models introduce customers to a new product free of charge, in the hope that they will see its merits and agree to start paying premiums.⁴¹

Cross-selling is an important tool in the inclusive insurer's kit. At the end of 2016, Ping An Insurance of China was named "the world's most valuable insurance brand" by Brand Finance, after the company provided free products and services through its online platform. This created significant goodwill and expanded the company's user base, giving it a large platform for cross-selling.⁴²

As noted above, insurance providers and their partners can jumpstart an insurance relationship by bundling insurance, either with other insurance products or with other financial or nonfinancial services. McCord notes that bundling of insurance products with each other is very common—but it is often overpriced based on actuarial value. His examples of bundling with noninsurance products include insurance attached to fertilizer use in India, Syngenta/ACRE Kenya providing insurance with purchases of GMO seeds, and Pioneer providing bancassurance for motorcyles in the Philippines.

Many insurers are looking at customers' needs holistically and designing integrated solutions that offer an array of financial and nonfinancial services. Insurance can also be tied to tangible products, such as school fees, food, or discounts on medicine. These innovative hybrids are especially found in insurance for health, agriculture, and climate risk. (See sections 3B and 3C for more on these innovative models.)

Investing in Understanding Customers. While these products are still under development or at the pilot stage in many markets, insurers' intensive research into the full range of customer needs is worth noting. Met99 used its large database of customers to identify smaller niches and adapt its products to serve the specific needs of those niche markets. AXA acquired MicroEnsure largely because MicroEnsure knows low-income customers. Martin Hintz spent years in Indonesia observing customers' needs firsthand before moving on to his global role. The holistic approach can go far beyond insurance—and, in fact, may not even lead with insurance.

^{41.} Peter Zetterli, "Freemium: Spawning An Insurance Market In Ghana," CGAP blog, February 19, 2013, http://www.cgap.org/blog/freemium-spawning-insurance-market-ghana.

^{42.} Gabriel Olano, "The World's Most Valuable Insurance Brand Revealed," *Insurance Business*, April 25, 2017, http://www.insurancebusinessmag.com/us/news/breaking-news/the-worlds-most-valuable-insurance-brand-revealed-65885.aspx.

Swiss Re's reinsurance in Ethiopia leveraged a range of public and private partners for a community-level agricultural risk-reduction project that included improving the soil and reducing water runoff. In some projects, Blue Marble Microinsurance focuses on credit as the lead product, with crop insurance helping to unlock that credit, as well as water conservation techniques that help to avoid loss from drought. Just as radically, Hintz sees Allianz Emerging Consumers as a financial services provider with insurance in its toolkit, and has launched MicroEquity Investments in Indonesia providing direct investment support for microentrepreneurs.

AXA's in-depth assessment provides recommendations for unlocking the women's market globally and outlines in impressive detail what women want and how they can be reached in ten key emerging markets.⁴³ IFC worked closely with AXA on that research, and has also assisted Banco BHD León in designing integrated products that meet the needs of women small-business owners. Informed by "gender-smart design," BHD León offers credit cards and loans to women business owners, along with basic multi-risk insurance covering the business, inventory, and machinery. The business owners are also eligible for "SME Assistance" that provides free consultations with vetted professionals, such as lawyers.⁴⁴

Once barriers to awareness and trust are overcome, there is still the essential question of designing relevant products that meet customers' needs. For YES Bank in India, most challenges point back to the issues of offering an appropriate product with appropriate access points to match.

Aligning Organizations to Serve Unserved Markets. The frontline staff of financial-service providers often don't understand insurance themselves, or have no incentive to sell it. CARD-Pioneer Microinsurance Inc. (CPMI) launched its work with low-income customers by committing to test-and-learn strategies as it learned more about its customers and their needs. Everyone in the company, from top management to frontline staff, spends three to five days per year carrying out "immersion visits" with clients. The investment of time has paid off. As one example, CPMI learned that, although it had been paying claims to its partners within five days, the customers had not received those claims. It reviewed its claims process and was able to fix the bottlenecks. At a global level, Denis Duverne, chair of AXA Group, says that setting up a dedicated unit focused exclusively on emerging customers was key to the traction inclusive insurance has gained in the company.

With these examples of keen attention to unserved and underserved customer segments, Wattez-Richard notes, "Reverse innovation is occurring as new products, business models, and technologies pour over into traditional insurance."

^{43.} The ten emerging markets are Brazil, China, Colombia, India, Indonesia, Mexico, Morocco, Nigeria, Thailand, and Turkey. See Henriette Kolb et al., "She for Shield: Insure Women to Better Protect All" (Washington, DC: World Bank, January 1, 2017).

^{44.} Roscoe, "Investing in Women."

^{45.} Dalal, "Case Brief."

Innovation Spotlight: Allianz and Its Far-Reaching Vision for Emerging Consumers

We are a financial-services provider that starts with insurance.

—Martin Hintz, Head of Emerging Consumers, Allianz SE

Allianz SE started serious discussions about microinsurance in 2004, when the concept was mostly the purview of social-impact leaders. While Allianz carried out pilots in a number of markets, it was in Indonesia that it first achieved traction, through a "Family Umbrella" credit life product in partnership with microfinance institutions, which reached a million active insured after six years. Fueled by an active test-and-learn strategy, Allianz has transformed its early experiments with microinsurance into a robust Emerging Consumers division now operating in eleven emerging markets.⁴⁶

Hintz points out that Allianz is "all business," with a profitable model: "The margins are proportionate, not any lower than conventional products. With a large distribution partner, we are able to multiply those margins by large volumes." As of December 2016, Emerging Consumers was reaching 55 million people, generating about \$357 million in premiums, and operating through more than 700 distribution partners.

Allianz sees its distribution partners as the key to its success—but it's clear that customer-oriented product design is also part of its DNA. Credit life is still its predominant product in emerging markets, but Allianz is actively working to roll out a variety of life and nonlife lines.⁴⁷ In fact, its Emerging Consumers department goes beyond insurance. Hintz explains, "We are working with a customer segment that has broader needs than insurance. We think of ourselves as a financial-services provider that starts with insurance. We are trying to diversify our products and bundling where we can." One result is the Micro Private Equity pilot under way in Indonesia, which formalizes informal businesses through "trial investments" as low as \$100 that are interest-free, collateral-free, flexible, and Sharia-compliant.

This is a commercially oriented product with a goal of exit-driven profitability—and a big vision of impact for microentrepreneurs. Allianz Emerging Consumers takes its core values seriously, including transparency in sharing results and lessons learned— for both what has worked and what has not.⁴⁸

For more information, see the April 2017 Allianz Emerging Consumers Report.

Innovation Spotlight: Aviva: Bundling and Prevention

We start with the customer, tailoring products to what they need and not what they don't need.

—Zelda Bentham, Head of Sustainability, Aviva

Although Aviva is predominately a life insurer, with 69 percent of its business in life and general insurance offered primarily in Europe, Canada, and the United States, it has developed a range of inclusive insurance activities in countries as diverse as India, China, and Poland.

^{46.} India, Indonesia, Malaysia, Colombia, and several African countries (Burkina Faso, Cameroon, Egypt, Ivory Coast, Madagascar, Mali, and Senegal).

^{47.} Cattle/livestock, credit life, crop insurance, funeral, home business, hospitalization, life and savings, motorcycle, personal accident, term life, and micro equity investments.

^{48.} Allianz gives these implementation examples for its values: 1. Customer research before product development, 2. Fair pricing, 3. Customer education, 4. Responsible sales practices, 5. Customer satisfaction survey, 6. Grievance mechanisms, 7. Social performance indicators, 8. Financial performance indicators, and 9. Knowledge sharing on the Allianz website. See Hintz, "Emerging Consumers 2016."

In China, a joint venture between Aviva and COFCO Ltd. (the largest food manufacturer and trader in China) provides a mix of savings, protection, healthcare, and retirement products to 800 million people. Its offerings are enhanced by a health and wellness platform that was introduced in 2015. The platform draws on more than twenty partnership agreements with providers of services such as preventive healthcare, nutrition and lifestyle advice, and the Chunyu Online Doctor, the first 24-hour online medical-consultation service available across China.

In Poland, Aviva bundles products by life stages, aiming to "kill complexity" so that the customer experience is as simple as possible. With 2,400 direct salespeople and 56 sales branches providing life, health, and general insurance products to more than three million customers across Poland, Aviva has been testing single-premium, bundled products:

- "YOU" focuses on young people who have little property and are relatively mobile. It provides life insurance, tech insurance (smartphones), and personal accident coverage, as well as travel insurance, private-doctor coverage, and personal liability.
- "ME" is tailored to the needs of single adults and includes critical illness, life, personal liability, motor, hospital, housekeeping, household (contents insurance), and doctor home visits.
- "WE" is focused on young families and includes property, tutoring, childcare, critical illness for parents and children, disability, and household.

Aviva has an increasing commitment to addressing climate risk, with a philosophy of moving from protection to prevention. In Poland, it is developing an app to provide airpollution alerts to raise awareness and protect customers.

Innovation Spotlight: Takaful Insurance—Reaching the World's 1.6 Billion Muslims

Relatively few of the world's Muslims have insurance. Takaful insurance, a form of insurance that complies with Sharia law, offers risk protection and savings products for which members contribute money into a pooling system to guarantee each other against loss or damage. This gives policyholders the opportunity to share in the underwriting profit.

The takaful market is set to reach \$20 billion by 2017, up from \$12 billion in 2011.⁴⁹ At the World Takaful Conference in Dubai in 2017, Salmaan Jaffery said: "Islamic finance is a huge opportunity, with \$2 trillion in assets globally and a potential market serving 1.6 billion Muslims." The markets around the Persian Gulf dominate the takaful industry, with 88 percent of the global market for general takaful insurance. A slightly different form of takaful insurance—known as family takaful—is concentrated in Southeast Asia.⁵⁰

Takaful operators face intense competition against established conventional players for the same market space, particularly when insurance is compulsory, such as motor and medical insurance. Regulatory policies help create a space. The largest market is Saudi Arabia, where the entire market is defined as Sharia-compliant, with gross written premiums of \$9.7 billion in 2015. Growth in the United Arab Emirates was driven by the introduction of compulsory health insurance in Dubai. In Malaysia—the first market in the world to implement a risk-based capital framework for takaful—global insurers such as Zurich are active takaful providers, as is Swiss Re's Retakaful.

^{49.} Emmy Abdul Alim, et al., "Islamic Finance Development Report 2014: Harmony on the Horizon" (Dubai: ICD Thompson Reuters, 2014)

^{50.} Farzana Ismail, et al., "Global Takaful Report 2017: Market Trends in Family and General Takaful" (Vienna, VA: Milliman, July 10, 2017); Sahar Kazranian, et al., "World Takaful Report 2016: Connecting the Dots, Forging the Future" (Dubai: Middle East Global Advisors, 2016).

Part 3. Product Breakthroughs in Inclusive Insurance

Many of the insurers we spoke with said that designing specific products to meet customers' needs was their most gratifying work. In this section, we look at some of the specific business lines these insurers offer for emerging customers.

3A. Starting with Life Insurance

Ninety percent of Allianz Emerging Consumers' policies are credit life. It's by far the most profitable product. It's easy to start with and gives a foothold.

—Martin Hintz, Head of Emerging Consumers, Allianz SE

AIDS crisis, microfinance network Opportunity International lea

At the height of the AIDS crisis, microfinance network Opportunity International learned that, on average, 40 percent of its clients in Africa could expect a death in the family within the course of a year. Microlenders that relied on group guarantees faced legitimate fears from prospective clients, who were afraid of being responsible for a group member's loan if she died. Prospective clients were often afraid to invest in their microenterprises because of the high cost of funerals, traditionally about three months of disposable income.

FIGURE 3.1 ALLLIFE SERVES THE PREVIOUSLY EXCLUDED

In 2005, AllLife became the first insurance company to provide whole life insurance to HIV-positive individuals. AllLife incentivizes customers to take care of their health through its adherence plan.



An HIV-positive customer in South Africa signs up for whole life or term disability insurance with AllLife. There is no waiting period, so the customer is covered immediately.



In order to maintain life and disability coverage, the customer commits to take scheduled CD4+ blood tests and to begin antiretroviral therapy upon any CD4+ result below 200 cells/mm³.



In taking these actions to maintain insurance coverage, the customer improves their health. AllLife reports that its average policyholder increases their CD4+count (a measure of immune system health) by 15% within six months of signing up for insurance.



The customer can use their AllLife policy to qualify for home and business loans from which they would have been otherwise excluded.

In Zambia, Opportunity responded with a funeral-benefits product called Ntula—meaning "to carry someone's burden." The product covered the loan client and five dependents with funeral costs, plus a little extra to restart the microbusiness. In Zambia and other countries, Opportunity also introduced credit life insurance to avoid loan losses, without imposing penalties on lending groups upon the death of a group member. Just as microfinance institutions had pioneered the transformative concept that low-income people could be profitable borrowers and savers, they discovered that they could also benefit from insurance and be served profitably.

This insight has led to an explosion of life products for first-time insurance customers. Credit life still makes up the bulk of the business—but other life-insurance products are also in demand, as well as "life plus" linked products. A 2010 report by Swiss Re found that "the market potential for life microinsurance is highest globally and includes credit life, funeral coverage, savings and pension products."⁵¹

Insurance providers have also transformed since the first microinsurance experiments. When Opportunity brought in reinsurance expert Richard Leftley in 2002, he discovered that some of the early experiments put the MFI at legal risk. Further, some customers were so suspicious of Ntula that they accused it of being demonic. After working through those early fits and starts, Opportunity backed Leftley to found an independent microinsurance company that ultimately became MicroEnsure. In 2016, AXA acquired a 46 percent share of MicroEnsure. At that point, many lessons had been learned, giving MicroEnsure a sound basis for future growth. As Garance Wattez-Richard of AXA points out, "We bought [microinsure] mistakes."

In the mid-2000s, Allianz sent Martin Hintz to Indonesia. Hintz combined a "just do it" philosophy with deep research to understand customer needs, rolling out credit life products primarily for the clients of microfinance organizations. Hintz confirmed without doubt that credit life was profitable—but, along with the rest of the industry, he sees credit life as a foot in the door. According to interviewees at YES Bank in India, customers are not only aware of their credit life coverage but feel they are not receiving value if credit life is not part of their loan package. This is not always the case, however. In fact, many insurers pursuing inclusive insurance have criticized credit life as bringing value to the lender, not the customer. While the bulk of inclusive insurance is now made up of compulsory products, especially credit life, many companies are innovating to reach into products that can do more for clients.

The general wisdom holds that credit life is an entry route for both the customer and the insurance company—as long as it is only the start, part of a strategy of growing with the customers. Credit life can be a trust-building entry product if clients see that claims are paid. Wattez-Richard says, "Some clients have taken out new loans just to get insurance. They are indebting themselves when they don't need a loan just for insurance." AXA is therefore seeking solutions for people to be covered between loans.

Allianz Indonesia bet that credit life could be an on-ramp to other products, testing five different voluntary "credit life plus" products. As a result, as of 2016, nearly all of its five million customers have credit life plus policies. The base product is compulsory group credit life covering the outstanding loan balance or original loan amount, with an optional funeral benefit of up to twice the original loan. The optional rider with the most enthusiastic uptake was personal accident for accidental death and total or partial disability, with benefits of up to about \$2,000.^{52,53} Hintz notes, "Personal accident may not be the most helpful to customers, but it had greater uptake than fire or hospital cash, possibly because it was easier to understand."

Other life products have come from identifying specific underserved market niches. In Mexico, MetLife offers Met99, a flexible and affordable life product, to lower middle-income employees. Banco BHD León in the Dominican Republic has focused on women's needs, with the help of the IFC.⁵⁴ The bank has taken its findings on the concerns of women small-business owners to the insurance partner in its group and they have worked together on product design. One resulting product that is especially attractive to low-income women is a life-insurance product

^{51.} Amit Kalra, "Microinsurance: Risk Protection for 4 Billion People," Sigma (Zurich: Swiss Re, 2010).

^{52.} Danielle Sobol, Barbara Magnoni, and Emily Zimmerman, "Credit Life Insurance in Indonesia," case study (Appleton, WI: Micro Insurance Centre, March 2015), https://www.microfinancegateway.org/library/credit-life-insurance-indonesia; Yoga Prasetyo, "Escaping the Credit Life Trap: Learning Diary on an Upselling Pilot Project in Indonesia" (Munich: Allianz SE, April 2015).

^{53.} For more on the Credit Life Plus product in Indonesia, see Martin Hintz, "Emerging Consumers Product Pool" (Munich: Allianz SE, April 2017).

^{54.} IFC's Banking On Women (BOW) program helps financial institutions to profitably serve women-owned businesses. Since 2010, IFC has made thirty-eight investments in financial institutions, with a cumulative committed portfolio of \$1.15 billion.

for children's education. Banco BHD León has sold 23,300 of these policies as a standalone product since February 2015, in addition to 2,000 policies that it provides as a loyalty incentive for customers with education savings accounts.⁵⁵

Social investor LeapFrog Investments has been especially effective in working with commercial insurers to go downmarket, profitably serving those who have been considered uninsurable or hard to reach. UT Life in Ghana is growing at 80 percent per year offering affordable life insurance to emerging consumers, including funeral and educational savings policies. LeapFrog's first investment, in 2009, was in AllLife in South Africa, which was offering whole life coverage to HIV-positive people, responding to a need in a country where 19.2 percent of adults live with HIV (see Figure 3.1; p.30). Since then, AllLife has gone on to offer diabetes coverage, and in April 2017 it announced a new partnership with Royal London to provide life coverage to people with diabetes in the UK who had been considered uninsurable. A "life plus" model adds a wellness incentive, with up to 40 percent reduction in premiums for those demonstrating they have adhered to their health treatment plans. The model is powered by the Kalibre Platform, which uses advanced robo-underwriting and algorithmic pricing to accept and price applications in real time.⁵⁶

3B. Building on Life Lessons with Health

In inclusive insurance markets, health protection is a close second to life products and is regarded as the most relevant coverage for the low-income population. Swiss Re's 2010 report predicted that penetration would increase in the underdeveloped and emerging economies of Africa and Asia, spurred by rising incomes among the growing middle class.⁵⁷

Yet health insurance is a tough product. Many relevant factors must align for a successful offer. Those we interviewed referred to the lack of care providers as a foundational issue. A 2016 survey in India found that the second most important reason in rural areas—after financial constraints—for not having health insurance was 'no medical facility available in neighborhood,' accounting for 15 percent of cases. AXA found that many "people do not go to the hospital because they are afraid to hear bad news, but also because of the cost of transportation and lost income. Therefore, they prefer going to a village midwife who is not covered by traditional insurance." In response, AXA is exploring a trial with an MFI to cover health expenses more holistically, including benefits for travel and maternity care.

When people are ill or injured, they need straightforward policies. An early health product in India provided hospital cash, but materials did not explain that it only covered inpatient care and that the first night was excluded. Because they didn't understand it, customers felt abused and the product ultimately failed.

Other common challenges that interviewees highlighted include, among others, customers' unwillingness to share health data (which is needed to design products), product design that does not address strong customer preferences (such as omitting emergency obstetric care even though women wanted it), and the moral hazard associated with pre-existing conditions.

To state the obvious, however, affordable health care is a vital need—not only for individual customers but for whole economies, given that health crises cost valuable work time and can easily set families back into poverty or destitution.

^{55.} See IFC's brochure "Banco BHD León Uses Women-Centered Design to Grow Its Market in the Dominican Republic" for more examples of the business case and solutions for women-centered design: IFC, "Banco BHD León Uses Women-Centered Design to Grow Its Market in the Dominican Republic," Gender-Smart Business Solutions (Washington, DC: IFC, 2016).

^{56.} Gary Herbert, "AllLife—the First Company in the World to Offer Life Cover to People Living with HIV Takes Its Diabetes Platform Global with Royal London," LeapFrog Investments blog, April 24, 2017.
57. Kalra, "Microinsurance."

^{58.} Samarth Bansal, "Health Cover: Too Little, Too Scarce," Hindu, April 12, 2016.

Research by Shailender Kumar Hooda shows that high out-of-pocket expenditure on healthcare has serious repercussions for households' well-being in India, as it plunges a sizable section of the society—even the well-off—to abysmal poverty levels. It pushes 3.5 percent of the population (50.6 million people) below the poverty line and also further deepens the poverty of already poor people.⁵⁹ Similarly, in the United States, medical bills are the number one cause of bankruptcies, and the US Census Bureau found that, in 2015, more than 11.2 million Americans were pushed below the poverty line by out-of-pocket medical spending.⁶⁰

Zelda Bentham of Aviva points out that proactive payments to cover health needs can help mitigate a crisis before it happens. In the context of an epidemic, such as the Ebola crisis in West Africa, earlier payouts might have allowed preventive measures to be put into place more quickly (in keeping with current policy recommendations of the World Health Organization and other bodies). The same holds true for individuals, with study after study showing that primary and preventive care greatly reduce future health-care costs. One of the selling points of BIMA's m-Health services is that patients can access medical advice from a qualified doctor before their condition worsens. And Centenary Bank in Uganda, through its SupaWoman Club for women small-business owners, has offered health insurance specifically for women. Hellen Tomusange of Centenary notes that the insurance has resulted in mothers delivering in better-quality health centers and receiving proper medical attention. There is "a big challenge of mothers losing life while giving birth in Uganda due to poor medical attention [and] negligence, mainly in public hospitals. This partnership has seen women have safe deliveries," she says.

Technology is enabling integrated services for health insurance, such as apps with wellness tips, inexpensive medical tests, and access to teledoctors. While many of these integrated products are still in the test-and-learn phase, BIMA's m-Health product in Ghana has gained some traction. The product offers hospital cash along with access to a teledoctor for \$1 per month, an amount that generates a small profit for BIMA. To persuade customers to try the product, BIMA held "doctors' camps" that offered free screenings for blood pressure, eyesight, and other conditions. The option of unlimited teledoctor consultations responded to the lack of local care providers. BIMA also offered discounts through the BIMA network, a local medical directory. To distribute the product widely, BIMA worked through banks, savings and credit cooperatives, transportation authorities, and church groups. For example, it offered health and accident insurance via mobile platforms for taxi drivers. And, in a direct effort to include the most vulnerable, BIMA targeted traders, drivers, and kayayee (female porters).⁶¹

In 2014, LeapFrog Labs and Mahindra Insurance Brokers carried out a national study in India on access to and demand for health services and insurance and found that penetration of health insurance was overwhelmingly low, regardless of income or occupation.

In making the business case to Mahindra, LeapFrog Investments pointed to the sizable unmet need for health insurance among existing customers, noting that Mahindra's existing one million customers would create a sizable market opportunity. Mahindra found that its customers were willing to pay \$2 per month for coverage—a price point 40 percent cheaper than its competition. The range of coverage—from \$1,000 to \$10,000—provides for cashless treatment in 4,000 hospitals across rural India, drugs and medical care, instant activation of coverage, and no medical underwriting.⁶²

^{59.} Shailender Kumar Hooda, "Out-of-Pocket Payments for Healthcare in India: Who Have Affected the Most and Why?" *Journal of Health Management* 19, no. 1 (March 1, 2017): 1–15.

^{60.} Jordan Weissmann, "Medical Expenses Still Drive an Outrageous Number of Americans into Poverty," *Slate*, September 13, 2016, http://www.slate.com/blogs/moneybox/2016/09/13/medical_expenses_still_drive_more_than_11_million_americans_into_poverty.html.

^{61.} BIMA, 11/20/2017

^{62.} LeapFrog Investments, "Mahindra," LeapFrog Investments blog, accessed October 19, 2017, http://www.leapfroginvest.com/casestudy/mahindra/.

This discussion of health insurance has focused on the private sector, but in each country the public sector has some responsibility for health care, especially for the poorest. Health insurance providers need to design around the public system, whether to work with it, supplement it, or substitute for its gaps. Wattez-Richard says that, with foundations laid by the government, the private sector can do its part to help build a functioning health-finance system.

3C. From Protection to Prevention: Weather Index Insurance and Climate Risk

FIGURE 3.2 BENEFITS OF AGRICULTURE INSURANCE

Studies have shown wide-ranging benefits ranging from increased economic returns to improved health outcomes.



Farmer receives a weather index insurance policy, which will provide a payout if certain weather conditions are met.

With proof of insurance, the farmer can get a loan from a local bank.





With protection against weather extremes, the farmer transitions to planting higher risk, higher return crops. Studies in both Ghana and India found that farmers with insurance coverage were much more likely to plant rain-sensitive cash crops.

With new capital and advisory support from an NGO, the farmer digs irrigation ditches to conserve water and uses data to improve the timing of crop production cycles.





The new crops results in more liquid post-harvest assets for the farmer.

With higher income, the farmer is able to invest more in future harvests and cover basic household expenses. Households of insured farmers in Ghana were 8% less likely to report missed meals.



The insurance industry is on the forefront of understanding the global risks related to climate change, natural disasters, lack of food security. Insurers are turning the world's attention toward the protection gap—the difference between actual economic and insured losses. The Insurance Development Forum partnership of industry with the United Nations and the World Bank, launched in 2016—estimates, "Presently, 70 percent of economic losses from natural hazards remain uninsured and in middle/low-income countries the uninsured proportion of economic losses often exceeds 90 percent."63 Over the past ten years, this has added up to a protection gap of \$1.3 trillion.64

The economic cost of natural catastrophes has grown dramatically over the last forty years, 65 with annual losses increasing fivefold since the 1980s to around \$170 billion today. 66 Since the 1950s, the frequency of weather-related catastrophes, such as windstorms and floods, has increased sixfold. 67 In the face of these increasing climaterelated risks, previously insurable assets are becoming uninsurable.

^{63.} For more information, see theIDF.org.

^{64.} Esther Baur and Reto Schnarwiler, "Closing the Protection Gap: Disaster Risk Financing, Smart Solutions for the Public Sector" (Zurich: Swiss Re, 2015); Reto Schnarwiler and Ivo Menzinger, "Closing the Protection Gap: Tools to Use Before They're Needed," October 7, 2015, http://www.swissre.com/global_partnerships/closing_the_protection_gap_2015.html.

^{65.} Schnarwiler and Menzinger, "Closing the Protection Gap."

^{66.} Tom Herbstein, "ClimateWise Launches Two Reports That Warn of Growing Protection Gap Due to Rising Impact of Climate Risks—Cambridge Institute for Sustainability Leadership," University of Cambridge, December 7, 2016, https://www.cisl.cam. ac.uk/business-action/sustainable-finance/climatewise/news/insurance-leaders-warn-protection-gap-due-to-impact-climate-risks. 67. Herbstein, "ClimateWise Launches Two Reports."

For inclusive insurance, the need is even more stark. A July 2017 IDF report makes a clear case that low-income countries are more vulnerable to disasters—and disasters help keep them poor.⁶⁸ According to the World Bank, poor people are more susceptible to natural disasters such as floods, drought, and heat waves; decreases in agricultural production and increases in food prices; and climate-related diseases. The report notes that "climate change could force more than 100 million people into extreme poverty by 2030."

In response, rather than relying on old underwriting models that are increasingly stressed, many insurers are thinking forward. Zelda Bentham of Aviva argues that insurers must move from pure risk transfer to risk prevention and protection to truly deliver their expertise to help customers—and, indeed, top insurers recognize the key role they can play not only in protecting against climate-related risk but also in mitigating it.⁷⁰ Several global insurers are active members of the IIF's Green Finance Working Group, which identifies and promotes market-based solutions that address climate-related risks. As of 2016, 29 global insurers were active members of ClimateWise, which calls for the insurance industry to evolve and broaden its role in society to manage the impacts of climate change.⁷¹ These principles promote a radical rethinking of underwriting practices, encouraging the industry to shift capital flows into climate-resilient assets and resilience-enhancing investments.

In July 2017, the MicroInsurance Network focused its entire annual report on "microinsurance solutions to address climate change," to move the conversation beyond risk transfer and product design to a broader focus on integrated risk management and how countries can better prepare and respond to climate-related risks.⁷² (This is in keeping with a greater focus on the broader impact of risk on development, also reflected in the MIC's Inclusive Insurance and the Sustainable Development Goals.⁷³)

Shaun Tarbuck, CEO of the ICMIF, co-chairs the IDF working group on microinsurance, which focuses on resilience-building programs to shore up communities that are vulnerable to climate change. He says, "We've talked about it long enough and we have to get out and do something. The time is right for us to stop doing research and turn it into more practical work." For ICMIF, that means an integrated concept that moves beyond simple drought and flood insurance. After looking closely at what happens after a disaster, ICMIF developed a more comprehensive suite of products that it calls "resilience insurance."

The package includes life; property, to allow people to rebuild homes and work spaces; and health, in recognition of the increased risk of disease after a natural disaster. ICMIF launched a "5-5-5 Mutual Insurance Strategy" in December 2015, with the aim of providing resilience insurance to five million policyholders in five countries⁷⁴ over five years.

A common element of many of these efforts is weather index insurance, which is not based on actual loss, but instead on an objective parameter such as rainfall or temperature. Once a certain threshold is reached (e.g. drought intensity), all policyholders within a defined geographic area receive payouts, saving transaction costs, reducing adverse selection and moral hazard, and making insurance more affordable.

^{68.} Insurance Development Forum, "Understanding Risk to Create Resilient Platforms for Sustainable Growth and Human Dignity" (IDF, July 19, 2017).

^{69.} Stephanie Hallegatte, et al., Shock Waves: Managing the Impacts of Climate Change on Poverty (Washington, DC: World Bank, 2016).

^{70.} Insurance Development Forum, "Understanding Risk to Create Resilient Platforms for Sustainable Growth and Human Dignity." 71. University of Cambridge, "About Membership—Cambridge Institute for Sustainability Leadership," accessed October 19,

^{2017,} https://www.cisl.cam.ac.uk/business-action/sustainable-finance/climatewise/about-membership.

^{72.} Glaesener-Nasr, "State of Microinsurance."

^{73.} Solveig Wanczeck, et al., "Inclusive Insurance and the Sustainable Development Goals: How Insurance Contributes to the 2030 Agenda for Sustainable Development—MicroInsurance Centre" (Appleton, WI: Micro Insurance Centre, August 10, 2017).

^{74.} Colombia, Kenya, India, Sri Lanka, and the Philippines.

We primarily focus in this report on weather index insurance for agriculture (see Figure 3.2; p.34), but needless to say, crop and livestock insurance are also vital, as is climate risk insurance covering property.

In East Africa, Swiss Re partners with ACRE Africa⁷⁵ (a company that evolved from the Kilimo Salama crop-insurance project) to provide farmers with weather index insurance covering both drought and excessive rain. In one product—a replanting guarantee—farmers who purchase sacks of seeds from participating seed stockists will find a card with a code in their bags. To activate coverage, a farmer only needs to send an SMS with the date and their geolocation. This information is then matched with the closest weather station, and a confirmation text is sent with details of coverage and a policy number. If the nearest weather station reports extreme weather within a predefined period, the farmer automatically receives a transfer to her M-Pesa account. According to ACRE Africa's website, as of 2016, the company had helped more than a million farmers across Kenya, Rwanda, and Tanzania insure property against a variety of weather-related risks. This model helps protect the livelihoods of small holder farmers and improves food production for the region.

ACRE Africa also promotes climate-smart agriculture, such as different cropping systems; soil and water conservation; better timing for the agricultural production cycle; and use of drought-resistant and certified seeds to increase yields and reduce risks of pests and diseases. And ACRE Africa is constantly reviewing its models. When a disease affected maize production in Kenya in 2013, weather index insurance was not designed to cover the loss. ACRE therefore drew on broader data sources to introduce a multi-peril hybrid product, combining both index and indemnity-based insurance. In the hybrid product, large-scale losses related to weather are monitored through indexes, but for more local events, such as a pest, a disease, fire, or hail, an assessment is conducted in the field.

ACRE Africa provides examples of a number of innovations that are making agricultural insurance work both for policyholders and for providers:

- Bundling insurance with credit and farm inputs to support higher farm productivity
- Mobile money for easy premium and claims payments
- Weather stations to provide rainfall information
- Data from multiple sources informing sophisticated analytics
- Index insurance that provides automatic payouts
- Partnerships, including Swiss Re's reinsurance and an array of local insurers, lending institutions, mobile operators, agribusinesses, farmer cooperatives, out-growers, and other aggregators
- A service provider (ACRE Africa) that brings risk assessment, product development and risk monitoring to help build new models
- Startup support from impact investors and venture philanthropists
- Climate risk-management strategies
- Constant monitoring to ensure that policyholder needs are met

^{75.} ACRE Africa is the brand name for Agriculture and Climate Risk Enterprise Ltd.

^{76.} Note, however, that the World Bank finds that "hydrological and meteorological ("hydromet") hazards are responsible for 90 percent of total disaster losses worldwide." Tariq Khokhar, "Chart: What Are the World's Wettest Countries?," *Data Blog*, September 15, 2017, http://blogs.worldbank.org/opendata/chart-what-are-worlds-wettest-countries.

^{77.} Glaesener-Nasr, "State of Microinsurance."

Blue Marble Microinsurance offers index insurance through products that create a simple customer experience while addressing holistic needs. It bundles financial services and access to farm inputs through extensive partnerships and sophisticated technology. Its newest project in Latin America, through a partnership with the Nature Conservancy, will move from protection to prevention by promoting increased water quality, soil protection, biodiversity, and carbon sequestration.

The big breakthrough in weather index insurance has been satellite systems that accurately record the status of geographic areas. This technology is constantly being improved, such as through higher-resolution imagery and triangulation of data with ground-truth sensors. The data eliminates the costly process of claims verification, enabling automation. In a high-volume, low-premium environment, automation is what makes the products work: it reduces cost, improves access, lowers friction for customers, and encourages rapid payouts that help build trust in insurance. AXA points out that its parametric insurance also allows analysis of the weather sensitivity of a given activity, allowing insurers to design coverage to meet the needs of that activity. In addition to agriculture, AXA applies parametric technology to weather-sensitive activities such as food and drink sales, construction, and retail.⁷⁸ Bilal Mughal adds that use of data allows more sophisticated prediction of agricultural yields, using better models of crop growth, weather data, and also machine-learning techniques. Zelda Bentham of Aviva notes another benefit: satellite systems can facilitate pre-loss payments that can help minimize the cost of a disaster before it is full-blown.

Some models use satellites to better predict the frequency and severity of floods and their damage, enabling rapid assessment of flood-response costs. The World Bank's Disaster Risk Financing and Insurance Program (DRFIP) in Bangladesh and Thailand that combines satellite imagery with data such as population maps and rainfall histories to produce a consolidated, near-real-time view of the number of people affected by floods. This enables an economic assessment of such things as crop loss and damage to infrastructure, as well as providing information that can help prevent loss of life, such as from landslides. In Thailand, the government has responded to the data by investing in flood-risk mitigation, such as relocating facilities and improving infrastructure. DRFIP anticipates "how state-of-the-art tools for remote sensing, hydrologic modeling, climate prediction and assessment, and field surveys could be integrated into a single measurement point."⁷⁹

Among the most recent innovations, several companies are exploring blockchain-based smart contracts that make core processes more automated and transparent. Because these coded contracts—which self-execute the stipulations of an agreement when predetermined conditions are triggered—eliminate costly human intervention once deployed onto a distributed ledger, several observers claim that insurance companies could reduce operating costs as agreements become more efficient and economical with potentially fewer opportunities for error, misunderstanding, delay, or dispute.

^{78.} AXA Corporate Solutions, "Parametric Insurance—AXA Corporate Solutions," accessed October 19, 2017, https://www.axa-corporatesolutions.com/parametric-insurance-7462?lang=fr.

^{79.} For more on this project, which was financed by the Rockefeller Foundation, the World Bank Group's Disaster Risk Financing and Insurance Program (DRFIP), and Columbia University's Earth Institute, see Antoine Bavandi, "New Project Uses Satellites for Rapid Assessment of Flood Response Costs," *Private Sector Development*, May 18, 2017, http://blogs.worldbank.org/psd/new-project-uses-satellites-rapid-assessment-flood-response-costs. A rapid and early response is key to immediately address the loss of human life, property, infrastructure and business activity. Severe flooding occurred during the 2011 monsoon season in Thailand, resulting in more than 800 deaths. About 14 million people were affected, mostly in the northern region and in the Bangkok metropolitan area. After such natural disasters, it is important that governments rapidly address recovery efforts and manage the financial aspects of the disaster's impacts. Natural disasters can cause fiscal volatility for national governments because of sudden, unexpected expenditures required during and after an event. This is especially critical in emerging-market economies, such as those in Southeast Asia, which have chronic exposure to natural disasters. To conserve and sustain development gains and analyze societal and financial risks at a national or regional scale, it is also critical to understand the impacts of these disasters and their implications at the socioeconomic, institutional and environmental level.

To that end, Swiss Life, Zurich, and Swiss Re have collaborated on hackathons to leverage the potential of blockchain technology. Bilal Mughal notes that blockchain technology may be able to replicate the communal risk-sharing structures of microfinance, making it much more powerful. ⁸⁰ The policyholders for the resulting products? Smallholder farmers living on less than \$2 per day. These farmers—many of them growing rain-fed maize—have very little disposable income. Yet the market is huge, and 70 percent of them have mobile phones that provide access. Swiss Re hopes the hackathon will help open the market for the millions of smallholder farmers across Africa, of whom less than one percent have insurance protection against agricultural risks. ⁸¹

Public-Private Partnerships

With less than 30 percent of catastrophe losses covered by insurance, the remaining 70 percent of the burden is carried by individuals, firms, and the "insurer of last resort," governments.⁸² With insurance coverage as low as three percent, the uninsured value at risk is a devastating proportion of the economy. Yet governments in emerging markets generally have little capacity to cover losses and help economies—and communities—recover.⁸³ Natural disasters can cause fiscal stress for governments long after the event has occurred.

The ILO points out that insurance can be a powerful tool for governments to achieve public policy objectives—including promoting access to health care and agricultural services and making communities more resilient to climate change. A one percent increase in insurance penetration could reduce the disaster-recovery burden on taxpayers by 22 percent. In fact, the United Nations member states, in the Sendai Framework for Disaster Risk Reduction, declared that governments have the primary role in reducing disaster risk, but that responsibility should be shared with other stakeholders, including local government and the private sector. The insurance industry notes the importance of government support to introducing insurance products to people, particularly in rural areas. Many feel that agricultural insurance cannot work without government premium subsidies.

New forms of public-private partnerships can help countries absorb the financial consequences of catastrophic events. Swiss Re points out the role of the reinsurance sector in "closing the financial gap," illustrating how individual countries are using public-private partnerships as a means of mitigating the effects of natural catastrophes. Swiss Re counts governments as key clients—along with multilaterals. Paula Pagniez of Swiss Re points out that the key is long-term investment. A number of innovative projects have folded—not because they are unsuccessful, but because donors are not thinking long-term.

In China, the government persuaded hundreds of millions of farmers to use insurance to hedge against the risks of climate change. The government subsidizes the insurance, but at least 20 percent of the premiums come from farmers.

^{80.} Swiss Re, "Hackathon Challenge: Blockchain-Based Architectural Microinsurance" (Zurich: Swiss Re, May 2017).

^{81.} Swiss Re, "Hackathon Challenge."

^{82.} Matthew Johns, et al., "Closing the Protection Gap: ClimateWise Principles Independent Review 2016" (Cambridge: Cambridge Institute for Sustainability Leadership, December 2016).

^{83.} Johns, et al., "Closing the Protection Gap."

^{84.} ILO, "What Is Impact Insurance?"

^{85.} Insurance Development Forum, "Understanding Risk."

^{86.} The Sendai Framework is a fifteen-year, voluntary, nonbinding agreement adopted by UN member states on March 18, 2015, at the Third UN World Conference on Disaster Risk Reduction in Sendai City, Japan. It declares that "The substantial reduction of disaster risk and losses in lives, livelihoods and health and in the economic, physical, social, cultural and environmental assets of persons, businesses, communities and countries." United Nations, "The Sendai Framework for Disaster Risk Reduction 2015-2030" (Geneva: United Nations, 2015).

^{87. &}quot;Insurers Look to Emerging Markets for Growth," *Insurance & Technology*, n.d., video, accessed October 19, 2017, http://www.insurancetech.com/insurers-look-to-emerging-markets-for-growth/v/d-id/1315549.

⁸⁸ Reto Schnarwiler and Ivo Menzinger, "Public-Private Insurance Solutions in Emerging Markets" (Zurich: Swiss Re, January 6, 2012)

Insurance companies manage their own risk in part by protecting farmers from adverse changes in the climate through activities such as training on how to cope with erratic weather patterns and paying for artificial hail-suppression services.⁸⁹

The government of India, after mounting losses due to extreme weather—80 percent of which are uninsured—is mandating insurance to address its highly vulnerable agriculture sector. Its recent scheme, Pradhan Mantra Fasal Bima Yojana, launched in 2016, sets premiums for farmers growing specific crops. The government has also required private insurers to set aside 20 percent of policies to cover people in rural areas.

While we are not exploring sovereign disaster risk insurance in this paper, it is also worth mentioning multicountry risk-pooling initiatives that involve public-private partnerships. As one example, the African Risk Capacity works with member states of the African Union while drawing on expertise, underwriting, and reinsurance from private companies such as AXA and Willis to help governments respond to extreme weather events and natural disasters.⁹¹

Often, these complex partnerships benefit from external brokering. Cenfri, as an independent policy think tank, has the patience for brokering longer-term relationships and models. The MIC likewise has deep experience working with commercial insurers, foundations, bi- and multilateral development agencies, regulators, NGOs, and others. The IFC has promoted insurance as an element of public-private partnerships to address climate risk and other challenges. Ye cannot insure our way out of the real risks of climate change, yet insurers are recognizing the risks and working creatively with a range of public and private partners to mitigate them.

Innovation Spotlight: Swiss Re: Public-Private Partnerships to Open New Markets

Reinsurers have to open new markets. We create new solutions for new market segments.

—Paula Pagniez

Paula Pagniez reports that Swiss Re has committed to offer protection of \$20 billion against climate risk by 2020 through public-private partnerships to promote inclusive economies. In 2011, Swiss Re launched the Horn of Africa Risk Transfer for Adaptation (HARITA) project, working with the Ethiopian government to make insurance affordable for rural smallholder farmers facing climate shocks. Together with Oxfam and a dozen other public and private partners, including Ethiopian farmers, local aid organizations, insurance companies, and climate experts, Swiss Re offered a livelihood development plan that packaged crop insurance with access to credit, savings, and advice on crop yields. Food-insecure farmers participating in the government's social safety net program were able to pay for insurance by working on community projects designed to reduce agricultural risk, such as digging ditches to reduce water runoff.

In 2014, Caribbean countries could purchase excess rainfall insurance coverage for the first time, thanks to Swiss Re's partnership with the Caribbean Catastrophe Risk Insurance Facility. And in 2015, Swiss Re was behind the first government livestock-insurance scheme in Africa. KLIP—the Kenya Livestock Insurance Program—applies satellite-based index insurance to protect pastoralists in remote areas.

⁸⁹ Coco Liu, "Millions of China's Farmers Now Buy Climate-Change Insurance," *Scientific American*, April 22, 2014, https://www.scientificamerican.com/article/millions-of-chinas-farmers-now-buy-climate-change-insurance/.

⁹⁰ EnvEcoLogic, "Climate Change Insurance in India Needs Attention," Spearheading Sustainable Growth, June 20, 2017, http://envecologic.com/?p=1193.

⁹¹ Kai-Uwe Schanz and Fabian Sommerrock, "Harnessing Technology to Narrow the Insurance Protection Gap" (Zurich: Geneva Association, December 2016).

⁹² Intenational Finance Corporation, "How to Make Infrastructure Climate Resilient," EMCompass, September 2016.

If the satellite image shows that the land is yellow, indicating very dry conditions, it triggers an automatic lump-sum payment that allows farmers to pay for feed and water so their cows, goats, and camels can survive. These early payouts help prevent crop and cattle losses at the outset of a crisis.

As a reinsurer, Swiss Re works with governments, multilateral institutions, and others to bring product development, risk capacity, partnership development, and knowledge to local insurance markets. Governments have a vital role to play as a distribution platform and through education. In the case of KLIP, the government's purchase of insurance allowed Swiss Re to price the risk—and then the other insurers in that market had a reference to start offering similar solutions.

Innovation Spotlight: Blue Marble Microinsurance: Collaboration among Competitors Unleashes Innovation

We really believe that this collaborative innovation model is a powerful one. In traditional markets the Blue Marble partners are fierce competitors, but we have decided to collaborate to open up the microinsurance market, and that has been quite remarkable.

—Bilal Mughal, Blue Marble Microinsurance; Zurich Insurance Group

When it joined with seven other commercial insurance players to form Blue Marble Microinsurance, Zurich Insurance Group bet that collaboration would lead to innovation and expanded ability to meet social objectives sustainably. In addition to Zurich, the consortium is made up by American International Group, Aspen Insurance Holdings, Guy Carpenter & Company, Marsh & McLennan Companies, Hamilton Insurance Group, Old Mutual Emerging Markets, Transatlantic Holdings, and XL Insurance (UK) Holdings. The consortium has a commercial purpose, but also a mandate to work toward societal goals such as food security, financial inclusion, and the advancement of microentrepreneurs.

The collaborative-innovation model provides not only capital and cost-sharing, but also a large talent pool. In addition to its small core management team, Blue Marble Microinsurance draws on the expertise of eight companies, with a combined total of about 275,000 employees in 125 countries. Effectively, the consortium has created a protected space where success is defined not by numbers of policyholders or profits but by customer intimacy.

In the case of its first pilot project—providing drought protection for smallholder maize farmers in Zimbabwe—that means looking at needs holistically: mapping out not only agriculture but the entire gamut of a customer's needs across all aspects of life, including school fees and health. By looking at the natural cadence of cash flows and identifying volatile liquidity patterns, Blue Marble was able to design a pilot that opened up access to credit along with insurance. This created a virtuous cycle, enabling farmers to buy higher-quality seeds that resulted in better yield. And by drawing on the consortium's talent pool of data scientists, agronomists, and others, Blue Marble Microinsurance could innovate with a proprietary index, engage in two-way mobile communication with customers, and use point-sensor technology to measure rainfall and plant health in order to create a higher-resolution parametric insurance cover.⁹³

⁹³ Alan Bjerga, "Designed in Davos, Tested in Zimbabwe," *Bloomberg Businessweek*, January 13, 2017, https://www.bloomberg.com/news/articles/2017-01-13/designed-in-davos-tested-in-zimbabwe.

For its second pilot project, Blue Marble partnered with Nestlé Nespresso SA, the consumer products company that pioneered the production of high-quality portioned coffee. They have developed a crop-insurance program that protects smallholder coffee farmers in Colombia against adverse weather conditions.⁹⁴ This kind of partnership in the agriculture value chain enables a major downstream player to enhance the welfare of its more vulnerable upstream suppliers and mitigate its own longer term supply risks.

Part 4. Regulation

Much good work has already been done to regulate and set standards for inclusive insurance. Interviewees noted initiatives by industry-led bodies and public policy leaders, and lauded the work of the Access to Insurance Initiative (A2ii) on behalf of the International Association of Insurance Supervisors (IAIS); the Centre for Financial Regulation and Inclusion (Cenfri), an independent think tank based in Cape Town; the ILO's Impact Insurance Facility; the MicroInsurance Network; the Microinsurance Center; GIZ, a German development agency; and others. This report does not attempt to recap the expert analysis and recommendations of those organizations, but instead highlights the regulatory issues identified as most pressing by the private-sector providers we interviewed (see *Inclusive Insurance Resource List*).

Regulation is not the most significant barrier to inclusive insurance, according to leading inclusive insurers. Doubell Chamberlain of Cenfri suggests that, for global insurance companies making decisions about where to invest group capital, many other market tests must be confirmed before regulation comes into play, such as the growth rate and the capacity and commitment of national offices. As Martin Hintz of Allianz explains, "In reality, regulatory challenges have not stopped us—but having favorable regulation can help us experiment." Chamberlain believes the greater concern is regulatory uncertainty, which disincentivizes investment, rather than specific policies: "Bad regulation is better than uncertain regulation."

Yet, in the context of a rapidly evolving market, global standard-setting, regulation, and supervision in national markets need more attention. The stakes are high. Ping An, for example, reports that agricultural insurance regulations have a significant impact on its inclusive insurance business practices. It sees the government as able to affect its future work by enforcing the rule of law and emphasizing livelihoods among low-income rural populations as Ping An moves forward with serving these populations with insurance.

The primary call to action has been proportionate regulation for inclusive insurance that is commensurate with the nature, scale, and complexity of the risks involved and does not overreach. A proportionate approach allows the supervisor to attain its objectives of soundness and security of insurance in the financial sector while still allowing regulation. Without a proportionate approach, regulation can become overly complex, straining the capacity of regulators and the industry. Hannah Grant of A2ii explains, "Standard regulatory and supervisory approaches need to be adapted to facilitate the types of insurers and distribution channels needed to tap into the inclusive insurance market and allow growth and development." She adds, "Developing proportional regulation is not easy, as well as being able to keep up with new business model innovations." She therefore calls for support for capacity building, and for the insurance industry and regulators to continue to work toward a framework that strikes the right balance between facilitating new providers and business models while also protecting vulnerable consumers and building trust.

^{94.} Nick Brown, "Nespresso and Blue Marble Piloting Micro-Insurance Program in Colombia," *Daily Coffee News*, May 30, 2017, https://dailycoffeenews.com/2017/05/30/nespresso-and-blue-marble-piloting-micro-insurance-program-in-colombia/.

FIGURE 3.3 WHAT INSURERS WANT FROM REGULATORS



GO PAPERLESS:

- Allow payment with airtime and other means
- Allow e-signatures with remote enrollment



MOVE FASTER:

- Shorten filing times Promote test and learn approaches
- Do not restrict number of filings for new product approvals



SIMPLIFY THE PROCESS FOR THE CUSTOMER

- Allow auto-enrollment
- Reduce disclosure requirements
- Be flexibile in required claims documents



OPEN UP DISTRIBUTION

- Allow new aggregators, such as newly created associations, business supply chair and retailers, to create group policies through a range of intermediaries Allow broad flexibility of possible distribution channels
- Move beyond the commission limits of traditional insurance



RETHINK REINSURANCE

Permit reinsurance across borders



REDUCE THE REGULATORY BURDEN

Reduce taxes on low premium volumes

One such framework embraced by leading regulators has been to carve out protected space for microinsurance providers. reports that, as of November 2017, there were twenty countries with a microinsurance regulatory framework, with twenty-one more in the process of developing their own frameworks, compared to only six countries in 2009.

For regulatory purposes, microinsurance is generally defined by parameters such as the consumer group intended to be served, product characteristics, who can underwrite, distribution channels, and the requirements of the microinsurance contract.95

Supervisors have taken two primary approaches proportionate

regulation: supervising microinsurance as a distinct business line, and issuing dedicated microinsurance licenses to a specific tier of risk carriers. In exchange for less stringent licensing and prudential requirements (such as minimum capital, solvency, and risk management), these entities are restricted to limited types of insurance business lines. In September 2013, CARD-Pioneer became the first nonlife company in the Philippines specifically created to address the calamity, agriculture, and income-loss insurance needs of the marginalized market at the microinsurance level, taking advantage of a new insurance law that specifies a daily premium cap of 35 Philippine pesos (about \$0.81). Yet the Philippines, along with Cambodia, Nigeria, and other countries that have established microinsurance licenses, has seen few applicants for those licenses. 96 Richard Leftley suggests, "It's worth looking at why that is. There is a disconnect in that traditional insurance companies have been around for a long time—yet the vast majority of the world still doesn't have insurance."

While some might view microinsurance as a niche market, often the uninsured can be categorized as part of the microinsurance market. A Cenfri study found that 95 percent of the unserved Southern African Development Community fit the "microinsurance" profile—defined as those earning less than \$15 per day—and noted that microinsurance can form a foundation for building the retail insurance market, which is currently extremely small.⁹⁷

In light of the fast-evolving market and the need to support the industry during a time of significant investment, flexibility and agility are key. Leftley says, "The market is moving so fast it will have moved on by the time you regulate, so don't try to prescribe. Set out the playing field and what you won't allow [regarding] distribution [and] the split of commercial insurance, and be clear about what is not permissible." One example of regulation holding insurance back is mutual and cooperative insurance. ICMIF reports that 63 percent of low-income countries do not have laws that allow for such insurance, compared with only 33 percent of high-income economies.

^{95.} Martina Wiedmaier-Pfister, Hui Lin Chiew, and Hannah Grant, "Proportionate Regulatory Frameworks in Inclusive Insurance" (Eschborn, Germany: Access to Insurance Initiative, November 2016).

^{96.} Wiedmaier-Pfister, Chiew, and Grant, "Proportionate Regulatory Frameworks."

^{97.} Doubell Chamberlain, et al., "Regulating for Inclusive Insurance Markets in SADC: Review of Regulation" (Cape Town: Cenfri, October 28, 2013).

According to ICMIF CEO Shaun Tarbuck, this is a missed opportunity, since mutual and cooperative insurance is the fastest growing form of insurance in countries where it is allowed.⁹⁸

Test-and-learn approaches are needed to allow new products to be approved quickly and revised quickly after introduction. Restricting the number of new products introduced in a given year may make sense for managing regulatory capacity, but it does not make sense for a private-sector company making significant investments in a market and innovating new approaches. Regulators need to make space for innovation, including technology solutions. For instance, one request from inclusive insurers is to allow payments with mobile airtime, which are well suited to the small premiums of microinsurance. And, in harmony with the revolution in digital financial services, regulators should support digital enrollment in all markets.

The China Insurance Regulatory Commission has been proactive about encouraging innovation around new products and online distribution: in 2015 it introduced new regulations that make it easier for insurers to provide online services in regions where they do not have a physical presence, allowing new products to be launched more quickly.⁹⁹ AXA is also exploring providing proportional coverage in the event that customers cannot pay the full premium—an option that is currently prohibited by regulation.

While these specific recommendations emerged from our interviews, the MIC, working with A2ii, has developed a much more comprehensive and detailed understanding of proportionality. It recommends prioritizing flexibility on distribution channels, document disclosure, use of e-signatures for remote enrollment, and access to a range of intermediaries.

Because of this industry feedback, A2ii developed case studies with practical examples of "proportionality in practice." One focuses on reducing disclosure content requirements and allowing market-sensitive language; the other focuses on proportionality in distribution, including electronic means and payment methods, both of which promote regulatory incentives for insurance market development.¹⁰⁰

Regulators often create barriers as well by making policies that prioritize client protection without considering the level of risk, by stifling innovation in technology and distribution channels, or by slowing down the rate of innovation in product development.

In an industry that is all about protection and where there is urgency to close a protection gap that can encompass as much as 99 percent of a population, consumer protection can be relegated to the back burner. The industry leaders we interviewed pointed out that insurance, by its nature, is consumer protection, and preferred to focus on access rather than complaint mechanisms. At the same time, insurers see trust as critical and are proactive about building protection into the product design, such as providing automatic payouts based on preestablished criteria. As Bilal Mughal of Blue Marble Microinsurance puts it, "Regulation is about achieving the balance of convenience and accessibility with the clarity and protection that you need to provide for vulnerable consumers." In short, client protection is important for protecting previously uninsured customers who have no experience with insurance and may be more vulnerable to abuses, yet client protection must be proportionate, so that insurers are encouraged to enter the market.

^{98.} ICMIF, "45% of the World's Countries Do Not Have Mutual/Cooperative Insurance Law According to Latest ICMIF Data," July 5, 2016, https://www.icmif.org/45-world%E2%80%99s-countries-do-not-have-mutualcooperative-insurance-law-according-latest-ic-mif-data.

^{99.} Don Weinland, "China's Zhongan Sees Scope for Offbeat Insurance," *Financial Times*, November 18, 2016, https://www.ft.com/content/bee51a52-accd-11e6-9cb3-bb8207902122.

^{100.} See Access to Insurance Initiative, "Proportionality in Practice: Disclosure of Information" (Eschborn, Germany: A2ii, June 28, 2017); Access to Insurance Initiative, "Proportionality in Practice: Distribution" (Eschborn, Germany: A2ii, June 28, 2017).

Insurance providers report good relationships with regulators. Private-sector access to regulators has been a key factor in gains. However, regulation is very specific to each country, and the private-sector leaders forging the path for inclusive insurance welcome the intervention of think tanks such as Cenfri and others with the mission and expertise to carry out intensive negotiations with regulatory bodies over long periods.

This is particularly the case when the insurance regulator is not the only relevant player. Insurers cited the most significant engagement with telco regulators, followed by ministries of agriculture, with central banks, finance ministries, consumer protection agencies, and data protection authorities close behind. Others engage with tax agencies, health regulatory bodies, and e-commerce regulators. After meeting its maximum quota for new product filings in Nigeria, AXA worked with the health regulator to introduce an m-Health product branded under the name of its partner. Pioneer Life received guidelines from the e-commerce regulator in the Philippines while awaiting formal approval.

A regulatory framework that addresses the global protection gap is particularly important in emerging economies that are most vulnerable to climate impacts.

The Cambridge Institute for Sustainability Leadership (CISL) has convened ClimateWise as a platform for the global insurance industry to drive action on climate change risk. ClimateWise calls for "a more enabling environment for insurance, increasing the availability and reliability of technology-enabled data, and, crucially, moving beyond financial risk transfer and ensuring greater collaboration across sectors and markets to increase societal resilience." ¹⁰¹ CISL advocates for a financial architecture that supports sustainable development, calling for a greater emphasis on the role of insurance—whether public, private, or mutual—to protect the basic human rights to life, livelihood, and shelter. CISL's framework focuses on protection for policyholders (individuals, corporates, and sovereigns); insurance contracts that influence risk reduction and resilience through conditions and incentives; and enabling financial inclusion, ensuring that the most vulnerable have access to insurance along with other financial services. ¹⁰² The aims of sustainability converge with the aims of inclusion for all, with insurance playing an essential role.

^{101.} Johns et al., "Closing the Protection Gap."

^{102.} IRDA, "Annual Report 2015–2016" (Hyderabad: Insurance Regulatory and Development Authority of India, November 21, 2016).

Innovation Spotlight: India

The government of India has intervened to address insurance throughout the years, with a number of schemes initiated by Prime Minister Narendra Modi since May 2014. The insurance industry in India includes 53 insurance companies (24 life insurers and 29 non-life insurers). Life insurance recently saw an aggressive one-year growth of 22.5 percent to \$20.5 billion in premiums as of March 2016, and the overall insurance market saw 12 percent growth over the same period. Yet a large section of the Indian population remains excluded, with insurance penetration (measured as the percentage of insurance premium to GDP) at 3.44 percent as of 2015 Hard and is expected to cross four percent in FY 2017. In population numbers, this translates to only 10 percent of the Indian population having insurance. This gap has spurred the government to generate strong incentives for inclusion, especially in rural areas—although not without some confusion and a constant need for adaptation.

The Indian Ministry of Finance has spurred growth and mandated service for low-income people through a range of guidance policies as the market opened up to private-sector companies. Two percent of average net profits are mandated to be set aside for corporate social responsibility (CSR); SBI Life, for example, has used its CSR to help children and their families.

Another regulatory prescription is that one percent of insurance should be in the social sector, for low-income people. For SBI Life, that has provided a base of small policies for very small groups that it then targets for growth. Another requirement is that at least 20 percent of policies in a year must come from rural areas. Aviva has risen to that challenge, with the goal not just to comply but to develop a sustainable product—and reports that its rural life product has worked extremely well as a sustainable revenue stream.

India's life insurance sector is the biggest in the world, with about 360 million policies thanks in part to the Ministry's activism, life policies are expected to increase at a compound annual growth rate of 12 to 15 percent over the next five years—although that would still only hike penetration levels to five percent by 2020.¹⁰⁷

Allianz, which has worked in India since 2004 and reaches 49 million people there, saw significant change in its emerging customers' activity in 2016, in part due to changes in government policies. It says its 95 percent growth in gross written premiums during 2016 is "driven by two factors: crop insurance premiums, thanks to the enlarged crop insurance program of the Indian government, and higher average ticket sizes of our Indian Group Term Life (GTL) business, as these policies are tied to microfinance loans of BajajAllianz' Indian microfinance distribution partners which have seen the average loan sizes increase, despite demonetization." Allianz also reports that a "10 percent drop in outreach is due to the effect of demonetization in India, which has led to less people taking out GTL-protected microloans, but at higher amounts." 108

^{103.} India Brand Equity Foundation, "Indian Insurance Industry Overview & Market Development Analysis," September 2017, https://www.ibef.org/industry/insurance-sector-india.aspx.

^{104.} G.E. Thomas et al., "The Missing Chapter of Microinsurance in India: A Diagnostic of Mutuals," paper (International Cooperative and Mutual Insurance Federation, July 2017).

^{105. 11/20/2017 10:16:00} AM

^{106.} International Cooperative and Mutual Insurance Federation, "Key Findings from the ICMIF Country Diagnostic Study on Mutual and Cooperative Microinsurance in India" (Bowdon, England: ICMIF, July 2017).

^{107.} India Brand Equity Foundation, "Indian Insurance Industry Overview."

^{108.} Hintz, "Emerging Consumers 2016."

In 2014, the Modi government increased the upper limit on foreign investment in the insurance sector from 26 to 49 percent, allowing global insurers such as Aviva to invest more into risk models for the Indian market. At the same time, private insurers have found it difficult to compete with products subsidized by the Indian government, such as the drought-protection product that was spurred by a suicide crisis among farmers. Fear of being undercut by a government policy makes global insurers less willing to invest substantially.

The Modi government has also introduced a number of social security schemes. Anyone with a savings account is eligible for accidental death and disability coverage of 200,000 Indian rupees (about \$3,000) for a premium of 12 Indian rupees (about \$0.20) per year, and a standard life insurance product paying the same amount for a premium of 330 Indian rupees (about \$5) a year.¹⁰⁹

SBI Life comments that the Insurance Regulatory and Development Authority of India is very open—it has formed a product-review committee, and some CEOs and CIOs are part of this group. At the same time, the Indian insurance market is heavily regulated, mandating who can sell, how, and what.

India has been in the vanguard of using data for advanced financial inclusion, with innovations such as the biometric data collected for the Aadhaar national identification scheme. Garance Wattez-Richard notes that having a national ID changes everything, even in rural areas, where the vast majority of farmers have biometric identification. India Stack, a unified software platform with a vision of bringing India into the digital age, offers the transformation to presenceless, paperless, and cashless service delivery. Yet, in August 2017, the Indian Supreme Court issued a historic ruling that the right to privacy is part of the fundamental rights to life and liberty enshrined in the country's constitution, calling for regulation regarding how such information can be stored, processed, and used. Many eyes will continue to watch how India's innovations in inclusive insurance play out.

^{109.} Business Insider India Bureau, "8 Insurance Schemes Modi Launched and How They Benefit You," *Business Insider*, May 25, 2015, http://www.businessinsider.in/8-Insurance-Schemes-Modi-launched-and-how-they-benefit-you/articleshow/47418104.cms.

APPENDIX A: Study Methodology

This study aims to understand the role of financial institutions in driving inclusive insurance and the market opportunities and challenges associated with expanding coverage to unserved and underserved customer segments, primarily in emerging markets. To that end, CFI and IIF carried out in-depth interviews over four months. The report's findings are based on written submissions and phone interviews with thirty people from twenty-two financial institutions, organizations, and other entities. A list of interviewees can be found in Appendix B; a sample interview guide is available on request. Along the way, an Advisory Group that included stakeholders and industry experts spoke with researchers from time to time to provide guidance.

For the purpose of this report, we define *inclusive insurance* as access to and use of appropriate and affordable insurance products for all who are currently unserved and underserved, with a particular emphasis on vulnerable or low-income populations. The context of the discussion is financial inclusion, referring to a full suite of financial services, of which insurance is one underused category of products.

APPENDIX B: Interviews

Institution	Interviewee	Title
Access to Insurance Initiative (A2ii)	Hannah Grant	Head, Secretariat
Allianz *	Martin Hintz	Head, Emerging Consumers [^]
Aviva *	Zelda Bentham	Group Head of Sustainability
AXA *	Denis Duverne	Chairman
AXA *	Garance Wattez-Richard	Head of AXA Emerging Consumers
AXA *	Quentin Gisserot	Project Manager, AXA Emerging Customers
Banco BHD León	Pura Mendez	Gender Manager, Business and People's Banking Segments
Banco BHD León	Mercedes Padilla Estevez	Insurance Manager
Banco Davivienda *	Margarita Maria Henao Cabrera	Vice President, Personal Banking Products and DaviPlata
Banco Davivienda *	Jorge Jaimes Mantilla	Professional III, DaviPlata Business Line
Blue Marble Microinsurance	Bilal Mughal	Head of Ventures and Operations
Zurich Insurance *		Head of Emerging Consumers
Cenfri (The Centre for Financial Regulation & Inclusion)	Doubell Chamberlain	Founder and Managing Director
Centenary Bank †	Hellen Tomusange	Supervisor Women Banking
Dubai International Financial Centre *†	Salmaan Jaffery	Chief Business Development Officer
Global Communities	Marike Brady	Director, Strategic Partnerships—Middle East and Europe
International Cooperative and Mutual Insurance Federation (ICMIF)	Shaun Tarbuck	CEO
International Labour Organization	Craig Churchill	Chief, Social Finance Programme and Team Leader, ILO Impact Insurance Facility
LeapFrog Investments	Tessa Albrecht	Global Communications Manager
LeapFrog Investments	Matthew Myers	Director
MetLife *	Pedro Chavelas	Vice President, Worksite Marketing Group
MicroEnsure	Richard Leftley	President & CEO
MicroInsurance Centre	Michael McCord	President
Ping An Insurance *†	DING, Wen	Senior Actuary
Pioneer Life and CARD-Pioneer	Lorenzo Chan Jr.	President & CEO, Pioneer Life Inc.; Retail Organization Head, Pioneer Group
Pioneer Life and CARD-Pioneer	Geric Laude	President, CARD-Pioneer Microinsurance Inc.
SBI Life Insurance Co. (State Bank of India) *	Arijit Basu	Managing Director & CEO
SBI Life Insurance Co. (State Bank of India) *	Abhijit Gulanikar	President, Business Strategy
Swiss Re *	Paula Pagniez	Senior Microinsurance Specialist; Vice President, Global Partnerships
YES Bank *	Sushant Tripathy	Group Executive Vice President, Inclusive & Social Banking
YES Bank *	Ajay Desai	Senior President and Chief Financial Inclusion Officer

^{*} IIF member institution.

[†] Provided comments in writing.

 $^{\ ^{\}wedge}$ Title during the time of interview. He has since left Allianz.





