

Investing in financial inclusion for climate resilience and adaptation

The role of Islamic financial services

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- There is a growing consensus that financial inclusion can have a range of benefits, including for climate resilience and adaptation. Financial inclusion rates tend to be low in Muslim-majority countries: more needs to be done to develop financial services and instruments that are tailored to the context.
- In scaling-up Islamic financial services, more effort is needed to identify new tools and complement grant funding with different financing approaches. Greater experimentation in product delivery could help in driving down costs, while further product development could contribute to wider acceptance of Sharia-compliant financial services as instruments of financial inclusion and resilience.
- There is also a need to further develop relationships and partnerships to connect private and public actors, as well as linking Islamic finance players and donors with mainstream climate resilience and disaster risk management.

Introduction

The UN Climate Summit in September 2019 will present a significant opportunity to transform the international response on climate change resilience and adaptation. It will also provide a key space to promote innovative sources of finance and financial instruments to support climate adaptation and resilience. While there is a growing consensus recognising that financial inclusion has manifold benefits, including enhancing financial stability and building resilience, there also needs to be a realisation that, if the international pledge to foster financial inclusion and support resilience is serious, Islamic financial products must be supported to ensure that Muslim populations are not excluded from the formal financial system. This briefing note aims to feed into the Climate Summit by examining the opportunities for investing in Sharia-compliant financial products. Jointly developed by ODI and Islamic Relief Worldwide (IRW), it is based on an extensive literature review and on the research team's participation in discussions at a roundtable in February 2019 on the role of Islamic financial services in financial inclusion for climate change resilience and adaptation.

Why invest in financial inclusion for climate resilience and adaptation?

Financial inclusion strategies aim to ensure that all individuals and companies, including people on low incomes, women and small and mediumsized enterprises (SMEs), have access to and make use of adequate formal financial services (transfers, savings, credit and insurance) supplied by a variety of public and private providers. Financial inclusion can lead to economic growth through the development of financial systems (e.g. increasing the number and total value of formal financial transactions) and to greater diversification of risks (e.g. large deposit bases and portfolios of small loans, both less vulnerable to shocks). It can also decrease income inequality when financial services are tailored to the needs of the poorest and most marginalised.

Evidence shows that access to financial services, including loans, current and savings

accounts and insurance, plays a crucial role in enabling low-income households to enhance their circumstances by investing in physical assets, education and businesses. Access to financial services helps households withstand the impacts of economic stresses and seasonal variations in income. Saving and borrowing can help people plan ahead, adapt to changes and absorb shocks (Haworth et al., 2016; Moore et al., 2019). Firms need access to financial services to invest, innovate, take advantage of market opportunities, manage cash flow and costs and reduce risks. Financial inclusion is therefore a crucial policy area for building resilience at the micro, meso and macro levels.

For these reasons, financial inclusion has caught the attention of some of the most prominent global institutions. Organisations such as the G20, the United Nations and the World Bank have committed to make financial services accessible to the most vulnerable. These efforts often focus on increasing access to affordable savings and money transaction services and scaling up the provision of credit and insurance.

Why invest in Islamic (micro)-finance for resilience and adaptation?

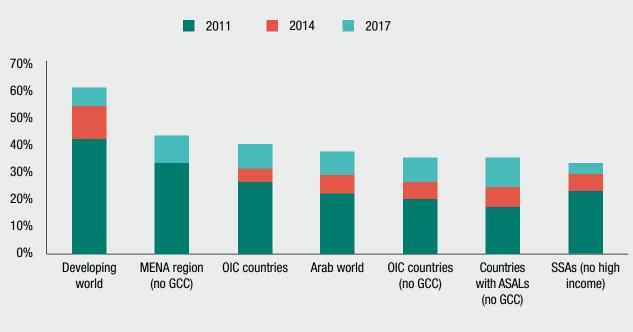
In Muslim-majority countries, financial inclusion rates, such as the proportion of the population having borrowed from a bank, are about 24% below that of non-Muslim countries, after controlling for GDP per capita (Karlan et al., 2017). Across the Sahel, the Horn of Africa and the Middle East and North Africa, many disadvantaged Muslims have limited or no access to the formal financial system, either through conventional or Islamic financing, because financial institutions are not evenly spread and often have a restricted offer of suitable products, and markets for the provision of formal and semi-formal financial services that are Shariacompliant are under-developed. This highlights the importance of investing in Islamic (micro)finance in order to further increase and deepen financial inclusion in countries with substantial Muslim populations.

Experience from the Building Resilience to Climate Extremes and Disasters (BRACED)

Box 1 Financial inclusion in OIC countries

Although Islamic finance is one of the fastest growing segments of emerging global financial markets, the market is still far below its true potential. For instance, despite a four-fold increase in recent years in the number of poor clients using Sharia-compliant products (estimated at 1.28 million) and a doubling in the number of providers, Islamic micro-finance is still nascent, and is struggling to find sustainable business models with a broad array of products that can meet the diverse financial needs of poor, religiously observant Muslims (El-Zoghbi and Tarazi, 2013). Countries in the Middle East and North Africa tend to underperform on access to SME lending relative to countries with similar gross domestic product (GDP) (Pearce, 2010). In this context, the ability to offer, at micro and meso level, suitable financial products that are in line with the abilities and convictions of the local population is critical to support financial inclusion.

Information from the Global Findex database (Demirgüç-Kunt et al., 2017) confirms that the level of financial inclusion in Organisation of Islamic Cooperation (OIC) countries and in arid and semi-arid lands (ASALs) remains lower than the average in the developing world – even if both have recently experienced more rapid growth (see Figure 1).





Source: Authors' calculations based on Global Findex (Demirgüç-Kunt et al., 2017).

programme shows how the development of Sharia-compliant options can help in overcoming cultural barriers and opening up new markets for financial services – for example in the semi-arid regions of north-eastern Kenya (Weingärtner et al., forthcoming). Over a billion people, a significant proportion of whom are Muslim, live in such Arid and Semi-Arid Lands (ASALs) (Koohafkan and Stewart, 2008), which are highly exposed to the effects of climate change through extreme temperatures, high rainfall variability and fluctuations in natural capital (such as water and grazing resources). This confluence of climate and non-climate risks, combined with broader socio-economic inequalities, means that climate hazards disproportionately affect the populations of ASALs, threatening the central commitment underpinning the Sustainable Development Goals (SDGs) to 'leave no one behind' (Jobbins et al., 2018). Yet ASALs are routinely marginalised in economic and political terms, resulting in a lack of incentives for financial institutions to invest in and develop markets that meet people's needs, despite their potential for climate-resilient economic development (Carabine and Simonet, 2018). To take advantage of such opportunities, there is a need to broaden value chain finance opportunities to target the range of private actors (individual producers, women's collectives, SMEs) active in ASALs and meet their varied needs, including Sharia compliance in areas with Muslim populations.

Recent technological and financial innovations such as mobile banking, indexbased livestock insurance and *takaful*¹ could further expand opportunities to invest in the development and provision of financial services suitable for Muslim populations and have the potential to reach people in more remote locations than conventional financial services.

There have been a number of key financial inclusion initiatives across the Muslim world. Under the auspices of the OIC, the Islamic Development Bank (IsDB) has established itself as a global leader in Islamic finance, with the goal of promoting development across and beyond OIC states through financing structures that are Sharia-compliant. In 2015, the president of the IsDB called on experts in Islamic finance to take advantage of existing business approaches and technologies such as mobile banking to develop new semiformal Islamic microfinance products for entrepreneurs and SMEs. At the same time, the IsDB established a Climate Change Division within the Resilience and Social Development Department to scale up efforts on climate change mitigation and adaptation across member countries. It has also recently joined the Climate Finance Tracking Working Group to keep track of its disbursements in this field. In 2017, IsDB climate finance was estimated to be worth \$644 million (approximately 22% of approvals), 47% of which was dedicated

to climate adaptation (African Development Bank (AfDB) et al., 2018).

The urgent need to raise levels of ambition and action to combat climate change has been felt across the Islamic world. In 2015, Islamic leaders called on the world's 1.6 billion Muslims to play an active role in fighting climate change. The call was made in an Islamic Declaration on Climate adopted at the International Islamic Climate Change Symposium, hosted, among others, by Islamic Relief Worldwide. The symposium showcased examples of best practice in projects on environmental sustainability, climate adaptation and people-centred solutions, as well as underlining the importance of mobilising Muslim communities to address climate change, supporting the view that the climate crisis is also a moral crisis.

The potential of Islamic finance

In recent years Islamic finance has moved from a market niche to a rapidly growing industry. According to the National Bureau of Asian Research, the Islamic finance market globally grew by between 10% and 15% annually from 2000 to 2012, and Sharia-compliant assets rose by more than 160% between 2009 and 2011. In 2016, the industry held about \$1.6 trillion in banking assets (concentrated in the Gulf Cooperation Council (GCC) countries (Daly and Frikha, 2016)). The sector is attracting increasing interest from both Muslim and non-Muslim countries, and Sharia-compliant institutions now include banks (fully Islamic institutions and institutions with Islamic subsidiaries), Islamic investment banks and finance and insurance companies.

The main foundations of an Islamic financial system are its equity-based principle of sharing risk and profits and its asset-based transaction nature. These have a clear role to play in supporting the financial inclusion of households, groups and SMEs for climate change resilience and adaptation (see Box 2). There is evidence that the application of such principles makes a difference. For instance,

¹ *Takaful* represents a cooperative model resembling mutual insurance based on a group of participants donating funds into a pool that members can then use in the event of specified unfavourable contingencies.

Box 2 Basic principles of an Islamic financial system

- **Prohibition of interest and speculative behaviour.** An Islamic financial system discourages hoarding and prohibits transactions featuring extreme uncertainties, gambling and risks.
- **Risk-sharing.** Because interest is prohibited, suppliers of funds become investors instead of creditors. The provider of financial capital and the beneficiary share risks in return for shares of the profits (and losses).
- Asset-based transactions. As a result of the previous principles, the system promotes the 'materiality' aspect, which requires linking financing directly with the underlying asset so that financing activity is clearly identified with 'real' sector activity.
- Sanctity of contracts and preservation of property rights. Islam anchors socio-economic relations in contracts and encourages individuals to comply with their contract terms.

Source: Iqbal and Mirakhor (2013).

Beck et al. (2013) show that Islamic banks are better capitalised, have higher asset quality and are less likely to disintermediate during crises and, hence, enjoyed better stock performance during the recent financial crisis.

Islamic principles can be leveraged to mobilise capital for climate mitigation and adaptation. Recently, the development of 'green' Islamic finance has represented a key success factor in raising new resources to fund projects with environmental and climate benefits. Like green bonds, green *sukuk*² are attractive financial instruments to channel new avenues of climate finance in compliance with Islamic law. Malaysia issued the first green sukuk in 2017 to finance renewable energy projects (Hadad-Zervos, 2017), and Indonesia issued the first green sovereign sukuk in 2018, worth \$1.25 billion, to finance renewable energy projects, sustainable land use, green tourism and waste management (Bahuet, 2018). The United Arab Emirates and Qatar are now planning to issue green sukuk (Stott, 2018; Townsend, 2015), recognising the increased demand for and interest in green sukuk across Muslim countries, and the shortage of supply. Some countries have also tapped into *zakat* and waqf³ funds to finance such projects (UN-ESCWA, forthcoming).

Expanding Islamic financial services for resilience: challenges and opportunities in product development

The enabling environment for financial inclusion in OIC countries has recently improved, but it is still weak overall. Challenges are substantial, and include the following:

- Deficiencies in financial infrastructure (e.g. limited reach of modern payments systems).
- Lack of regulatory clarity.
- Often outdated credit assessment techniques.
- The absence of risk-based Know-Your-Customer requirements (i.e. identification and eligibility criteria for basic accounts proportionate to risks).
- Weak consumer protection.
- A general lack of systematic market analyses/ poor understanding of clients' needs.
- Few efforts put into building trust in product authenticity.
- Low investment in developing financial skills and capabilities.

Other key constraints weighing on the expansion of financial inclusion include informality (which translates into high

² *Sukuk* is a green Islamic bond where the proceeds are used to fund a specific environmentally sustainable project such as green infrastructure.

³ *Zakat* is one of the pillars of Islam. It prescribes a spiritual duty to give a set percentage of one's wealth to charity. *Waqf* involves donating an asset – usually land or buildings – for religious or charitable purposes.

information asymmetries⁴) and limited product offerings, resulting in a lack of tailored savings, insurance, credit and payment products.

Despite these challenges, ongoing development within the sector and the increasing need to finance climate resilience globally also present opportunities for Islamic finance at micro, meso and macro level.

Product cost and innovation

The main challenge in supporting larger uptake of Islamic microfinance is probably associated with the product structure and the additional operational costs related to achieving and maintaining Sharia compliance. However, recent empirical evidence suggests grounds to be optimistic. Karlan et al. (2017) find that offering consumers a Sharia-compliant loan increases application rates from 18% to 22% compared to consumers offered a conventional loan at the same price. As the price increases, the demand for the Sharia-compliant product goes down more slowly among religious individuals. This shows that the extra costs associated with Sharia compliance could be passed through to religiously observant customers without eliminating the market for the product. Findings also suggest that the new product successfully increases utilisation of formal financial services without necessarily pulling in more risky individuals for the lender. Targeting based on religion might generate indirect benefits: for example, a faith-based lending process may include group meetings for borrowers, through which borrowers acquire more social capital, or lead to higher repayment rates due to moral suasion, potentially allowing lenders to pass those savings back to the borrower (Bursztyn et al., 2015).

Over the past decades, specific products have been developed that avoid the concept of interest and imply a certain degree of risksharing to comply with Islamic principles. Such risk-sharing instruments can offer Sharia-compliant household finance, financing for SMEs and insurance. Generally, though, the products offered are largely restricted to Murabaha (i.e. an Islamic lending product typically used for working capital) and, to a lesser extent, Musharaka transactions (i.e. an Islamic financing structure with equity participation). Often, demand-driven innovation is limited, and the supply is donor-driven. In the microfinance and -savings space, access to finance tends to be particularly narrow, with most providers not able to offer extra services such as transaction accounts, term deposits or insurance products. Providers are still in the process of identifying innovations and adaptations to Islamic finance that lower costs and enable them to offer sufficiently attractive pricing. While there are a number of promising examples, more needs to be done, for example in scaling up FinTech solutions.

Financial inclusion and technology

Of particular interest is understanding how the demand for financial products that can be used for consumption smoothing differs from the demand for products aimed at asset-building and enterprise financing, for which most Islamic financial services are more suitable. Recent research suggests that the gap between Muslims and non-Muslims might be larger in the ownership of formal accounts than in the usage of formal credit products (Demirgüç-Kunt et al., 2013). This suggests that efforts to increase the uptake of banking products at the micro level might be especially relevant for building resilience, since through savings people can use resources acquired during better times to recover from shocks. To this end, scaling up the use of technology to expand economic and financial inclusion presents a particularly relevant avenue. The scope of FinTech projects has expanded greatly over the past few years, globally and across the Muslim world. Early impact evidence on digital financial services and other branchless banking solutions indicates significant positive benefits (Calderone et al., 2018; Karlan et al., 2016). For instance, digital interventions could meet the needs of the poor while addressing longstanding cost inefficiencies in Islamic (micro)-finance as they could easily promote product innovation and aid service provision. Mobile banking, in particular, has the potential to be transformational in unlocking

⁴ Problems of adverse selection and moral hazard are more serious in informal markets.

banking and financing options for agro-pastoral communities in ASALs.

Strengthening production systems through value chain financing

Along the same lines, the use of Islamic contracts for value chain financing (VCF) is highlighted in a number of case studies as a promising way of supporting SMEs' access to finance and wider climate-resilient development efforts (see, for example, Hussain and Syed Musa Alhabshi, 2016). The risk-sharing principle and the principle that all transactions have to be backed by a real economic transaction make Islamic products particularly suitable for VCF. In fact, some Islamic products have equivalent features to common VCF products in that borrowers are considered business partners who jointly bear the risks and profits. Murabaha lending, for example, is similar to trade financing. A number of institutions are active in supporting the development of such instruments. The International Islamic Trade Finance Corporation (ITFC), for example, has established itself as a leader in Sharia-compliant trade finance. However, proper VCF platforms – a welldeveloped concept in Western markets (including factoring to unlock liquidity for working capital⁵) – have been almost non-existent in the Sharia-compliant finance space. Islamic finance solutions currently account for only 1.5% of the global VCF industry (Parker, n.d.). While there are notable exceptions, such as the Tawreeq Holdings company, developments in Shariacompliant management of the entire VCF cycle offer a promising investment opportunity.

Linking Islamic finance instruments with the climate resilience and disaster risk management agendas

While Islamic finance is 'business-as-usual' for financial institutions offering Shariacompliant products and services, recognition and understanding of Islamic finance solutions – along with their potentials and pitfalls – in the mainstream climate resilience and disaster risk management arenas is low. However, if global initiatives are serious about financial inclusion and leaving no one behind in climate change adaptation, they should be doing more to make financial services more accessible and appropriate for Muslim populations. For instance, developing *Takaful* products represent a key risk financing opportunity for disaster and climate resilience – in line with the G7 commitment to reach 400 million additional people globally with affordable insurance by 2020 through the InsuResilience Global Partnership, and the global commitment to invest more in longterm resilience-building rather than short-term humanitarian action.

Yet in many cases, access to and use of insurance products has been low. One reason, among others, is that Muslims often avoid such services over concerns about interest and uncertainty or ambiguity in contracts. Takaful products are slowly but steadily emerging as a central part of the Sharia-compliant family of financial services, helping to meet insurance needs in ways that are consistent with local norms. Re-takaful is a Sharia-compliant form of reinsurance. A project piloted by IRW in Bangladesh demonstrated that low-cost Islamic risk financing can open up opportunities to scale up insurance against extreme weather events among low-income individuals (Crawford et al., 2018). Takaful has high potential and can possibly cover various climate-related risks at the micro and meso level. While the market has experienced a period of very rapid growth (30% annually in 2007–2010), it is regarded as still largely untapped (Gönülal et al., 2013).

The underlying principles of Islamic finance also present an opportunity to leverage Islamic finance to mobilise capital for climate mitigation and adaptation. Although instruments so far are underutilised, the recent emergence of green *sukuks* and the increasing use of *zakat waqf* in funding climate action exemplify this potential. However, in Islamic finance and beyond, more needs to be done to channel climate finance where it is needed most. To address this,

⁵ Factoring is a type of supply chain finance practised by banks through securitisation of trade receivables. This means that, in order to avoid this financing being classified as debt on a company's balance sheet, the bank purchases the supplier's invoice from the company.

there is a need to identify new approaches for investing in financial inclusion for resilience and adaptation at the micro and meso level through Islamic finance. In particular, there appears to be a 'missing middle' of intermediaries and aggregators that would be able to absorb and channel larger investments, for instance by the IsDB, at a more disaggregated level.

Recommendations and next steps

The recommendations below outline steps that could be taken to build this area of work, as well as highlighting areas where the discussions identified the greatest scope for further development.

In enhancing financial inclusion for climate resilience and adaptation, subsidies such as \ zakat may be critical in the initial stages, but a long-term vision of the market for Islamic financial services should rely on self-sustaining models. Expanding financial inclusion is often seen as a philanthropic activity rather than a business enterprise. For example, in the context of Islamic microfinance, there is a tendency to view *zakat* as the only appropriate source of funding, but charity is not necessarily the best model for developing larger and more reliable commercially motivated streams of funding. Greater experimentation in product delivery could help drive down costs, while further product development could contribute to a wider acceptance of Islamic financial services as viable instruments to support financial inclusion and climate change resilience and adaptation.

A range of incentives have been used to promote financial inclusion, such as tax incentives to banks that serve first-time banked customers or poor households, publicly rating banks on their performance in providing basic banking and affordable credit to lowincome customers, branching laws that require banks to open rural branches before opening additional urban ones or subsidies to establish a conducive environment for technologically innovative solutions (Doi and Srinivas, 2011). These examples could give guidance to OIC countries on some of the options available, while multilateral development banks and donors should support knowledge management and sharing around best practices. These efforts should promote systemic approaches to financial inclusion by considering all the aspects of a market system and breaking down barriers to financial inclusion by nudging market actors to take up missing or weak functions in the market through regulations or economic incentives. Developing and scaling up innovative financial services is just one entry point among many (e.g. government-to-people payment schemes, regulations to introduce 'no-frills' bank accounts, initiatives to support value chain finance through value chain re-structuring) for achieving universal financial inclusion and its associated development and resilience goals (Burjorjee and Scola, 2015).

Public–Private Partnerships (PPPs) represent another innovative solution to encourage the involvement of private actors in supporting financial inclusion in OIC countries. The assetbacked nature of Islamic finance structures and

Box 3 Establishing a 'coalition of the willing' on the role of Islamic financial services for climate change resilience and adaptation

To further pursue some of the opportunities outlined here, it would be helpful to formalise a 'coalition of the willing' to promote the links between the climate change arena and the Islamic finance sector in key policy and industry forums. Bringing together the 'conventional' climate and disaster risk financing players and donors (e.g. climate funds, the World Bank, the UK, Germany) with Islamic finance actors would ensure that learning could be built on as the IDB and others deepen their engagement in this space (for example, lessons on the most suitable projects for green bonds - e.g. renewable energy, clean transport - could be shared across decision-makers designing green sukuk). Such an initiative should also involve raising awareness, promoting research to identify best practice and knowledge management and sharing, especially South-South learning.

their emphasis on shared risks make them a natural fit for PPPs. This is particularly relevant in the resilience space as multi-stakeholder partnerships can bring together actors from different sectors and represent a powerful mechanism to coordinate action at multiple scales. A recent World Bank report highlights a number of cases where Islamic finance has been successfully mobilised to support PPPs for sustainable infrastructure (World Bank, 2017), but areas of application are much broader.

The resilience benefits from investments in strengthening financial inclusion and in related climate change adaptation actions in OIC countries and ASALs need to be better quantified. This should be multidimensional and go beyond direct financial measures to include broader benefits and co-benefits in economic, social and environmental terms. For example, in 2015, as a voluntary joint initiative, the Climate Finance Tracking Working Group - including the IsDB and the International Development Finance Club (IDFC) Climate Finance Working Group agreed on a set of Common Principles for Climate Change Adaptation Finance Tracking. At COP24 in 2018, the Working Groups jointly launched a report on the lessons from the previous three years of implementation, which underlined the need to develop further ways to define and report on the impact of adaptation projects (MDBs-IDFC, 2018). This is particularly important because, until the benefits of interventions are demonstrated, investments will not be made and scaling up initiatives will be difficult. For product pilots, there is also a need to develop and implement monitoring and evaluation systems that can feed into the next steps of product design and experimentation.

In supporting the development of Islamic finance for resilience, there is also a need to

drive climate risk disclosure forward. Given the asset-based nature of transactions and underlying principles around avoidance of uncertainty, Islamic finance has a high stake in better understanding how to quantify risks for physical assets. As such, Islamic finance would be well placed to become a champion of climate risk disclosure. In recent years, this has been driven by initiatives such as the Task Force on Climate-related Financial Disclosures (TCFD) or the Climate Risk Disclosure Project. As the IsDB's new Climate Change Division works towards mainstreaming climate action across the bank, it has started to screen all its investments for climate risks. Pushing for climate-related financial disclosure in partner organisations and companies would offer an opportunity to ensure that climate risks are better understood and managed and, therefore, strengthen the case for up-front investments in resilience.

In facilitating learning and product innovation in the Islamic micro- and meso-level finance fields, the focus should not only be on standard financial inclusion indicators (e.g. account ownership), but also on usage and adequacy measures. Quality of products needs to be ensured and initiatives to support financial services should be linked with interventions to enhance financial literacy and planning skills, as well as risk awareness and anticipation and prevention capabilities to strengthen resilience more holistically. To engage the poorest and most vulnerable, graduation packages including supply of financial services along with training and support, life skills coaching and productiveasset grants are needed (Banerjee et al., 2015). For low-income households, financial inclusion interventions should include components aimed at changing mindsets and behaviours (Calderone et al., 2018).

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