PART 4

WHAT MODELS TO FINANCE INCLUSIVE DIGITAL ECONOMIES

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• The gap in financing to reach the SDGs was estimated at US$2.5 trillion per year until 2030 for developing countries; the present COVID-19 crisis will considerably widen this financing gap, due to the socio-economic consequences of the pandemic. Still, digital finance can help to bridge this gap by: (i) transforming how finance can be mobilized to support the SDGs (ii) transforming how finance can be channeled to the economic sectors and populations that need it most, at scale and very low cost (iii) creating the incentives for further investments in areas where that impact is greatest.

Over the past 10 years, the digitalization of finance has been a major driver of financial inclusion. For the first time the number of registered digital accounts had surpassed the 1 billion mark in 2019. At the same time, digitally-enabled products and market innovations have enabled the growing integration of digital financial services with access to other services in the ‘real economy’, for example in health and education, in clean energy, climate-smart agriculture and for entrepreneurs. The digital finance revolution therefore offers the potential for a stronger alignment of finance with the Sustainable Development Goals (SDGs) in ways that were simply not possible before, linking access to finance with national priorities such as better education, health care, improved agricultural practices or access to markets. Digital finance also uniquely contributes to the financing of the SDGs.

The gap in financing to reach the SDGs was estimated at US$2.5 trillion per year until 2030 for developing countries; the present COVID-19 crisis will considerably widen this financing gap, due to

the socioeconomic consequences of the pandemic. Still, digital finance can help to bridge this gap and significantly contribute to the financing the SDGs in three major ways:

i. by transforming how finance can be mobilized to support the SDGs

ii. by transforming how finance can be channeled to the economic sectors and populations that need it most, at scale and very low cost

iii. through the possibility that it offers to monitor the impact of those financial flows in relation to the SDGs, creating the incentives for further investments in areas where that impact is greatest.

**HOW FINANCE CAN BE MOBILIZED IN SUPPORT OF THE SDGS**

The rapid expansion of digital finance in the past 10 years has profoundly transformed the possibilities of mobilizing finance and, ultimately, the way the world’s citizens invest, as highlighted in the interim edition of the United Nations Secretary-General’s Report on the Digital Financing of the SDGs. Digital finance has drastically reduced the cost of last mile distribution, providing almost half a billion citizens with access to accounts at formal institutions that can be used for savings and as an alternative to hiding cash under their mattress. Due to the efforts of UNCDF and others supporting market development in countries such as Zambia, Senegal, Benin and Nepal, the share of adults using digital financial services has increased from as low as 2 percent of the adult population to up to 44 percent during the 5 years to 2019.

A deteriorating fiscal outlook and debt burden for many developing countries stemming from the COVID-19 pandemic has deepened concern about how to fund the SDGs. Mobilizing domestic savings and domestic sources of capital in general has become a priority. Innovations in agent banking and alternative delivery channels have made it possible to mobilize and channel informal savings at scale into the formal financial system. We are already seeing promising momentum in savings mobilization: over the past 20 years, the global savings pool has grown from $7.5 trillion to $23.3 trillion.

Digital finance is also enabling longer-term savings by, in parallel, providing people with flexibility to meet unexpected liquidity needs. UNCDF supported the Solomon Islands National Provident Fund to launch a zero-fee and mobile-based pension savings product that now serves more than 5 percent of the population. It uses airtime top-up to make deposits affordable and convenient, and enables partial withdrawals when needed. Communities living across many islands can now use the YouSave product for their long-term savings needs.

Digital innovation is also accelerating the formalization of remittance flows, which contributes to the macroeconomic stability of developing countries and supports their progress towards the SDGs. The COVID-19 crisis is predicted to reduce the international flow of remittances by an estimated 20 percent (US$120 billion) in 2020, according to the World Bank. However, use of digital remittance services has grown during this time. They are offered at lower cost (and often lower risk) and contribute to the formalization of remittance flows.

Digital remittance flows directly benefit migrants and their families, by lowering costs, linking remittances to services offered in digital platforms, or creating a financial transaction ‘history’. In Nepal, UNCDF has partnered with a commercial bank, Laxmi Bank, to build on its doorstep collection services, whereby female staff with tablets collect daily earnings from customers’ homes and shops. With UNCDF’s support, this doorstep service has been leveraged to collect remittances and link these cash inflows to other financial services. This has contributed to increased savings and enabled savers to develop profiles with the bank, which are

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206 A study commissioned by UNCDF from the International Association of Money Transfer Operators in 2020 showed that, as a result of the COVID-19 crisis, the top priority of the operators was to accelerate the offering of digital remittance channels, which will in turn increase the percentage of remittances provided through formal channels.


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assessed when they want to access uncollateralized loans. The formalization of remittances is linked to financial products that can help the families of remittance senders to save for the long term or to invest, for example, in their business. In addition, the formalization of remittance flows through digital channels has macroeconomic benefits for recipient countries’ balance of payments, improving their credit risk and lowering the cost of their international borrowing. Retail investments are an emerging channel for the mobilization of capital in developing countries, especially through the use of crowdfunding platforms (as subsequent papers highlight). Digital finance can also support the fight against illicit financial flows and tax evasion, increasing the amount of financing available in public finance for the SDGs.

**HOW FINANCE CAN BE CHANNELED WHERE IT IS MOST NEEDED**

Digital technology can facilitate the reinvestment of savings into long-term investments in key socio-economic infrastructure (such as roads, schools and health centres) and even localize those investments in districts where local savers would directly benefit from improved services, with additional economic effects as dividends flow to them.

The approach of connecting digital savings to reinvestments by local governments in key socioeconomic infrastructures is being tested by UNCDF and the United Nations Development Programme with the Government of Bangladesh and has the potential to be scaled up nationally, as well as in other countries, if successful. Citizens’ savings pool in Bangladesh in 2020 amounted to more than US$140 billion (including US$72 billion of formal savings, US$45 billion of informal savings and US$20 billion in the form of remittances). Digital finance offers the potential to transform Bangladeshi citizens from micro-savers to micro-investors, enabling the aggregation of those savings at very low cost and with the guarantee of the Central Bank, into investment instruments that could fund the socio-economic infrastructure that would directly improve the lives of citizens. Bangladesh’s FY18–19 infrastructure budget stood at US$20 billion, 64 percent of which was financed through external borrowing, and this budget is expected to grow substantially by 2030 due to SDG requirements. Harnessing domestic savings could help to both lower the dependence on external debt and strengthen Bangladeshi citizens’ stakes and ownership of those investments. More generally, connecting national SDG priorities and digital financing opportunities offers tremendous scope for growth and is an area currently advanced by UNCDF.

Over the past decade, we have seen the emergence of new actors – who are often not from the world of finance – as the major drivers of access to finance for micro, small and medium enterprises (MSMEs) and the missing middle in general. For example, disruptive ‘fintech’ actors have advanced sophisticated algorithmic approaches to consumer and micro, small and medium enterprise (MSME) lending decisions through the use of expanded data sets, enabling hundreds of millions to access financing. In sub-Saharan Africa, mobile money providers are extending their digital credit offerings to mobile money agents, who are essentially local MSMEs. In Latin America, Mercado Libre, an ecommerce platform, is providing loans to MSMEs that would not have been eligible based on traditional credit bureau information. In Bangladesh, various fintechs, such as UNCDF partner TallyKhata, are offering collateral-free credit lines based on the digitization of MSME’s ledgers. In China, MYbank is using Alipay’s technology to perform cost-effective, real-time credit assessments of millions of MSMEs. Globally, e-commerce platforms such as Alibaba have become major lenders to MSMEs trading through them, and ride-hailing platforms are increasingly financing both the drivers and merchants in their ecosystems. Eco-Cash, one of the members of the United Nations Secretary General’s Task Force on the Digital Financing of the Sustainable Development Goals, has launched an initiative to promote an alternative investment platform to finance for more mature MSMEs, such as those that are small and medium enterprises (SMEs). As part of this, UNCDF is helping to set up an SME exchange that leverages alternative data to create investment profiles on enterprises and bridge the financing gap between high-potential MSMEs that need stable, longer-term funding and investors.

In short, digital solutions can now aggregate credit demand in ways that were previously impractical (especially for MSMEs), offer risk assessment through alternative credit scoring by leveraging digital data, and structure investment offerings and access to capital in a variety of new ways.
HOW DIGITAL TECHNOLOGY CAN HELP TO MONITOR THE IMPACT OF INVESTMENTS IN THE SDGS

The exponential growth in data gathering and processing, which is being enabled by the digital revolution, has a profound impact on how investments decisions are identified and monitored. In addition to improving risk pricing, data are also helping to increase both the alignment and impact monitoring of investment decisions in terms of their support to the SDGs. Digital platforms, such as the Future of Sustainable Data Alliance, are advancing data-driven approaches to the effective integration of environmental, social and governance-related (ESG) factors into decision-making processes and greater incorporation of SDG-related risks and impacts in financing decisions. Demand for ESG investments is surging around the world. Digital is empowering citizens to decide how their money is invested, as well as how it is spent, in order to align with the Sustainable Development Goals. The opportunity for LDC governments is to leverage this demand and opportunity to channel financing into domestic projects that will benefit local communities.
UNPRECEDENTED CRISIS MEETS HISTORIC OPPORTUNITY: HARNESSING COVID-19’S DIGITAL DIVIDEND IN FINANCING THE SDGS

By Simon Zadek was the head of the Secretariat of the UN Secretary-General’s Task Force on Digital Financing and the SDGs, and Special Advisor on Finance to the Deputy Secretary-General

Digital is the clear winner from the unprecedented COVID-19 crisis. There is no doubt that the pandemic has catapulted us into a digital future, as hundreds of millions of people have migrated to the world of bytes to socialize, work and consume. COVID-19’s digital dividend in achieving the Sustainable Development Goals (SDGs) could be huge, from helping to deliver our climate goals to improved health and education access.

Whether we get this dividend depends on how digitalization reshapes finance. Whether digitalization underpins a transition to a low carbon, climate resilient, and more inclusive development pathway depends on whether it returns “the financial services industry to what it is supposed to be – an industry that serves people” as IMF’s Managing Director, Kristalina Georgieva noted in January 2020. The digital dividend will be positively transformative if digitalization can help deliver on the call by Mark Carney, now the United Nations Special Envoy for Climate Action and Finance, to reset finance in establishing a “sustainable financial system to stop runaway climate change”.

The global financial system must deliver in financing the SDGs, that reflect the collective needs of the world’s citizens - the ultimate owners of the world’s financial assets.

Digitalization can make a difference if it can support this outcome.

With this in mind, the UN Secretary-General established his Task Force on Digital Financing of the SDGs (Task Force) in late 2018. He asked its 17 extraordinary members, leaders drawn from the worlds of finance, technology, governance, and development to “make recommendations and catalyse action to harness digitalization in financing the SDGs”.

Almost two years later, in August 2020, in a world transformed by COVID-19, the Task Force released People’s Money: Harnessing Digitalization to Finance the SDGs. This landmark report:

- Maps, for the first time, the many hundreds of innovative developments around the world at the nexus of digital, finance and sustainable development, leveraging big data, artificial intelligence, blockchain, and of course mobile platforms.

- Points to five multi-trillion dollar catalytic opportunities for harnessing digitalization in aligning finance with the SDGs, spanning the most complex domains of the world’s capital markets to the dollars borrowed daily by market traders in Nairobi through their mobile devices.

- Sets out an Action Agenda focused on accessing such opportunities, building national sustainable digital finance ecosystems and building a more inclusive international financial governance.

The Task Force sets out how, for example, digitalization can help channel the huge growth in domestic savings, rising three fold over two decades to US$23 trillion in 2019, into long-term development investment. The potential of this recommendation is exemplified in practice by an initiative in Bangladesh, one of seven Pathfinder Initiatives advanced by the Task Force together with the United Nations Development Programme (UNDP) and the United Nations Capital Development Fund (UNCDF). The initiative is focused on using digital rails to aggregate the savings of many Bangladeshis into large-scale capital pools to invest in sustainable infrastructure, using blockchain to increase the transparency and effective use of such funds. By substituting domestic savings for international capital in this manner, Bangladesh (and many other countries) could reduce the cost of financing sustainable infrastructure by an estimated 20 percent, secure multiplier and equity effects by paying dividends to its citizens rather than external financial institutions, and give citizens a more active voice in deciding what their savings should be used for and holding those to account who use their savings on their behalf.

Similarly, the Task Force highlights the role of digitalization in extending the volume of environmental, social and corporate governance (ESG) directed financial assets from the current level of US$30 trillion across the world’s US$185 trillion capital markets. It illuminates how digital can increase the transparency and accountability of public finance that accounts for about 20 percent of global
spending. It shows us how algorithmic lending can unlock the US$5 trillion annually needed to finance small and medium enterprises (SMEs), the source of much of the world’s employment and livelihoods.

The Task Force’s key message to world leaders in People’s Money is that digitalization will be a force for good if it delivers citizen-centric finance. As co-Chair Maria Ramos, ex-CEO of Absa in South Africa, remarked at the report launch, “We have an historic opportunity to accelerate and expand the transformative impact of digitalization... extending the boundaries of financial inclusion by empowering citizens as savers, investors, borrowers, lenders and tax-payers in a way that gives them choice and power over their money”.

Set against this potential, the Task Force recognizes the barriers and risks involved. As well as exclusionary gaps in digital infrastructure and an unequal distribution of skills, digitalization risks perpetuating discrimination against women and other groups. Moreover, it presents new possibilities for data-security breaches, embezzlement, and fraud, and could intensify short-termism and market concentration. The Task Force’s Action Agenda points to these risks and ways in which its recommendations can help to overcome or at least mitigate them. Moreover, several Pathfinder Initiatives have been introduced by the Task Force to advance practical action in addressing such risks and barriers. For example, the Dialogue on Global Digital Finance has been launched to increase the consideration of developing country interests and the SDGs in the future governance of ‘Big Fintech’ platforms that are emerging globally as tomorrow’s financial force.

FIGURE 19.
The opportunities for digitalization

| Opportunities                           | Scale                  | SDG       | Citizens as...
<table>
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<tr>
<th></th>
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<tbody>
<tr>
<td>Channel domestic savings into development financing</td>
<td>Global savings pool has grown over two decades from US$7.5 to US$23.3 trillion.</td>
<td>6</td>
<td>Small savers and co-beneficiaries of sustainable infrastructure</td>
</tr>
<tr>
<td>Enhance financing for small and medium-sized businesses (SMEs)</td>
<td>Potential to meet the US$5.2 trillion a year need for SME financing in developing countries.</td>
<td>7</td>
<td>Borrowers, entrepreneurs, employees</td>
</tr>
<tr>
<td>Digitize public financing and make public budgets and contracts transparent</td>
<td>Governments in developing countries could gain US$220 to US$320 billion annually from digitalizing payments.</td>
<td>8</td>
<td>Tax-payers, voters, public service users</td>
</tr>
<tr>
<td>Embed SDGs into decisions financial and capital markets</td>
<td>The outstanding value of global equity and bond markets is US$185 trillion.</td>
<td>9</td>
<td>Savers, investors</td>
</tr>
<tr>
<td>Shape consumption decisions through improved information and choice architecture</td>
<td>Annual global consumption expenditure is US$47 trillion.</td>
<td>10</td>
<td>Consumers, asset owners</td>
</tr>
</tbody>
</table>
As Patrick Njoroge, Kenya’s Central Bank Governor, Task Force member and co-Chair of the Dialogue, notes “…the COVID-19 crisis is a tragedy. But it is also an opportunity for change. After decades of rising inequality and unsustainable investment, we have the tools and know-how to do better. We just need the will to use them”.

The choice is ours, let’s make sure COVID-19 digital dividends shape the world we want to live in.

FIGURE 20.
Delivering citizen-centric finance
An additional US$2.5 trillion per year is required to achieve the Sustainable Development Goals (SDGs) in developing countries by 2030.209 This financing is available,210 at a time when the gross world product and global gross private sector financial assets are estimated at more than US$80 trillion and US$200 trillion, respectively.211,212

Digital finance can play a critical role in narrowing this financing gap by channelling finance to businesses advancing the SDGs and by raising domestic savings from citizens. Governments around the world can embrace this digital opportunity. Two emergent ‘pathfinder’ initiatives, inspired by the United Nations Secretary-General’s Digital Finance Task Force recommendations,213 illustrate how public-private partnerships are taking shape to narrow the financing gap with digital finance. Although they are in the pilot phase, these initiatives demonstrate how digital finance could support enterprise growth and engage citizens in new ways.

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PATHFINDER CASE STUDY 1: MOBILIZING DOMESTIC SAVINGS WITH DIGITAL FINANCE FOR REINVESTMENT IN LOCAL ECONOMIC DEVELOPMENT IN BANGLADESH

Financing to support infrastructure development, decarbonization and other investments critical to reaching the SDGs in many least developed countries is not yet sufficiently mobilized. Not only is more financing needed, but it needs to be mobilized inclusively, so that citizens are empowered to become stakeholders in decision-making and ownership, and they benefit from the returns of such investments. Over the past two decades, the global savings pool has tripled to US$23.3 trillion, while domestic savings in LDCs have grown 15-fold to US$218 billion. The progress achieved in growing domestic savings in LDCs needs to be accelerated. Digital financing solutions that enable citizens to invest their (micro) savings in local green or sustainable infrastructure have been identified by the United Nations Secretary-General’s Task Force on Digital Financing for the SDGs as a catalytic opportunity for the United Nations system to take forward.

Bangladesh is seizing this opportunity through its Aspire to Innovate (a2i) initiative, which is implemented by the Information and Communication Technology Division of the Government of Bangladesh, together with the United Nations Development Programme and UNCDF. The a2i partners are currently designing the various aspects of this pilot project. The objective is to harness digital finance to tap into and mobilize savings for investments and empower citizens to align finance with their priorities. With 99 percent of Bangladeshis covered by 2G mobile connectivity, more than 40 million using smartphones, and 39 million digital finance accounts, the country has an unprecedented opportunity to mobilize citizen micro-savings at scale.

Bangladesh requires at least an estimated US$133 billion by 2030 to meet its SDG investment requirements, in addition to US$74 billion for infrastructure spending. The COVID-19 pandemic and any related economic recessions may further increase the SDG budget required.

At present, 52 percent of the infrastructure budget is financed from domestic sources, with the balance from external sources, such as official development assistance, concessional loans and non-concessional loans from the international capital markets. Bangladesh’s upgraded economic status would result in a decline in funding from multilateral donors, while also pushing the interest rates on debts higher. For this reason, the Government is prioritizing the use of digital finance to mobilize domestic savings.

Formal savings by Bangladeshi citizens stood at US$54 billion in 2019; this is expected to double by 2030 as the economy grows. Digital finance is predicted to play a critical role in encouraging savings and channelling domestic capital for long-term domestic investment. Digitalization allows micro-savings from the informal sector to become part of the formal financial system, and gives those already using the financial system more options. If savings can be aggregated and deployed through a digital financial value chain from 2020 onwards, an incremental US$45 billion annually can be mobilized domestically to finance the SDGs.

Financial instruments and mechanisms, such as securitization, impact bonds, microinsurance, and crowdfunding, can layer on top of the digital financial value chain to aggregate micro-savings at scale and channel investment into the SDGs. For example, a citizen can invest in the construction of a bridge or road, or health care or education, or renewable energy facilities, and will later be paid back from the earning proceeds (i.e. in the form of a Susuk, a financial certificate issued in accordance with Shariah principles). To achieve this, a government authorized fund manager can deploy the fund for a 1.5–2 percent fund management fee. The fund would finance the Government, resulting in a low-cost source for long-term financing. The mechanism benefits citizens in several ways, giving them more direct access to investment opportunities in the infrastructure that they need and returns equal to or greater than they achieve through banks, as well as transparency and accountability.

This raises the possibility of increasing the proportion of long-term development financing needs being met from domestic resources through accessible savings products linked to local sustainable investment. Such an approach has the potential to reduce the cost of capital, as well as international debt burdens, and vulnerability to foreign exchange movements. The ultimate goal of this model is to empower citizens by ensuring equitable returns.

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216 UN Secretary-General’s Task Force on Digital Finance, People’s Money: Harnessing Digitalization to Finance a Sustainable Future (Geneva, 2020).


218 UN Secretary-General’s Task Force on Digital Finance, People’s Money: Harnessing Digitalization to Finance a Sustainable Future (Geneva, 2020).
Small and medium enterprises (SMEs) are of critical importance to a country’s economic growth, job creation and social prosperity. The growth of most SMEs in low-income countries is constrained by a lack of finance. SMEs are underserved by domestic banking systems and capital markets. The share of non-bank finance in total SME finance remains very low. With historic levels of capital accumulating in negative or low-yielding assets globally, there is an urgent need to channel capital to profitable use among SMEs in developing countries. Policymakers and regulators are encouraging market innovation to narrow this gap.

In Zimbabwe, an inclusive investment platform is being developed to meet this challenge. This country’s 3.5 million microenterprises and SMEs play an important role in its economy, employing 75 percent of the total workforce. Almost 30 percent of these enterprises have operated for between 6 and 10 years. SMEs, defined as those Zimbabwean enterprises which have more than 6 employees, represent 12 percent of all registered or licensed enterprises in Zimbabwe. As experienced across LDCs, a major constraint to their growth is a lack of finance, especially for longer-term and lower-cost financing and even among the more established SMEs. Capital markets are not accessible to SMEs. Given SMEs’ important role in the economy, policymakers in Zimbabwe have prioritized initiatives to address their financing constraints.

Inclusive investment platforms for SMEs, which integrate sustainability criteria and client protections, are among the innovations emerging in least developed countries (LDCs) that are made possible by digital finance.

In Zimbabwe, an inclusive investment platform is being developed to meet this challenge. This country’s 3.5 million microenterprises and SMEs play an important role in its economy, employing 75 percent of the total workforce. Almost 30 percent of these enterprises have operated for between 6 and 10 years. SMEs, defined as those Zimbabwean enterprises which have more than 6 employees, represent 12 percent of all registered or licensed enterprises in Zimbabwe. As experienced across LDCs, a major constraint to their growth is a lack of finance, especially for longer-term and lower-cost financing and even among the more established SMEs. Capital markets are not accessible to SMEs. Given SMEs’ important role in the economy, policymakers in Zimbabwe have prioritized initiatives to address their financing constraints.

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220 Overall there is around US$10 trillion in negative yield bonds, and over half of all assets under management earning less than 5 percent globally.


222 UN Secretary-General’s Task Force on Digital Finance, People’s Money: Harnessing Digitalization to Finance a Sustainable Future (Geneva, 2020).

223 2012 FINSCOPE survey.

Mobile money has been widely adopted by most Zimbabwean adults and enterprises for payments and transactions. Ecocash is the largest mobile financial services (MFS) provider in Zimbabwe. It has analysed transactional data from more than 70,000 SMEs. Together with its partners, it has found that use of this data to assess the creditworthiness and value of businesses, as well as to manage customer due diligence (CDD) and antimony laundering (AML) risks, can enable capital market process flows and thereby enhance investor participation. New data sources such as these are proving important when SMEs lack properly analysed and audited financial statements.

In partnership with Ecocash, the Financial Securities Exchange Limited (FINSEC) has launched a dedicated SME platform: the Growth Enterprises Market Listing Portal (GEM Portal).225 Technical support is provided to the initiative by the Investors Exchange (IEX) and UNCDF. It is designed to be a robust end-to-end platform, with fully automated capital-raising through private placements, securities exchange listing and securities trading and settlement for SMEs. FINSEC provides complete automation of all processes in the issue and trading of various types of financial instrument. The use of technology enables FINSEC to extend capital market products and services to a wide range of issuers and investors in an efficient and cost-effective manner. For example, FINSEC has created an app that works on all devices, including feature phones, enabling retail investors to participate, even with investments of less than US$100.

Currently, the GEM platform is operational at the pilot stage, with 135 registered SMEs that have provided their business and related data for due diligence. Three investors are on the platform, as well as seven advisors (to build the capacities of SMEs, develop investment-related documents, and assist them in initial public offering (IPO) issuances on stock exchanges as needed). It is estimated that the solution can extend investment to 20,000 SMEs in the next phase. GEM builds on similar features pioneered by the Thailand Market for Alternative Investments and London’s AIM, which demonstrate that SMEs can raise financing from securities exchanges. The Zimbabwe model is unique in how it selects and onboards SMEs onto the platform, takes them through the growth curve of capacity enhancements with advisor support, and connects to qualified investors and underwriters. SMEs that meet the listing requirements can move to the securities exchange platform for equity or debt requirements.

The GEM Portal incorporates some unique features for the Zimbabwean market within a securities exchange infrastructure. It:

- allows SMEs to apply on one common platform;
- creates SME profiles using alternative data, digital data sets such as from mobile money, bank data, credit cards, remittance data, point of sale data, satellite data, etc. (most of the data sources have yet to be integrated);
- brings investors, investees, advisors and underwriters together on the same platform; and
- lowers the cost of due diligence and the creation of investment-based SME financing portfolios, based on investor needs (size, geography, sector, impact, etc.).

The GEM Portal will be able to categorize SME financing into bond portfolios, direct financing, special purpose vehicles (SPVs) and IPO listings. This approach can cater to the different financing requirements of SMEs and deliver different options for investors. The goal will be to create a diversified asset pool that meets various preferences from both the demand and supply side.

In addition to mobile money datasets, data from financial institutions, such as CABS, are also used on the platform to create assessment scores for SMEs. The partners are presently working with the regulators and other entities for acceptance of new data sets. Once the initial SMEs secure financing, the platform will open up to more data-providing entities. Future plans will also test whether additional data sources can be used to finance microenterprises on the platform.

There is a set of risks that needs to be managed. Many emerging markets are subject to volatile political and economic situations that can disrupt capital markets. There are also currency, perception, fraud and corruption risks. Data access can also be a risk (as was shown in 2020 when one of the largest MFS providers in the country was forced to temporarily halt operations). Inclusive investment platforms, such as the GEM Portal, can be designed to support SMEs in handling some of those risks better and in a progressive way. For example, GEM can link SMEs to funding before they list on the securities exchange, thereby reducing their exposure to stock market fluctuations from political and economic changes.

225 See www.gemportal.co.zw.
Digital finance is only just starting to narrow the wide financing gap that prevents many least developed countries (LDC) from achieving the Sustainable Development Goals (SDGs). The United Nations Secretary-General’s Digital Finance Taskforce affirms that digital finance can also reshape financial markets by democratizing sustainable investment into sectors of importance to local communities.

Crowdfunding is a digital finance innovation that places investment decisions in the hands of retail investors, as well as those of institutional investors. While some emerging countries, such as Indonesia, have leveraged this innovation to finance more than US$1 billion through crowdfunding, the practice is only just getting under way in many LDCs and requires further attention if it is to be scaled. Increased focus is also required to direct

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**HIGHLIGHTS**

- Large amounts of investment are channelled through crowdfunding platforms globally, but LDCs are being left behind. All of Africa, the Middle East and the Asia Pacific Region (excluding China) accounted for less than 3 percent of global crowdfunding volumes.

- Digitalization will continue to connect retail and institutional investors with the investment needs of businesses globally. For LDCs to capture the promise of crowdfunding, especially through home-grown crowdfunding platforms, enabling regulation is needed to encourage responsible investment and innovation.

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alternative investments to businesses, especially the micro, small and medium-sized companies (MSMEs) that stand to deliver many of the services required to achieve the SDGs at the last mile.

**MANY FORMS OF CROWDFUNDING STAND TO BENEFIT MSMEs**

Individuals and their enterprises in LDCs have long benefited from pooling their financial resources for investment in their community, as demonstrated by the popularity of informal savings groups, such as chamas in East Africa and tontines in West Africa. With digital technology, more targeted and diversified investment within and beyond their community is possible. Crowdfunding introduces the use of technology to match many funders to the investment needs of an enterprise, individual, non-profit or government. In the process, it bypasses traditional financial intermediaries. Debt, equity and donation funding can be provided through crowdfunding. Technically, there are several variations of this innovation, including peer-to-peer lending, marketplace lending, and related online capital-raising activities.

Debt or lending to MSMEs through crowdfunding platforms often involves the listing and grading of MSME investment needs. The platforms can match investment opportunities to investors’ expectations for risk-adjusted rewards and environmental, social and governance priorities. Investment opportunities can be financed by multiple investors – sometimes including the crowdfunding platform itself, investing off its own balance sheet – who then share the risk and return of that investment. Investors can select from multiple investments to diversify their risk.

In 2018, only US$50 billion (US$31 billion excluding China) was provided for business lending globally. MSMEs are underserved by the domestic banking system and capital markets in LDCs. To finance these MSMEs, some crowdfunding providers are leveraging innovations in the use of business and transactional data, algorithms for credit scoring and to match investors, and linkages to customers and suppliers through digital platforms, for improved underwriting and risk management.

**LEAST DEVELOPED COUNTRIES MUST ACCELERATE CROWDFUNDING**

Large amounts of investment are channeled through crowdfunding platforms globally, but LDCs are being left behind. Crowdfunding providers extended US$304 billion of alternative investment in 2018 globally. Excluding China, which saw consolidation, global volume grew by 48 percent in 2018 to US$89 billion. Crowdfunding activity is concentrated in advanced countries, such as China and the United States of America. By contrast, all of Africa, the Middle East and the Asia Pacific Region (excluding China) accounted for less than 3 percent of global crowdfunding volumes. On a per capita basis, this means that someone in Zambia or Solomon Islands secured US$2.35 or US$0.51 from crowdfunding in 2018, respectively, whereas someone in the United States of America secured US$186.9.

About one-half of all investment globally was from institutional investors – their contribution was as high as 85 percent of investment in the United States of America. However, it remains predominantly financed by retail investors in LDCs. A lack of regulation slows larger inflows of investment into crowdfunding. In Africa, where crowdfunding investment grew 102 percent in 2018 to US$209 million, for example, only two countries have adopted a regulatory framework for crowdfunding: Morocco and Tunisia. Most of this volume occurred in African countries that have yet to introduce or finalize regulatory frameworks. Further growth can be expected as regulatory frameworks progress in an additional 11 African countries. These developments could also see more domestic investment through crowdfunding, at a time when 76 percent of crowdfunding volumes in Africa are met by international investors.

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228 Ibid.


231 Ibid.

232 This chapter uses the term ‘crowdfunding’ in the most general sense to encompass all these forms.


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CROWDFUNDING IS INNOVATING TO SERVE MSMES IN LEAST DEVELOPED COUNTRIES

Examples from countries where ‘missing middle’ financing gaps exist for MSMEs operating in the informal economy, from Ghana to Indonesia and Bangladesh, demonstrate that crowdfunding can be an important source of capital to MSMEs in least developed countries. To realize this opportunity, ‘pathfinder’ countries, such as Bangladesh, are introducing strategies to enable crowdfunding, as part of their overall approach to mobilizing domestic capital in order to finance the SDGs. UNCDF’s work offers several insights into future crowdfunding opportunities in LDCs:

1. Crowdfunding can reach MSMEs at scale with ‘tech and touch’ adaptations. In Indonesia, crowdfunding is demonstrating the ability to fund large numbers of MSMEs. For example, Amartha has provided lending support to 600,000 micro-entrepreneurs with more than US$215 million in funding. UNCDF has supported Amartha in providing financial literacy training to micro-entrepreneurs who are considering using the service. Similarly, another platform, Modalku, has extended US$1.4 billion in funding to enterprises. Its business model leverages a ‘tech’ crowdfunding, in combination with a hands-on ‘touch’ approach with MSMEs. UNCDF has supported the development of an agent network to assist in the application, appraisal, disbursement and collection of loans.

2. Innovative use of data and supplier relationships is improving risk management. In Ghana, crowdfunding platforms are demonstrating novel underwriting and risk management approaches to fund MSMEs, even in the Ashanti and Western regions, where lack of economic opportunity has led youth to migrate. Here, UNCDF supports Pezesha a Kenyan fintech company, in matching the funding needs of MSMEs (borrowers) with the investment interest of investors (including banks, microfinance institutions and other retail lenders). Investors provide debt and receive periodic repayment. MSMEs can apply for a loan online in under two minutes. Pezesha uses a credit-scoring process to evaluate the creditworthiness of enterprises and a framework to tailor the financing offer. Pezesha enhances risk management by restricting the use of funds to certain goods and services that it or its partners make available. A matching algorithm selects investment opportunities for investors based on their risk appetite and expectation of risk-adjusted investment returns. On-the-ground account officers complement the operating model, to assist in due diligence and servicing, and Pezesha offers financial education to drive responsible borrowing.

3. Convergence with digital commerce platforms. In Bangladesh, digital platforms are demonstrating how crowdfunding can be embedded into larger offerings. For example, iFarmer provides a digital solution for farmers that bundles finance with training and agronomic advice to improve their productivity and profitability. iFarmer has partnered with e-commerce and logistics platforms to sell produce and fulfil deliveries. Through its crowdfunding feature, it has matched 2,000 farmers with funding from investors since 2018. UNCDF has helped iFarmer to integrate more women farmers into its farming network.

4. Crowdfunding is part of a continuum of funding. Crowdfunding platforms for donations also have an important role to play in channelling funds to community projects and vulnerable populations. UNCDF is supporting FundRaising Africa, a platform that was launched to help young entrepreneurs during COVID-19 by channelling funds from the Ghanaian diaspora. Recipients of donations can be linked to financial institutions for more sustainable sources of funding as their enterprise grows.

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236 From internal report.
Digitalization will continue to connect retail and institutional investors with the investment needs of businesses globally. For LDCs to capture the promise of crowdfunding, especially through home-grown crowdfunding platforms, enabling regulation is needed to encourage responsible investment and innovation. A safe and enabling environment are critical for it flourish and reach its full potential.241


FIGURE 22. Crowdlending: the ecosystem

Strengthened financial capabilities among MSMEs and responsible lending practices among crowdfunding platforms are essential to maintain trust in crowdfunding. Continued innovation in the use of data for underwriting and approaches to risk management will underpin crowdfunding for MSMEs that are excluded from the formal financial system.
While international and domestic public finance remains essential to meet the Sustainable Development Goals (SDGs), public resources alone will not be enough. Private sector investments must be better aligned with and supportive of the SDGs. The challenge is particularly urgent in the least developed countries (LDCs), which often find it difficult to attract private investment, including foreign direct investment, across a variety of economic sectors.

Furthermore, the development finance architecture is not channelling resources to LDCs effectively, or at the scale and speed needed to leave no one behind. There is increasing focus on how limited public resources can be used to put in place the right incentives, regulations, productive capacities and financial instruments to reduce investment risks and mobilize private finance for the SDGs.

• Blended finance approaches can be important to maximize the catalytic impact of development finance by sharing risks or lowering costs to adjust risk-return profiles for private investors. They can create important demonstration effects that narrow the gap between actual and perceived risks of investing in these markets. However, LDCs currently only receive a small piece of the blended finance pie.

• The use of digital tools can enhance the role of blended finance in scaling and reaching the last mile. Innovations, such as alternative credit scoring, digital verification, etc. facilitate the structuring of blended finance transactions, which can provide access to capital where it was not previously possible.
In this context, blended finance is receiving increased attention for its potential to use concessional resources to help mobilize much needed private sector resources for the LDCs. Blended finance approaches can be important to maximize the catalytic impact of development finance by sharing risks or lowering costs to adjust risk-return profiles for private investors. They can create important demonstration effects that narrow the gap between actual and perceived risks of investing in these markets.

However, LDCs currently only receive a small piece of the blended finance pie. There is a need for further risk-taking and experimentation at both the project and fund or facility level. In addition, blended transactions typically require greater levels of concessional support in LDCs than in other developing countries, in order to reach financial viability.

Of the total private finance mobilized by official development finance interventions between 2012 and 2018, approximately US$13.4 billion, or 6 percent, went to LDCs, whereas more than 74 percent went to middle-income countries. Energy and banking and financial services were the largest sectors, receiving 50 percent of private finance (US$796 million and US$672 million, respectively) on average in 2017–2018.

THE ROLE OF BLENDED FINANCE IN FINANCING DIGITAL ECONOMIES

As the development of digital economies in LDCs accelerates, including in response to COVID-19, many digital entrepreneurs – as well as enterprises in real economy sectors – who are looking to benefit from digital solutions face challenges in accessing investment capital to grow and transform their businesses.

Blended finance can be one particularly well-suited approach to increasing access to finance for enterprises in the digital economy. There are several reasons for this:

First, the providers of concessional capital require that the investments they support have a clear development impact, in addition to a financial return. These concessional providers typically include international and development finance institutions, donors and philanthropic investors. There is growing evidence that digital technologies and solutions can make significant development contributions to help accelerate progress on the Sustainable Development Goals. For example, in its 2019 report, the United Nations Secretary-General’s High-Level Panel on Digital Cooperation highlights the transformative development impacts of digital technologies and calls for building inclusive digital economies and societies to accelerate SDG achievement.

Second, blended finance providers require that investments are commercially viable. In general, there is often a strong business case for introducing digital solutions, which makes investments in this sector attractive. For example, digital platforms and solutions can help to reduce transaction costs and create opportunities to reach new domestic and foreign markets, especially for MSMEs.

Third, given the high risks involved with digital start-up companies – which are often intangibles (intensive, knowledge-based and lacking collateral) – commercial banks and traditional investors may be hesitant in providing financing to these specific types of firm. Blended finance solutions that help to address or share some of the risks can therefore be an especially appropriate financing approach for the digital economy.

Despite the importance of digital economy enterprises to the SDGs, there are relatively few notable examples of how blended finance has supported investments in digital economies, especially in least developed countries. However, several examples and findings point to emergent trends and approaches for blended finance in this area:

- The joint UNCDF and Organization for Economic Co-operation and Development report, Blended Finance in the Least Developed Countries 2020, finds that the communications sector (including information and communications technology, radio, television and print media, telecommunications, etc.) attracted 18 percent (US$211 million) of all private investments mobilized by official development finance interventions in 2018.

- The European Investment Plan has a dedicated digital window under the European Fund for Sustainable Development (EFSD), which provides guarantees. This digital window aims to support innovative digital solutions, especially those

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242 There are several definitions of blended finance. For the purposes of this report, blended finance refers to “the strategic use of concessional finance to catalyse additional private-sector or commercial investment in SDG-related investments.” UNCDF, “Blended finance in least developed countries” (2018).


244 Ibid.
addressing local social needs and financial inclusion, low-carbon climate-resilient solutions and promoting decent job creation.245 The aim of the ESFD guarantee is to encourage financial institutions to work jointly with the private and public sector to create the conditions needed to lower investment risks in last-mile digital infrastructure and to scale up digital services. One example of how these guarantees are deployed is the FMO Ventures Programme, which received a Euro (€) 45 million (US$56.8 million) EFSD guarantee to boost investments for start-up companies that use digital solutions to improve or enable access to products and services for unserved and underserved communities, including in fintech, agritech, off-grid energy, e-commerce and health care. The guarantee, in combination with €6.5 million (US$7.7 million) in technical assistance, is expected to catalyse around €1 billion (US$1.18 billion) in total investment in digital ventures.246

Another example of how blending different sources of finance can help to catalyse digital transformation is the Alternative Energy Technologies Group (Altech Group), a Congolese-owned and managed pay-as-you-go off-grid solar distributor operating in the Democratic Republic of the Congo. Altech started in 2013, based out of Eastern Democratic Republic of the Congo, to try and address the country’s energy problem, where about 90 percent of the population has no access to electricity. To address this issue, Altech sells, distributes and installs alternative energy solutions in the form of solar lamps, solar home systems and clean cookstoves. Since its inception, Altech has sold approximately 200,000 assorted units and is currently positioning itself to grow that number by another 800,000 units by 2025 (75 percent solar home systems and 25 percent cookstoves). In the last quarter of 2020, Altech secured US$500,000 in financing from UNCDF to support its growing operations. The financing included a US$350,000 loan for its inventory and a US$150,000 grant for the expansion of the company’s clean cookstove offerings. Given the supply chain disruptions as a result of the COVID-19 pandemic, securing financing, particularly for inventory, became strategically important for the company. In addition to the financing from UNCDF, Altech secured additional financing from US-based Social Investment Managers & Advisors, with a US$500,000 debt investment. The UNCDF investment brings the total financing secured by Altech in 2020, via external investors and direct supplier agreements, to more than US$3 million.

Over the past three years, UNCDF has expanded its capacity to use financial instruments such as loans and guarantees in a strategic way to help unlock additional commercial investments through the establishment of its LDC Investment Platform.247 This unique capability in the United Nations system will be expanded in the coming years and can be further targeted at providing catalytic investments in early-stage digital economy businesses, to demonstrate investment readiness and enable such firms to access larger-scale blended or commercial finance. As an example, in Ethiopia, UNCDF partnered with the United Nations Development Programme, the Development Bank of Ethiopia and the Government to operationalize a guarantee scheme for renewable energy businesses. In 2019, the scheme guaranteed US$1.1 million in loans to 12 renewable energy SMEs in partnership with five local banks. This de-risking model will be used as proof of concept to be replicated to other markets and sectors.

**BLENDED FINANCE APPROACHES CAN ALSO BENEFIT FROM DIGITAL INNOVATIONS**

The use of digital tools can further help to enhance the role of blended finance in scaling and reaching the last mile. Digitalization of finance has revolutionized access to capital for MSMEs; digital solutions enable aggregation of demand in ways that were previously impossible (especially for MSMEs). This includes risk assessment through alternative credit scoring, leveraging digital data, digital verification of collateral/security, structuring of investment offerings and access to capital in a variety of new ways. These innovations facilitate the structuring of blended finance transactions, which can provide access to capital where it was not previously possible.

Digitalization of finance has also opened up new approaches to scale domestic resource mobilization that could be reinvested for long-term investments.

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247 See [www.uncdf.org/ldcip](http://www.uncdf.org/ldcip).
in socio-economic infrastructure and priority sectors in developing countries (as an alternative to external borrowing), through blended finance structures. Digital payments could be used to support infrastructure financing through catalytic opportunities, whereby the public at large (including low-income small-balance savers) could mobilize deposits cheaply via digital means to co-invest in a blended finance structure with public and private (pension and insurance) sector investors. Pay-as-you-go models that employ digital infrastructure can employ a blended finance structure to make investments less risky for the development of mini-grids, in order to address the barrier to investment of rural customers’ low spending power.

The exponential growth of data gathering and processing that is enabled by the digital revolution is having a profound impact on how blended finance investments can be identified, tracked and monitored in a way that helps to assess their compliance with SDG-aligned objectives. Until recently, lack of data and information to properly evaluate market opportunities has restrained blended finance investments. Big data and alternative sources of data through digital collection can help to provide needed data points. Data are helping to increase both the alignment and impact monitoring of blended finance solutions in terms of
DIGITALIZATION AND IMPACT INVESTING

By Jean-Philippe de Schrevel, Founder and Managing Partner, Bamboo Capital Partners

A year into the COVID-19 pandemic, it is clear that most developing countries have avoided the high transmission and mortality rates plaguing much of Europe and the US – possibly due to a combination of relatively youthful populations, lower rates of personal mobility, and in some cases decisive action and restrictions. The pandemic will nevertheless require significant changes in how citizens of developing countries learn, work, trade and interact with one another.

Trends underway before the crisis will accelerate, presenting immense challenges and compelling opportunities. Households will focus more than ever on essential needs in health, hygiene, food, and personal safety. ‘Leapfrogging technologies’ offering digital and technology-based solutions suddenly hold much greater appeal than ‘bricks and mortar’ infrastructure, given social distancing requirements. Tech-enabled solutions that lower price points even as they improve access and ease of use of essential products and services are expected to take off as economies recover, generating sustainable investment returns.

The latest generation of impact funds at Bamboo focus their investment strategies on just such solutions, including internet and mobile connectivity, cloud technologies, IoT, blockchain, big data, artificial intelligence, e-money, voice recognition, imaging technologies, unmanned aerial vehicles, and geo-localization. Companies that master one or more of these technologies will weather the COVID-19 storm better than their peers and be poised for rapid expansion during the economic recovery.

The digital transformation will cut across all sectors. In the health-care space, technologies such as telemedicine, medical booking platforms, health information dissemination and management, re-engineered medical technologies, e-pharmacy and insurance marketplaces or guided diagnostic tools, just to name a few, will allow for increased access to a broader range of higher quality and cheaper health-care services. For example, our health-care fund will focus on three investment axes: i) scaling technologies that greatly enhance the capability of community health workers and nurses or provide basic medical services without human input, thereby overcoming the scarcity of highly skilled health-care workers; ii) reducing the costs and complexity of existing health-care delivery models, and iii) delivering new services that would otherwise be out of reach through technologies that have been specifically designed for resource-constrained environments.

Similarly, in agriculture, the maturation of technology-enabled models represents a historic opportunity to remove significant bottlenecks. Such examples include online marketplaces for food, livestock, agricultural inputs, and insurance; agricultural products’ market information; affordable cold chain technologies; genomics and logistics supply solutions, to name a few. In the fintech industry, our funds will continue to focus on digital payments, electronic wallets, unstructured data-driven micro-loans, digital circular savings platforms, digital mobile-only banks and financial services platforms, micro-insurance services, e-commerce platforms, and financial literacy.

The digital transformation holds the promise of scaling much-needed basic services to underserved populations in emerging markets. But if countries do not embrace the global digital transformation underway and if the investment community does not support such transformation, the gap between rich and poor will further increase, laying a big and growing a digital divide on top of the already terribly unequal wealth distribution across the globe. Digitalization is an essential part of our collective efforts to rebuild better, and the time to act is now.