

Cambridge
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Judge Business School

ENERGY4IMPACT
ACCELERATING ACCESS TO ENERGY

THE AFRICA AND MIDDLE EAST ALTERNATIVE FINANCE BENCHMARKING REPORT

FEBRUARY 2017

WITH THE SUPPORT OF



This material has been funded by UK aid from the UK government; however the views expressed do not necessarily reflect the UK government's official policies.

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FOREWORDS

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We are pleased to publish this first alternative finance benchmarking report focused on Africa and the Middle East. The development trends we have observed in these regions are quite different from the other global regions our research centre has studied, in part because they are in an early stage of market development and growing more slowly than other global regions. But there are other trends unique to the region and certain countries. For example, funding flows for non-financial projects like donation, reward, and philanthropic online microfinance projects are primarily being funded via platforms based outside Africa. In the Middle East, donation and rewards-based crowdfunding are quite well established and debt-based models are starting to make their mark, but Israel is distinguished by the strong presence of equity-based crowdfunding.

Findings like these raise several new research questions about the development of alternative finance in these regions. How will the high levels of alternative payment system adoption in some countries impact the future growth trajectory of alternate finance in those markets? Will the philanthropic online funding outside of Africa evolve into innovative, next generation FDI channels for equity and debt finance inside Africa? Providing insights into the global development of alternative finance is the mission of the Cambridge Centre for Alternative Finance and we hope this study goes towards achieving this in Africa and the Middle East.

Robert Wardrop, Executive Director



The rapid growth of crowd funding globally has led some in the development sector to see the crowd as a potential solution to the funding challenges innovative businesses face when they try to serve the ‘bottom of the pyramid.’ But how significant is it in a developing country context?

Global numbers can be misleading. As we see from this latest CCAF report a small number of countries typically dominate the market in any given region, and the degree to which resources are raised from local vs international sources can be markedly different from one region to another. Knowing what’s really happening in this sector at the level of individual countries, types of funds raised, and who the recipients of those funds are, is key to understanding how crowdfunding might best support international development.

CCAF’s research in this area sets a new standard for reliability and comprehensiveness. In sub-Saharan Africa where E4I supports SMEs and micro-businesses providing energy access solutions we currently see crowdfunding playing a very modest role. But we also believe it has the potential to make a much larger contribution. We have been researching this area, with support from DFID, and working with selected platforms to better understand that potential. The CCAF data has helped us quantify the ‘energy access’ crowdfunding market, and will enable us to analyse trends going forward.

Developing a solid knowledge base and using evidence to guide interventions by development institutions is the best way to ensure we achieve results and impact. Crowd funding doesn’t happen in a vacuum. It is heavily influenced by wider economic realities and these need to be taken into account when designing interventions to expand markets.

We’re pleased to have been able to contribute to the data gathering, and to the analysis of what the data shows. We’re grateful to CCAF for providing space for a short chapter specifically on E4I’s crowdfunding research. We are also grateful to DFID for their support, and for their ongoing interest and active engagement with this emerging sector.

Simon Collings

RESEARCH TEAM

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Bryan Zhang is a Director at the Cambridge Centre for Alternative Finance. He is a co-author of ten industry reports on the state of alternative finance both at national and international levels. He is also a Research Fellow in Finance at the Cambridge Judge Business School and a Senior Fellow at the Financial Innovation Lab. He served with Oxfam GB as an Associate for six years.

KIERAN GARVEY

Kieran Garvey is the Policy Programme Manager at the Cambridge Centre for Alternative Finance and is the co-author of six industry reports. His research interests include the application of alternative finance within developing countries, renewable energy and early stage ventures. Kieran was previously a parliamentary crowdfunding advisor as well as helping to establish a microfinance business in Northern Vietnam – inspired by Kiva. He holds degrees from the LSE and Imperial College London.

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Tania Ziegler is the Research Programme Manager at the Cambridge Centre for Alternative Finance, Cambridge University Judge Business School. Tania's research interests include small business economics and SME utilisation of alternative funding models. Prior to her work in alternative finance, Tania specialised in Chinese outward direct investment and was a Fulbridge scholar. Tania studied economics and holds an Msc. in China in Comparative Perspective from the LSE.

ROBERT WARDROP

Robert is an economic sociologist and an experienced finance practitioner, with an interest in understanding how social relations influence financial decision-making. He has co-authored five alternative finance industry reports, and is co-Editor (with Raghu Rau) of The Palgrave Handbook of Alternative Finance (forthcoming). Robert is a member of the International Technology Advisory Panel of the Monetary Authority of Singapore, and is a past and current non-executive director of several technology companies.

SIMON COLLINGS

Simon Collings is the Director of Learning and Innovation at Energy4Impact. He joined E4I in 2009 and is the author of a number of papers on energy access. He has 30 years of experience working in the international development sector. He was at Oxfam for sixteen years then moved in 2003 to become CEO of Resource Alliance, a non-profit working to strengthen the fundraising capacity of civil society organisations globally.

GARRICK HILEMEN

Dr Garrick Hileman is a Senior Research Associate at the Cambridge Centre for Alternative Finance. Garrick is best known for his research on financial and monetary innovation, particularly distributed ledger technology (blockchain) and cryptocurrencies. He is regularly invited to share his perspective with the media, including the BBC, CNBC, FT, WSJ, Sky News, NPR, and he was recently ranked as one of the 100 most influential economists in the UK & Ireland.

RAGHAVENDRA RAU

Raghavendra Rau is Director of Research at the Cambridge Centre for Alternative Finance and Sir Evelyn de Rothschild Professor of Finance at Cambridge Judge Business School. He is the Head of the School's Finance & Accounting subject group and a past president of the European Finance Association. Raghu is Co-Editor of Financial Management and an Associate Editor of the Journal of Banking and Finance, the International Review of Finance and the Quarterly Journal of Finance.

MIA GRAY

Mia Gray is a Senior Lecturer at the Department of Geography and Senior Research Fellow at the Cambridge Centre for Alternative Finance, Cambridge Judge Business School. Mia is editor of the Cambridge Journal of Regions, Economy and Society and was previously Acting Director of the Cambridge Centre for Gender Studies. Mia is a Fellow of Girton College, Cambridge.

LOUISE WESTERLIND

Louise Westerlind has extensive industry experience in both crowdfunding and peer-to-peer lending at managing director level internationally. She also co-founded and ran an e-commerce platform in Hong Kong. Previously she worked at the World Bank/CGAP and at various financial services and consulting firms in New York City. Louise received her MBA from Cambridge Judge Business School and her BSc in International Business from Copenhagen Business School and Hong Kong University of Science & Technology.

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Dr. John Burton is a Research Associate at the Cambridge Centre for Alternative Finance. He achieved his PhD in astronomy, and has been working in large scale data analysis for over 10 years, and has built his own crowdfunding platform to provide money for charitable causes.

DAVINIA COGAN

Davinia Cogan is the Programme Manager of Crowd Power at Energy 4 Impact. She runs the UK government funded programme, which explores the role of incentives to stimulate debt, equity, reward and donation crowdfunding in the energy access space in Asia and Sub-Saharan Africa. Davinia joined E4I in 2013 after completing a Kiva fellowship in Tajikistan. She holds an MA in International Studies from the University of Sydney.

ALEXIS LUI

Alexis Lui was the Outreach Manager and a Researcher at the Cambridge Centre for Alternative Finance. His research interests include the efficiencies and advantages of alternative finance models, particularly the evolution of credit analytics. He is now focusing his efforts on fullstack development as well as digital design. Alexis and his team at A&R Designs created this report.

ACKNOWLEDGEMENTS

We would like to thank the research support team for their hard work and effort – Alexander James, Fatimah Alqahtani, Bridget Menyeh, Aditya Prasad, Harshal Kavishwar, Khyati Kanjani, James Talty and Peter Ferrara. We would also like to thank Joe Huxley (FSD Africa), Kevin Allen and Elizabeth Howard (African Crowdfunding Association), Karsten Wenzlaff, Dan Marom, Andrew Dix (Crowdfund Insider), Peter Renton (LendAcademy) Lars Kroijer, Anton Root and Malcolm Kapuza (Allied Crowds), Jason Best and Woodie Neiss (Crowdfund Capital Advisors), Gillian Roche-Saunders (BWB Compliance). Finally, we would also like to thank Nia Robinson and Kate Belger of the CCAF for their continued support and help in producing this report.

RESEARCH PARTNERS



AlliedCrowds



PLATFORM LOGOS





EXECUTIVE SUMMARY



“This report, covers 46 countries in Africa and 12 in the Middle East, with survey data gathered from over 70 alternative finance platforms.”

This report, jointly produced by the Cambridge Centre for Alternative Finance (CCAF) and Energy 4 Impact with the support of UKAid and CME Group Foundation, is the first study of its kind that systematically and comprehensively reports the size and growth of crowdfunding and peer-to-peer lending markets in Africa and the Middle East. This is the fifth in a series of impactful industry reports that the CCAF, based at the University of Cambridge, has published in 2016 together with its regional research partners, including those in the Asia-Pacific region, the Americas, Europe, and the UK.

The new report, covering 46 countries in Africa and 12 countries in the Middle East, gathered survey data from over 70 alternative finance platforms between 2013-2015. The study details the types of online alternative finance, ranging from reward-based crowdfunding to peer-to-peer business lending, that are prevailing in African and Middle Eastern countries. It captures the industry volumes in key markets, documents the growth of alternative funding for start-ups and SMEs, analyses the latest market trends and explores the changing regulatory landscape in Africa and the Middle East.

Unlike our other regional reports, this study includes additional chapters on the emerging alternative payment systems (e.g. mobile payment and cryptocurrencies), crowdfunding and peer-to-peer lending regulatory landscapes in Africa and the Middle East (drawing on our recent regulatory research with the FSD Africa) and on renewable energy crowdfunding, with insights from the DIFD funded CrowdPower Programme, carried out by Energy 4 Impact.

1. A total of \$242m in online alternative finance funds was raised across both Africa and the Middle East in 2015, of which Africa registered \$83.2m and the Middle East \$158.8m.
2. In 2015, over 75% of the total online alternative finance raised from Africa and the Middle East region was funding for start-ups and SMEs, with \$62.2m raised across Africa, and \$132m raised across the Middle East.
3. In Africa, 90% of online alternative finance was originated from platforms headquartered outside of the continent, whilst in the Middle East the reverse is true as 92.6% of online funding originated from home-grown platforms headquartered within the region.
4. Equity-based crowdfunding accounted for 67% of the total market volume in the Middle East, while microfinance is the leading model in Africa accounting for 42% of the total market volume. Donation-based crowdfunding also features strongly in Africa, accounting for 17% of market share, whilst reward-based crowdfunding accounts for 10%.
5. Relatively low levels of peer-to-peer consumer and business lending activities exist in Africa and the Middle East. Specifically, Peer-to-Peer Business Lending accounted for only 17% of total market volume in Africa, whilst Peer-to-Peer Consumer Lending accounted for only 6% of the total market volume in the Middle East.
6. Both the African and Middle Eastern online alternative finance markets are showing signs of decelerating growth. The Middle East experienced an annual growth rate of 152% from 2013-2014, but from 2014-2015 that rate fell to 75%. The African market grew 38% from 2013-14 and 36% between 2014-2015.
7. Israel is the clear market leader in the Middle East with \$124.3m raised in 2015. Kenya and South Africa are the market leaders in Africa with \$16.7m and \$15m raised respectively from online channels in 2015.
8. The East Africa region has the largest market share of the African alternative finance market. In 2015 East Africa accounted for 41% of total African market share, while West Africa accounted for 24% and Southern Africa accounted for 19%.
9. The lack of bespoke regulatory regimes and specific alternative finance policy developments is affecting alternative finance industry growth in both Africa and the Middle East. The greatest perceived risk by the industry in Africa and the Middle East region is 'fraud'.
10. There are tremendous yet unrealised potentials in both alternative payment systems and renewable energy financing in Africa and the Middle East.

METHODOLOGY

This report covers the alternative finance markets across 58 countries in Africa and the Middle East, utilising data from 46 countries in Africa and 12 countries in the Middle East. Building on similar studies conducted in 2016 across the Asia-Pacific region,¹ the Americas,² Europe³ and the UK,⁴ the Cambridge Centre for Alternative Finance⁵ and its research partners, including Energy 4 Impact, carried out an online survey from July to November 2016 regarding crowdfunding and peer-to-peer lending platforms in Africa and the Middle East.

A core group of leading industry partners helped realise this research. We would like to thank AlliedCrowds,⁶ CrowdfundInsider,⁷ FSD Africa,⁸ the UK's Department for International Development, Crowdfund Capital Advisors⁹ and the African Crowdfunding Association,¹⁰ for their generous help and support throughout the research process.

This inaugural Africa and Middle East study was designed to capture the size and growth of online alternative finance markets in Africa and the Middle East between 2013 and 2015. The research team collected data from individual platforms across the North, Southern, East, West and Central Africa and the Middle East. This benchmarking survey followed an alternative finance taxonomy consistent with previous benchmarking exercises, which was further refined to reflect developments specific to these two regions.

A total of 66 online alternative finance platforms participated in the survey, of which 45 are headquartered within Africa and the Middle East. During the survey process, the research team communicated directly with individual online alternative finance platforms, explaining the study's objectives and providing a copy of our research proposal and questionnaire. For cases in which currently active online alternative finance platforms in Africa and the Middle East did not contribute to our survey, the dataset was supplemented with desktop research and web scraping using commonly applied python scripting and related methodologies.

The research team cleansed and verified all gathered datasets before aggregating by directly contacting platforms or using secondary sources. For online alternative finance platforms that offered "mixed" or "other" finance models/products, or operated in more than one of the designated countries encompassed in this study, the team broke down transaction volumes further and added these to their associated models and countries based upon the information the platform provided. Upon completion of the study, the data collected was encrypted and safely stored, accessible only to the research team.

This benchmarking study captured an estimated 80% of the visible online alternative finance market in Africa and the Middle East.

THE TAXONOMY OF ONLINE ALTERNATIVE FINANCE

In this report, the alternative finance models reviewed are categorised using the taxonomy developed by the Cambridge Centre for Alternative Finance in 2013.¹¹ This taxonomy is broadly split into financial return and non-financial return models.

Non-investment models encompass donation and reward-based crowdfunding, as well as microfinance models. While the microfinance models surveyed in this study return the principal funds lent to borrowers, they do not include additional financial return for the funders/lenders, and are therefore deemed to be non-financial return models. It must be noted that these microfinance models often still have interest rates being charged to their respective borrowers through the microfinance platforms' lending partners.

Financial return alternative finance models provide a return for the funders or lenders above and

beyond the principal funds provided, mainly for investment purposes. These models include equity-based crowdfunding for both businesses and real estate ventures, and peer-to-peer lending models for consumers, businesses, and property-based transactions including real estate development. Furthermore, the survey also included other forms of online lending including debt-based securities, (whereby the business issuer puts forth a debenture or other bond-note) balance sheet consumer lending, and balance sheet business lending.

The standardised definitions and taxonomy used to analyse the alternative finance markets of Africa and the Middle East are listed in the table below. This taxonomy has been consistently applied across Europe, the Asia-Pacific region and the Americas to enable international cross-comparisons.

Alternative Finance Model	Definition
Marketplace/P2P Consumer Lending	Individuals or institutional funders provide a loan to a consumer borrower.
Balance Sheet Consumer Lending	The platform entity provides a loan directly to a consumer borrower.
Marketplace/P2P Business Lending	Individuals or institutional funders provide a loan to a business borrower.
Balance Sheet Business Lending	The platform entity provides a loan directly to a business borrower.
Marketplace/P2P Real Estate Lending	Individuals or institutional funders provide a loan secured against a property to a consumer or business borrower.
Real Estate Crowdfunding	Individuals or institutional funders provide equity or subordinated-debt financing for real estate.
Invoice Trading	Individuals or institutional funders purchase invoices or receivable notes from a business (at a discount).
Equity-based Crowdfunding	Individuals or institutional funders purchase equity issued by a company.
Reward-based Crowdfunding	Backers provide finance to individuals, projects or companies in exchange for non-monetary rewards or products.
Donation-based Crowdfunding	Donors provide funding to individuals, projects or companies based on philanthropic or civic motivations with no expectation of monetary or material return.

Figure 1. A Working Taxonomy for Online Alternative Finance

TOTAL MARKET VOLUMES IN AFRICA AND THE MIDDLE EAST



From 2013-15, a total of \$475 million was raised via online alternative finance platforms amongst all businesses, organisations, individuals and projects across Africa and the Middle East. The average annual growth rate during this three-year period was 74%, with total market growth for both Africa and the Middle East combined dropping from 89% between 2013-14 to 59% from 2014-15. In 2015, over \$242m was raised, providing alternative sources of capital to individual and business fundraisers in these regions. Assuming a conservative growth rate of 30% from 2015-2016, the total alternative finance volume in Africa & the Middle East could well exceed over \$300 million by the end of 2016.

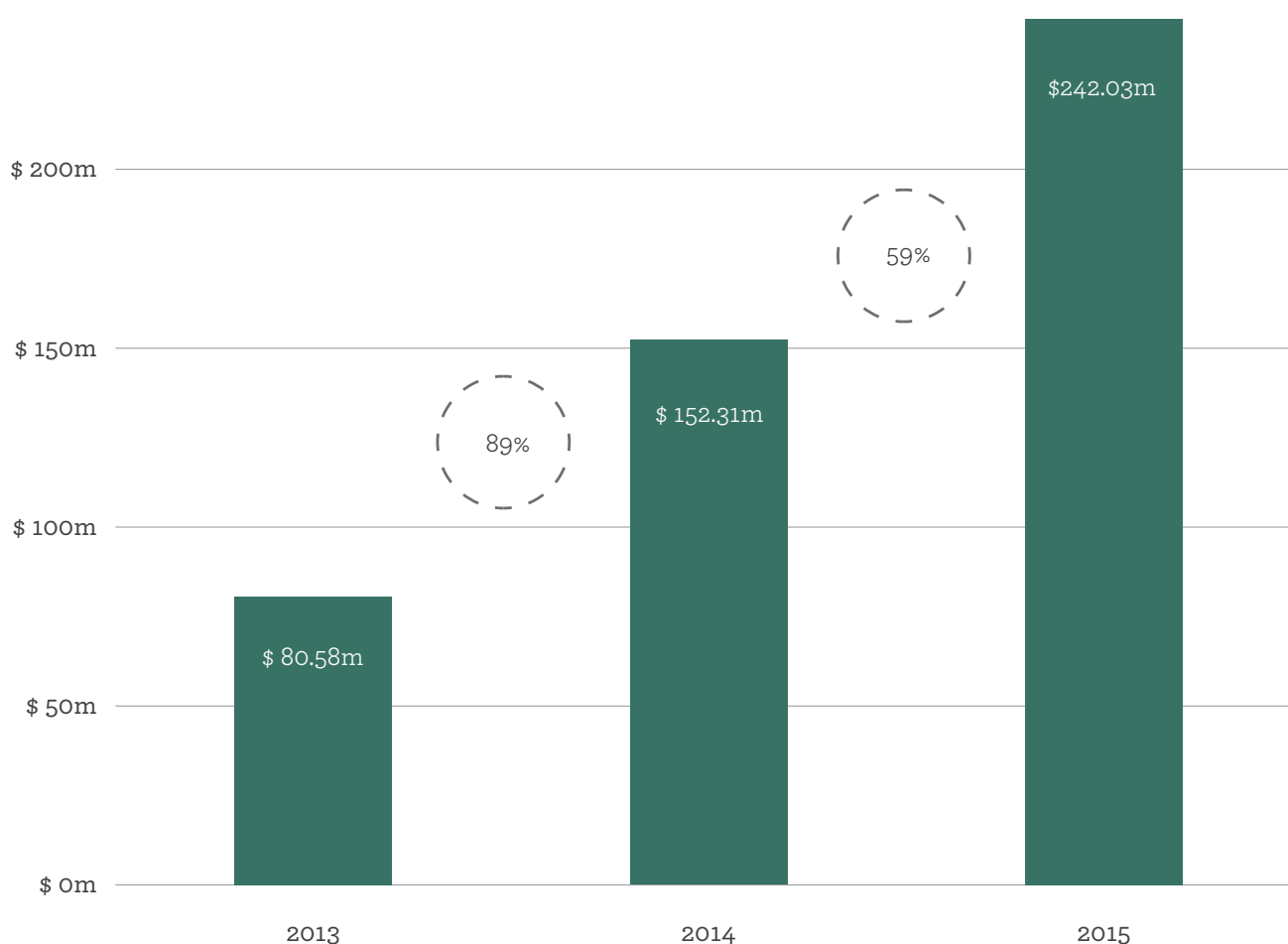


Figure 2. The Middle East and Africa Online Alternative Finance Market Volumes, 2013-2015 (\$ USD)

THE AFRICAN AND MIDDLE EASTERN MARKETS IN A GLOBAL CONTEXT

When reviewing Africa and the Middle East in a broader global context (excluding global market leaders China, the US and, to a lesser degree, the UK), these two regions taken together had similarly sized markets to both the Americas (excluding the US) and the Asia Pacific region (excluding China) in 2013 & 2014. A 'market' is defined as funds raised both domestically and internationally for businesses, projects and individuals in the respective country or region. This is the same approach used in previous CCAF regional reports. The Middle East

and African alternative finance markets together were actually larger than the Americas (excluding the USA) in 2013 (\$80.5m vs. \$64.4m) and 2014 (\$152m vs. \$121.5m). However, in 2015, the Americas (\$315.7m) overtook Africa and the Middle East (\$242m) largely due to the explosive growth of peer-to-peer lending models in both Canada and Chile.¹² These debt-based models are only just now starting to emerge in Africa & the Middle East – a trend that will be further analysed in this study.

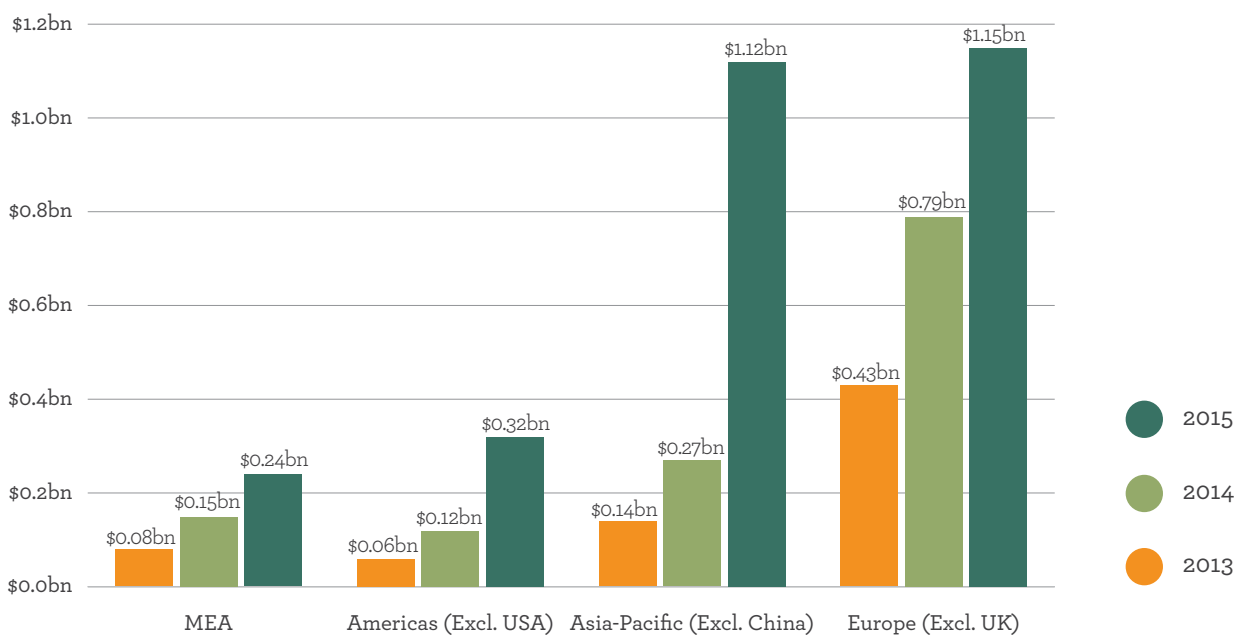


Fig 3. Regional Online Alternative Finance Volumes (excl. the USA, China and UK), 2013-2015 (\$ USD)

Excluding the three global market leaders - China, the US and the UK - Europe was the leading online alternative finance regional market between 2013-2015 in comparison to the Americas, the Asia-Pacific region and Africa & the Middle East. However, in 2015, the Asia Pacific region (excluding China) reached parity with the European market (excluding the UK). From 2013-2015, Africa & the Middle East experienced similar

levels of market activity to the Americas (excluding the US), which includes Canada, Central & South America, and the Caribbean. While the growth rate in Africa and the Middle East slumped from 89% in 2013-14 to 59% in 2014-15, the growth rate in the Americas from 2013-15 experienced a significant increase and therefore overtook Africa and the Middle East in terms of growth over that period.

GEOGRAPHIC DISTRIBUTION OF PLATFORMS AND MARKET VOLUMES

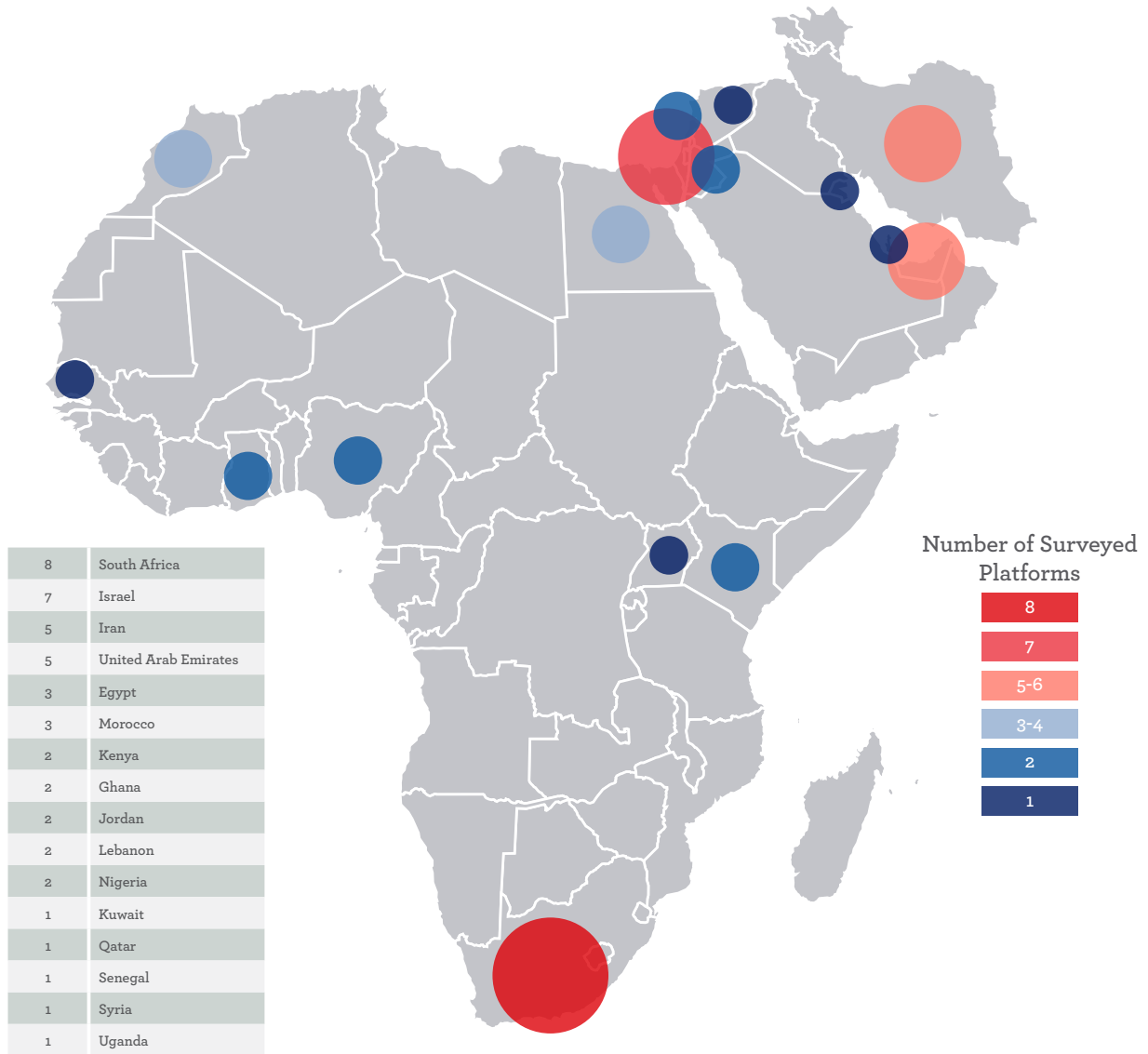


Fig 4. The Geographical Distribution of Surveyed Platforms, 2015

Within Africa, South Africa had the largest number of online alternative finance platforms with eight surveyed respondents. Following South Africa, both Egypt and Morocco had three domestically-based platforms, while Ghana and Nigeria each had two. Senegal, Uganda, and Zimbabwe each had a single surveyed platform.

As for the Middle East, Israel, which has seven domestically-based surveyed platforms, is the online alternative finance market leader in the region. Meanwhile, Iran and the UAE each had five domestically-based surveyed platforms. Both Jordan and Lebanon had two domestically headquartered platforms, while Kuwait, Qatar and Syria each had one.

Across Africa and the Middle East, a total of 58 countries reported some level of online alternative finance market activity. The study covers 46 countries in Africa and 12 countries in the Middle East; however, significant geographic variations exist across the markets. For instance; only six out of 12 Middle Eastern countries reported market volume exceeding \$1 million in 2015; whilst in Africa, only 13 countries, of the 46 reviewed, raised in excess of \$1 million.

In the Middle East, the largest alternative finance market by a large margin was Israel, raising over \$124 million in

2015. The United Arab Emirates (UAE) raised over \$17 million, while Qatar, Jordan, Lebanon and Palestine each raised between \$3-5 million in 2015.

In Africa, the market leaders for 2015 were Kenya followed by South Africa with \$16 and \$15 million raised respectively. A key difference worth noting between South Africa and Kenya is that most funding in South Africa was raised in the country while for Kenya, most funds were raised outside of the country. Nigeria and Cameroon both accrued between \$7-8 million, while Rwanda, Uganda and Ghana accrued around \$4-5 million each.

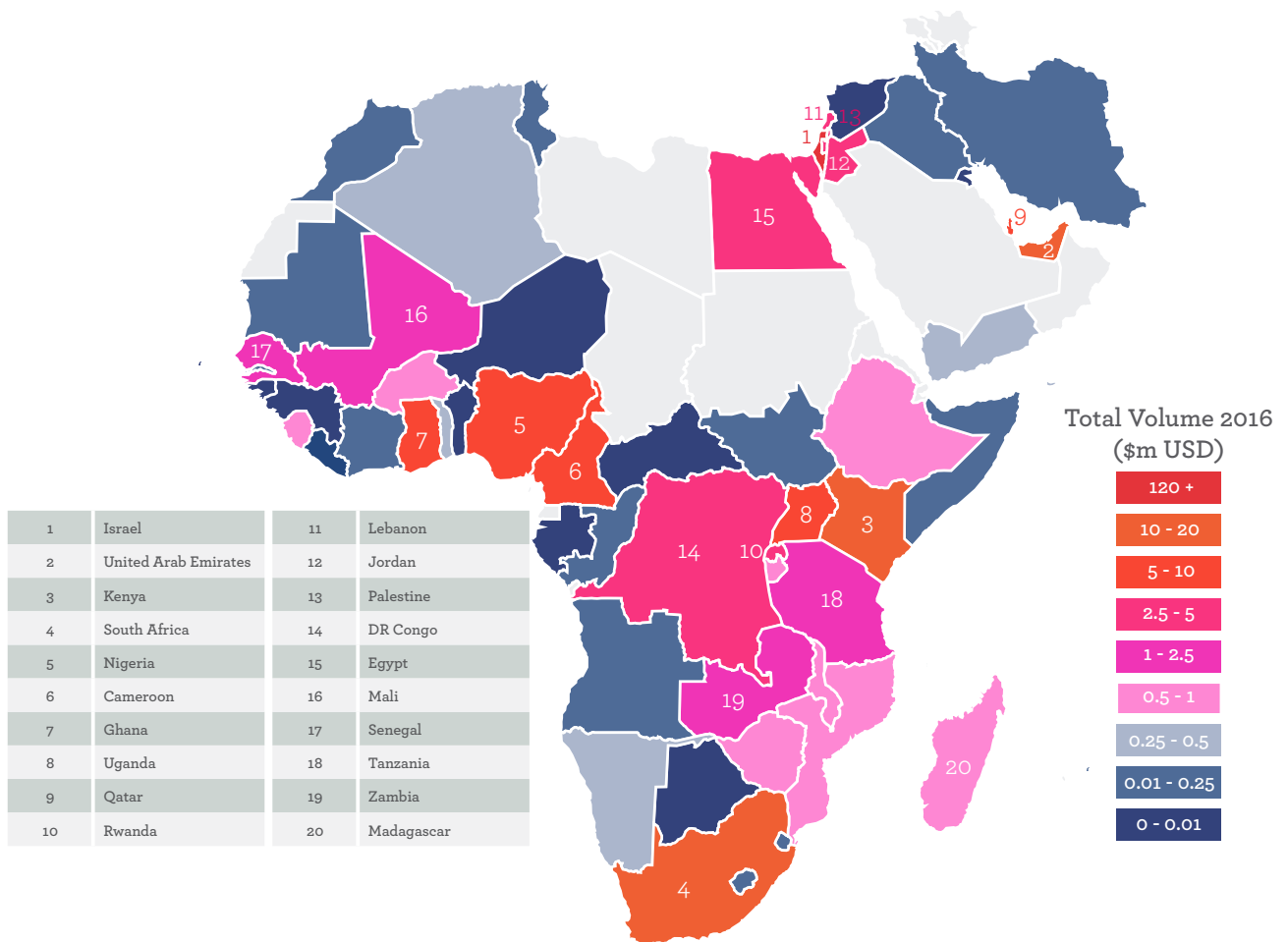


Figure 5. Comparative Market Volumes of Alternative Finance Transactions in the Middle East and Africa (2015)

INTERNAL AND EXTERNAL FUNDING SOURCES

Online alternative finance platforms across Africa and the Middle East, as with much of the rest of the world, incorporated and began trading from around 2010 onwards. A large number of platforms operate domestically. However, there are also a substantial number of platforms headquartered outside of Africa and the Middle East, that provide funding to individual and business fundraisers in each of these regions, particularly in Africa.

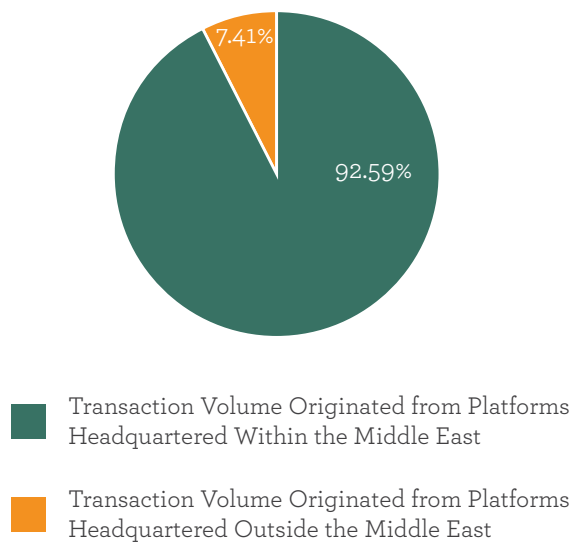


Figure 6a. Online Alternative Finance Funding Sources in the Middle East, 2015

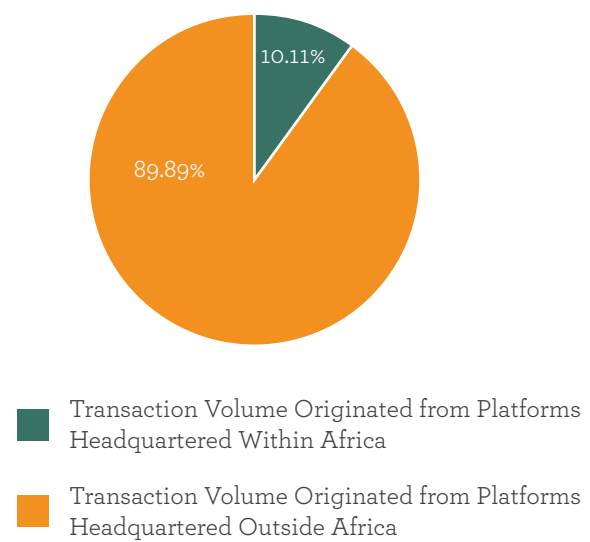


Figure 6b. Online Alternative Finance Funding Sources in the Africa, 2015

Nearly 90% of all online alternative finance transaction volume attributed to Africa. Conversely, approximately 92.5% of transaction volumes attributed to the Middle East came from platforms headquartered within this region, with only 7.4% of the transaction volume being facilitated from platforms headquartered outside of the Middle East.

ALTERNATIVE FINANCE TRANSACTION VOLUME PER CAPITA

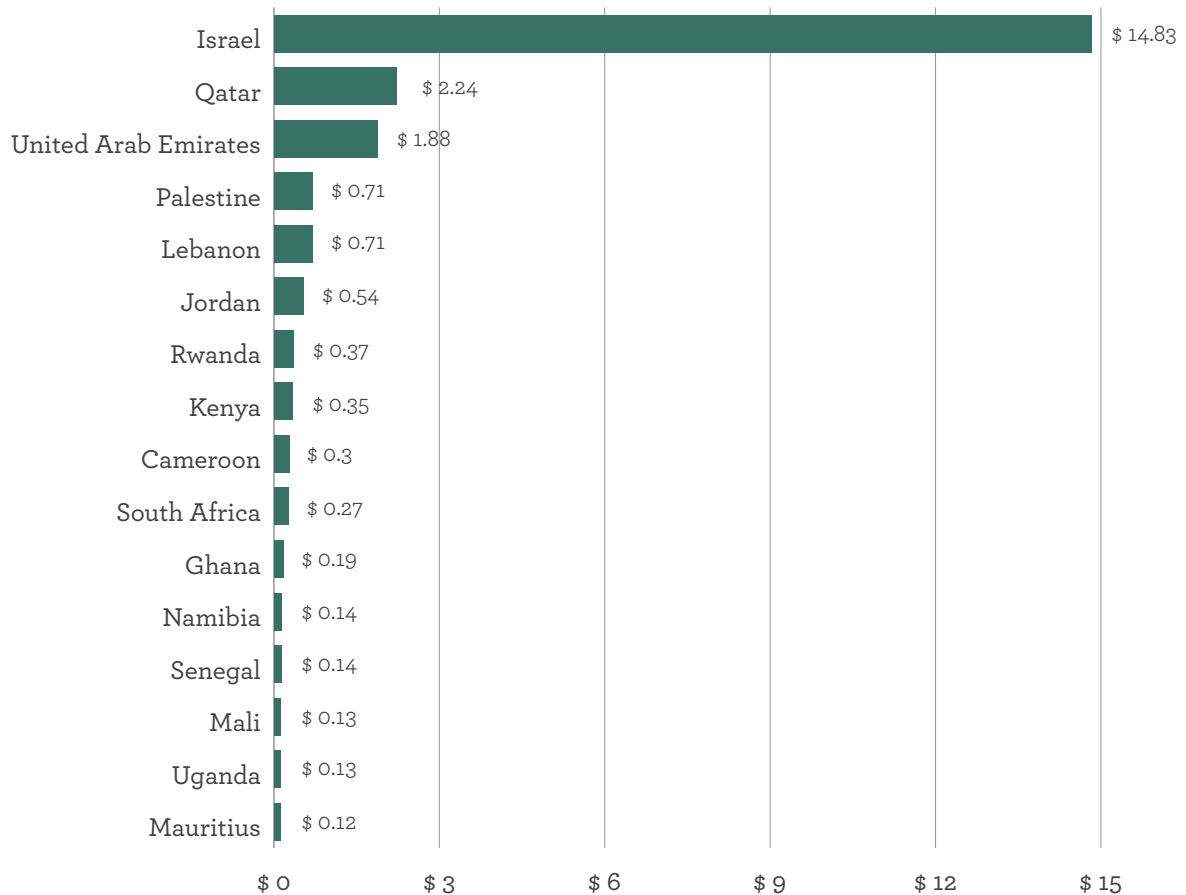


Figure 7. Market Volume per Capita by Country for the Middle East and Africa, 2015

When viewed on a per capita basis, the alternative finance markets across Africa & the Middle East reveal an interesting trend. Despite 46 countries surveyed in Africa, and only 12 in the Middle East, the Middle East was responsible for each of the top six countries with the highest alternative finance volumes per capita (perhaps due to relatively lower populations).

Israel is by far the most developed market when considering alternative finance volumes per capita with \$14.83 per person. This is linked to the long history of investment in innovation and incubation of new technology as well as an enabling regulatory

environment that facilitates the raising of equity via crowdfunding. Qatar lags well behind Israel in second place with \$2.24 per person and the UAE with \$1.88. Palestine and Lebanon are equal with 71 cents per person, while Jordan has around 54 cents per person.

In Africa, Rwanda has the highest level of alternative finance volume per capita with \$0.37 per person, with Kenya and Cameroon following behind with \$0.35 and \$0.30 respectively. South Africa had the fourth highest level of alternative finance per capita in Africa with \$0.27 per person.

ALTERNATIVE BUSINESS AND NON-BUSINESS FUNDING

The relative proportions of funding sought for business purposes in comparison to non-business purposes demonstrates that business funding in both Africa and the Middle East dominates alternative finance market activity. The scope of business funding for means of this comparison included equity-based crowdfunding, peer-to-peer business lending, microfinance, debt-based securities, balance sheet business lending, and 35%¹³ of rewards-based crowdfunding.

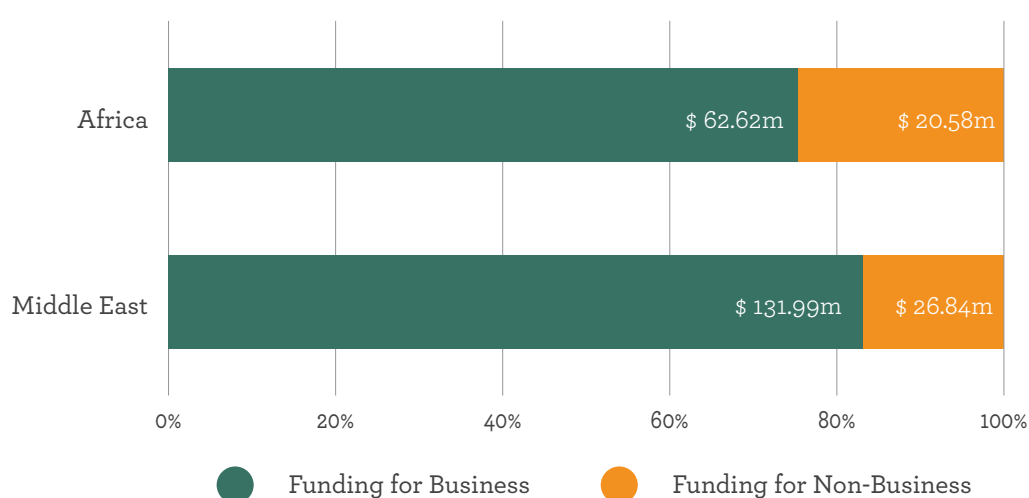


Figure 8. Total Online Alternative Business and Non-Business Funding, 2015

Of note is the substantial proportion of market activity used for business purposes in both the Middle East and Africa. Over 80% of alternative finance is used for business finance in the Middle East, while in Africa, over three-quarters of funding served business purposes in 2015.

In Africa around a quarter of funds were utilised for non-business purposes including philanthropic, cultural or community-based projects – primarily via donation – and reward-based crowdfunding. Furthermore, as will be highlighted in the regional breakdowns of each funding model, financial return models, including equity-based crowdfunding and peer-to-peer lending, are clearly more developed in the Middle East than in Africa (outside South Africa) – a trend that has appeared to be changing in Africa from 2015 onwards.

Since both equity-based crowdfunding and peer-to-peer business lending are beginning to take root in Africa (see chart on page 26), the proportion of funding attributed to business finance will likely increase over the coming years. As we have seen in the Americas, Europe, and the Asia Pacific regions, peer-to-peer lending and, to a lesser extent, equity-based crowdfunding have come to dominate the alternative finance markets of these regions by market share, while non-financial return models such as donation- and reward-based crowdfunding tend to make up a much smaller proportion of activity.

It remains to be seen whether the same market dynamics will emerge in Africa. Within the alternative finance market in the Middle East, most of which requires financial structures that adhere to Islamic financial principles, an interesting development to track will involve if and how debt-based models emerge in this region going forward.

MOST FUNDED INDUSTRY SECTORS BY MODEL

Alternative Finance Model	Top Sector 1	Top Sector 2	Top Sector 3
Equity-based Crowdfunding	Technology	Finance	Internet and E-commerce
Donation-based Crowdfunding	Charity & Philanthropy	Education & Research	Community & Social Enterprise
Marketplace/P2P Consumer Lending	Real Estate & Housing	Community & Social Enterprise	Retail & Wholesale
Marketplace/P2P Business Lending	Leisure & Hospitality	Retail & Wholesale	Media & Publishing
Reward-based Crowdfunding	Art, Music & Design	Technology	Community & Social Enterprise
Real Estate Crowdfunding	Real Estate & Housing	Construction	
Business Lending	Finance	Real Estate & Housing	Retail & Wholesale
Microfinance	Agriculture	Food & Drink	Education

Figure 9. Most Funded Sectors by Model

The online alternative finance models which facilitated business funding to start-ups and SMEs, accommodated a diverse number of industries. Looking at the top sectors funded by various alternative finance models, equity-based crowdfunding clearly caters more to businesses in technology, finance, and internet & e-commerce industries, than to peer-to-peer business lending, which primarily funds businesses in the leisure, hospitality, retail & wholesale sectors.

Microfinance differs somewhat from peer-to-peer business lending, with a focus on agriculture-based

businesses, as well as food & drink, and education. For peer-to-peer consumer lending, providing finance to sole-traders or individuals, a high proportion of funds were allocated towards real estate and housing, community, and retail & wholesale.

Donation-based crowdfunding focused on charity and philanthropic causes, as well as educational and community & social enterprise, while reward-based crowdfunding provided funds mostly for artistic and cultural endeavours, as well as technology, and community & social enterprise proposals.

FEMALE MARKET PARTICIPATION RATES

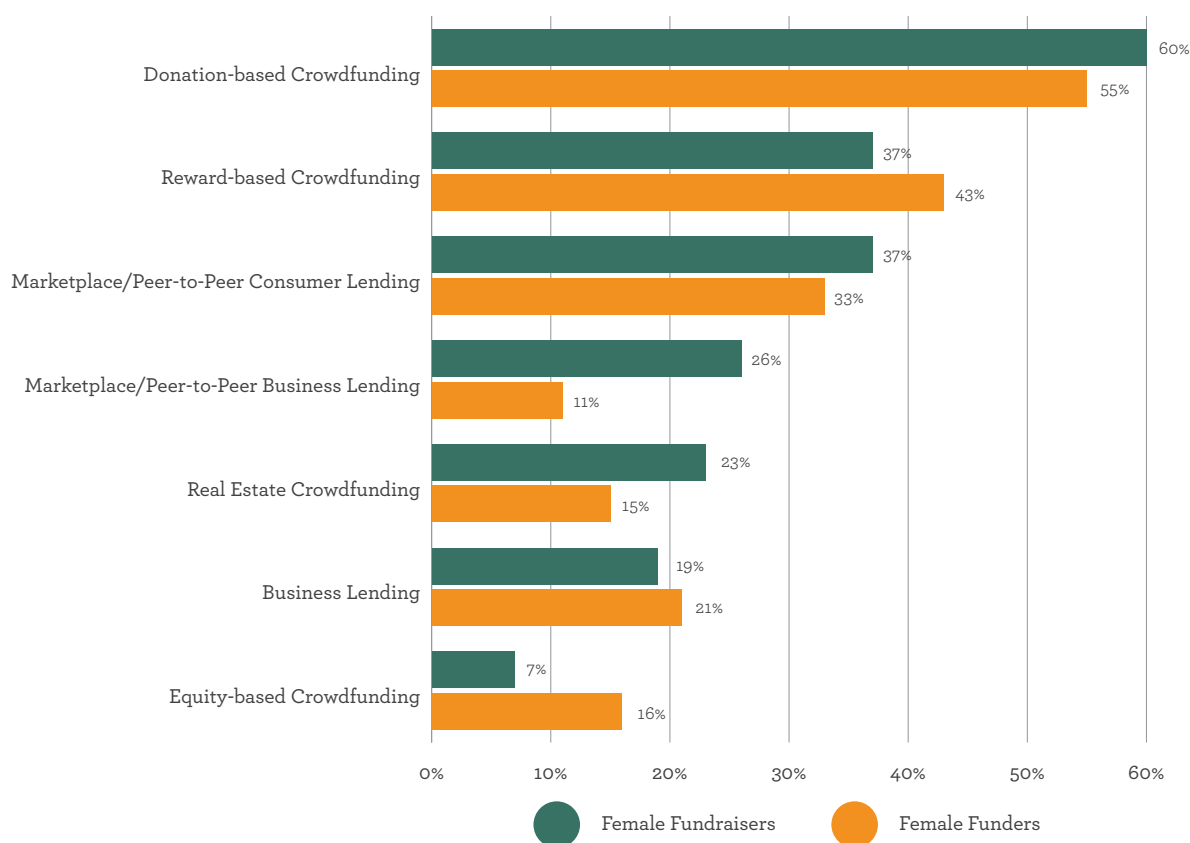


Figure 10. Female Funders and Fundraisers by Alternative Finance Model, 2013–2015

Levels of female online alternative finance market participation across both Africa and the Middle East yield similar patterns to other regions previously surveyed by the research team. Donation-based crowdfunding in Africa and the Middle East, as in Europe, the Asia Pacific region and the Americas, has the highest levels of female market participation for both fundraisers and funders. In the combined data from Africa and the Middle East, 60% of donation-based crowdfunding fundraisers were women, while 55% of funders were women. For rewards-based crowdfunding, which typically has high levels of female participation, 37% of fundraisers and 43% of funders were women, as indicated by the combined regional data.

Consumer lending had the third-highest level of female participation with 37% for fundraisers and 33% for funders, while peer-to-peer business lending had just over a quarter of fundraisers who were women and substantially fewer, 11%, women funders. As for real estate crowdfunding, 23% of fundraisers were women and 15% were women funders. Equity-based crowdfunding, which typically has the lowest levels of female participation among the regions surveyed, likewise had the lowest levels of fundraisers in Africa and the Middle East with 16% being female funders – higher than both real estate crowdfunding and peer-to-peer business lending.

ALTERNATIVE FINANCE MARKET RISKS IN AFRICA & THE MIDDLE EAST

Although the continued growth of the alternative finance sector in both Africa and the Middle East is exposed to a variety of risks, platforms in both regions perceive certain systemic risks to a similar degree. For instance, a substantial proportion of surveyed platforms in both the Middle East and Africa view increases in default rates (43% for Middle Eastern platforms and 38% for African platforms) and collapses of major platforms (35% for Middle Eastern platforms and 36% for African platforms) as high or very high risk.

Differences in perceptions toward risk arise when reviewing other categories captured in the study. Fraud is perceived as the greatest risk towards industry growth in Africa (60%), while 48% of platforms in the Middle East view fraud as a high or very high risk. Changes to regulation is also seen as a high or very high risk by 42% of survey respondents in Africa, with slightly fewer Middle Eastern platforms (30%) perceive the risk as a significant factor.

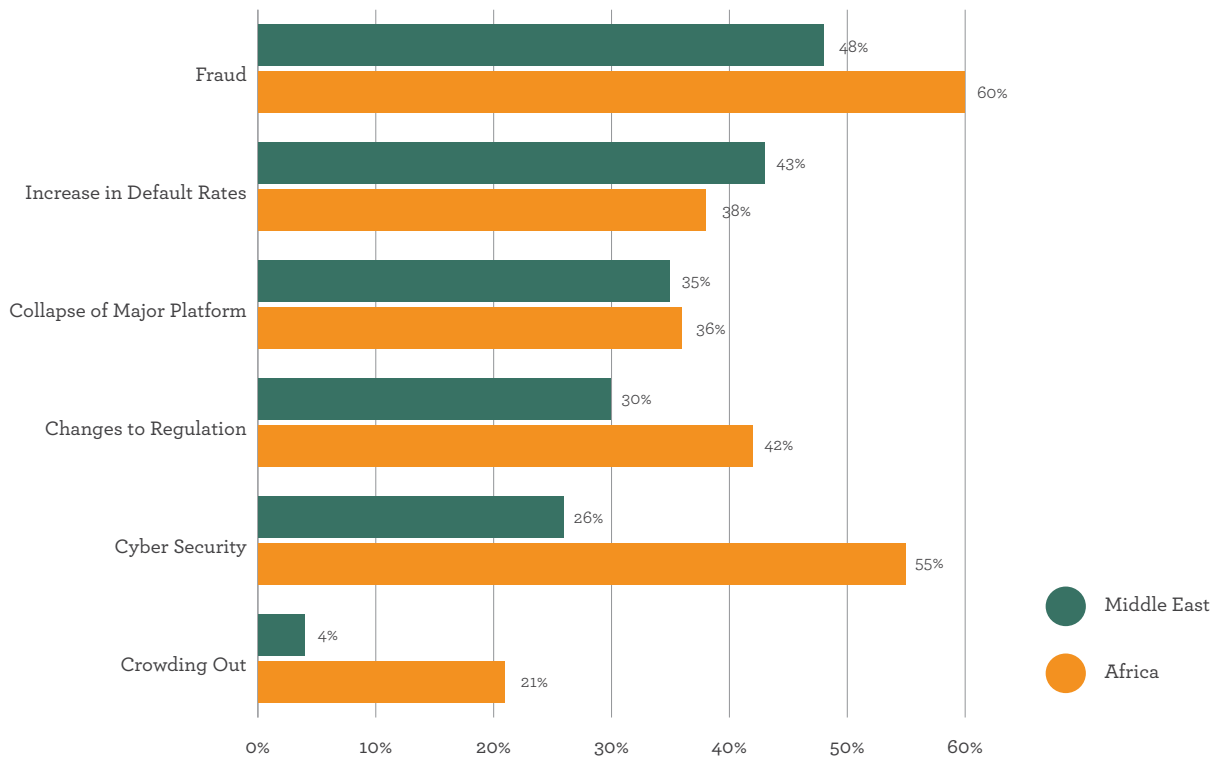


Figure 11. Proportion of Survey Respondents Perceiving Risks to their Regional Alternative Finance Industry as 'High' or 'Very High' Risk Industry

Africa and the Middle East diverge most markedly in the risk associated with cyber security and the crowding out of retail investors. Cyber-security is perceived as a high or very high risk to African platforms (55%), as opposed to only 26% of platforms in the Middle East. As for crowding out of retail investors, only 4% see this factor as a high or very high risk to the alternative finance industry in the Middle East, while a substantial 21% see it as a high or very high risk in Africa.

ONLINE
ALTERNATIVE
FINANCE
IN THE
MIDDLE EAST



In the Middle East, the online alternative finance industry raised a total of over \$285m from 2013-2015 across the 12 countries surveyed. From 2013-14, the Middle East regional alternative finance industry grew at a rate of 152%, and then decelerated from 2014-15 to 75%. The three-year average growth rate for the period 2013-15 was 113.5%.

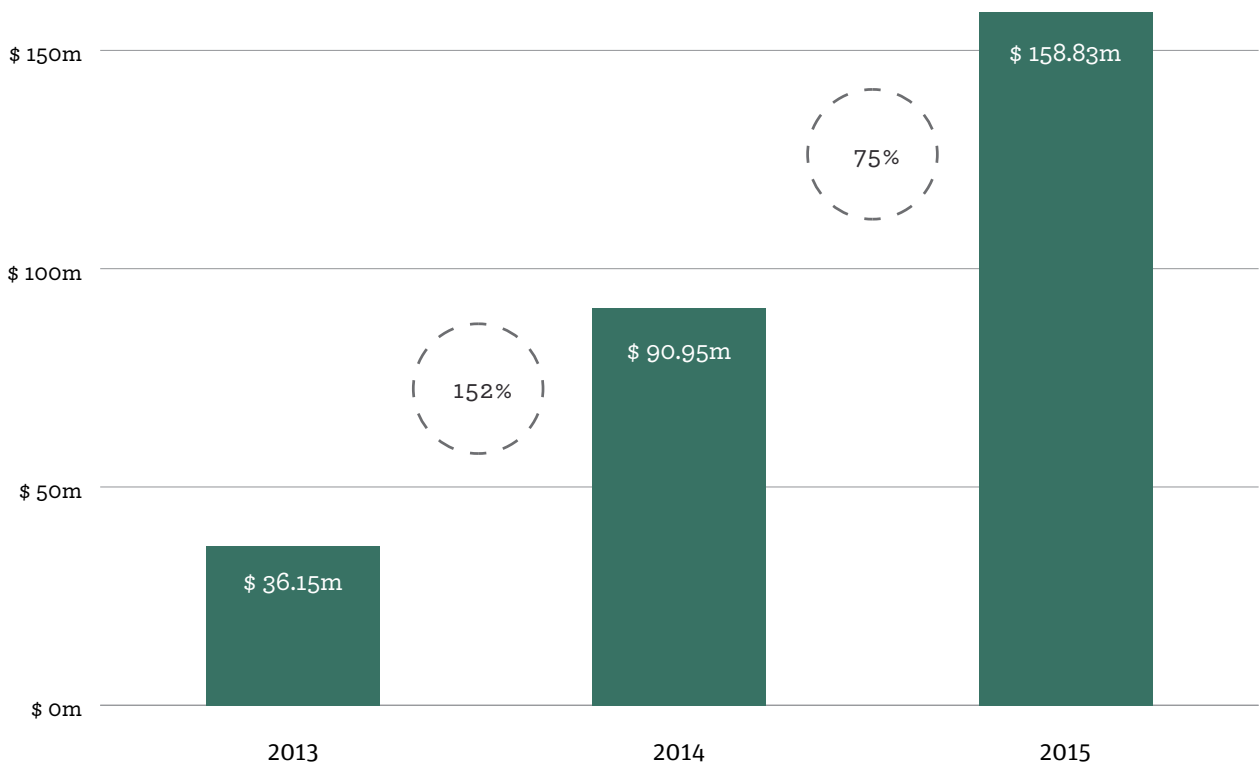


Figure 12. Total Online Alternative Finance Market Volume for the Middle East, 2013-2015 (\$ USD)

ALTERNATIVE FINANCE MARKET BY MODEL IN THE MIDDLE EAST

Equity-based crowdfunding dominated market activity in the Middle East, accounting for approximately 67% of total 2015 transaction volume in this market. The model has grown rapidly on a year-on-year basis since 2013, when a total of \$24 million was raised. In 2014, this figure swelled to \$62m, culminating in just over \$106m for 2015. These figures are dominated by the data for Israel – see analysis in later sections of this report. Trailing far behind equity-based crowdfunding as the second largest model is that of microfinance, a model which has remained quite steady from 2013-15 with a total \$25 million raised over the three-year period. Yet, when observing this model on a year-on-year basis, a total of \$8m was registered in 2015, a decline of 16% from the \$9.5m registered in 2014. In third place is reward-based crowdfunding, with a total of almost \$22 million across the three-year period.

Interestingly, as the table below illustrates, both the peer-to-peer lending models for businesses and consumers only emerged in significance in 2015, raising \$9.65 million and \$81 million respectively. Given these initial rapid growth rates, these debt-based models will likely play an increasingly significant role in the Middle Eastern alternative finance market in coming years.

Finally, the real estate crowdfunding model, also a relative new-comer, has seen significant growth, though not of the same exponential nature as that of the debt-based models mentioned previously. In 2015, this model accounted for \$9.1 million, with a two-year total contribution of \$13.64 million.

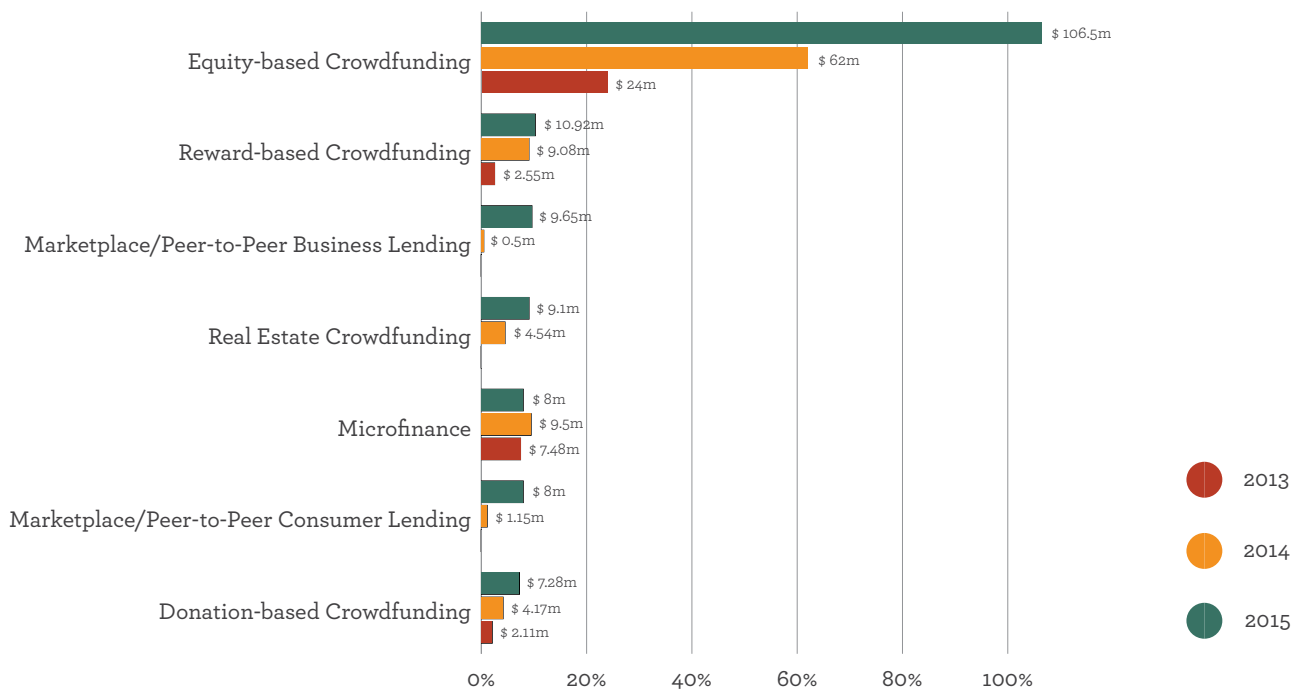


Figure 13. Alternative Finance Volume by Model in the Middle East, 2013-2015

In terms of the market share of each model in the Middle East, equity-based crowdfunding accounted for around two-thirds of market activity in 2015 – dominated by data from Israel. As indicated in the figure below, reward-based crowdfunding, peer-to-peer business lending, real estate crowdfunding, microfinance, and peer-to-peer consumer lending all account for approximately 5% to 6% of the total market in the Middle East with donation-based crowdfunding contributing less than 5% of the market in 2015.

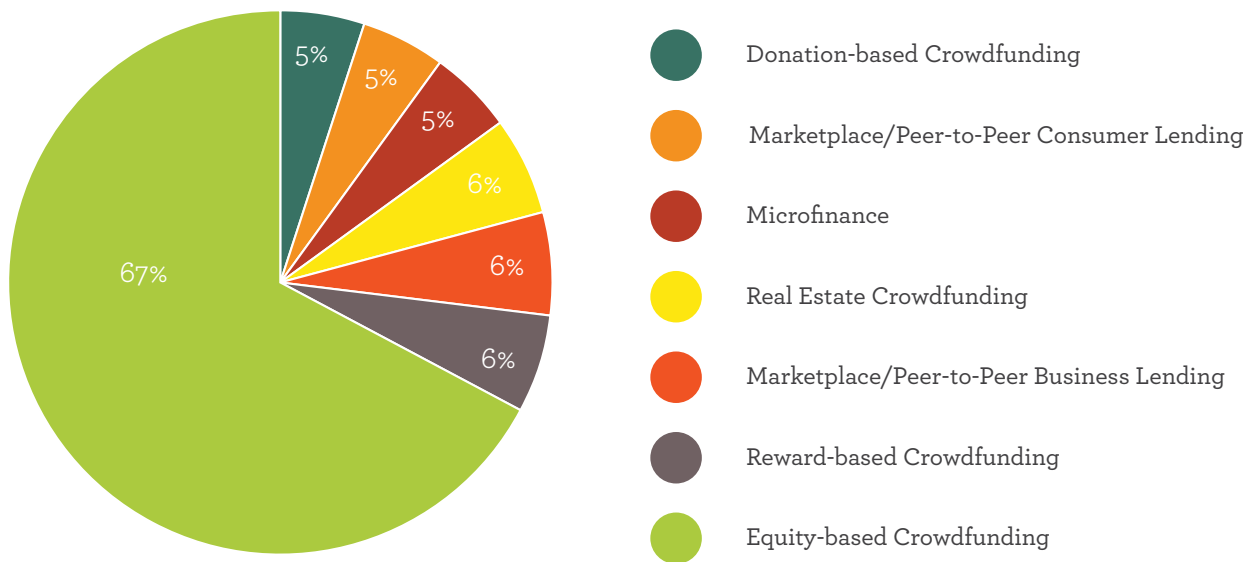


Figure 14. Market Share by Alternative Finance Model in the Middle East, 2015

AVERAGE DEAL SIZE BY ALTERNATIVE FINANCE MODEL



Figure 15. Average Deal Size and Number of Funders by Model in the Middle East

In the Middle East, the equity-based model had the highest average deal size. Serving SMEs and start-ups, equity-based crowdfunding raised an average of close to \$3 million per deal, with an average 41 investors participating in each individual fundraiser (an average investment size of \$70,000). However, the model is strongly skewed by the large volume of equity crowdfunding in Israel, which dominates equity crowdfunding market activity in the Middle East.

Real estate crowdfunding campaigns approached the half-million-dollar mark per fundraiser, with nearly 40 investors participating in each campaign. Peer-to-peer business lending had the third-highest average deal size with over \$91,000 and 65 lenders per loan.

Reward-based crowdfunding followed next, with a high average of almost \$60,000 per deal with nearly 275 funders. This high average can be largely attributed

to high levels of technology-focused products funded in Israel. Consumer technology reward-based crowdfunding typically raises higher levels of funding than other types of reward-based crowdfunding such as cultural, philanthropic or artistic fundraises. With a high level of consumer technology-focused entrepreneurs in Israel, this trend has affected the overall average reward-based crowdfunding raise across the Middle East.

Peer-to-peer consumer lending raised on average a total of \$7,500 with 122 lenders contributing to a typical loan, while microfinance had an average of \$1,451 per loan – similar to the loan size seen in Africa. Microfinance activity recorded in the Middle East occurred primarily in Jordan, Palestine, and Lebanon. Donation-based crowdfunding had the smallest deal size with just over \$1k per raise, with an average of 23 funders.

KEY ALTERNATIVE FINANCE MARKETS IN THE MIDDLE EAST

As with the other regions covered by the Cambridge Centre for Alternative Finance, e.g. the Asia Pacific region, Europe and the Americas, there have been a few countries that have dominated market activity – with a single market accounting for the vast majority of activity. In the Middle East, the regional market leader is Israel, which from 2013-2015 accounted for between 75-80% of total market activity, while the UAE and to a lesser extent, Qatar, Jordan, Lebanon and Palestine accounted for the bulk of remaining activity. Excluding Israel, the total market activity in the Middle East in 2015 was almost \$40 million.

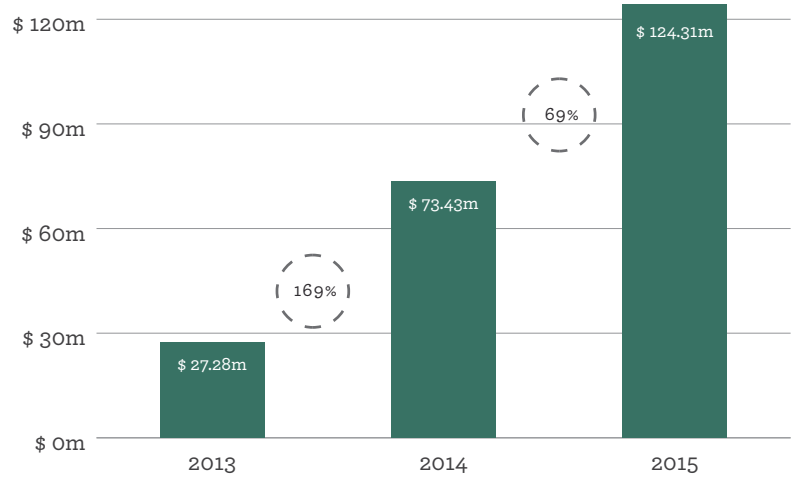


Fig 16a. Total Online Alternative Finance Market Volume for Israel, 2013-2015 (\$ USD)

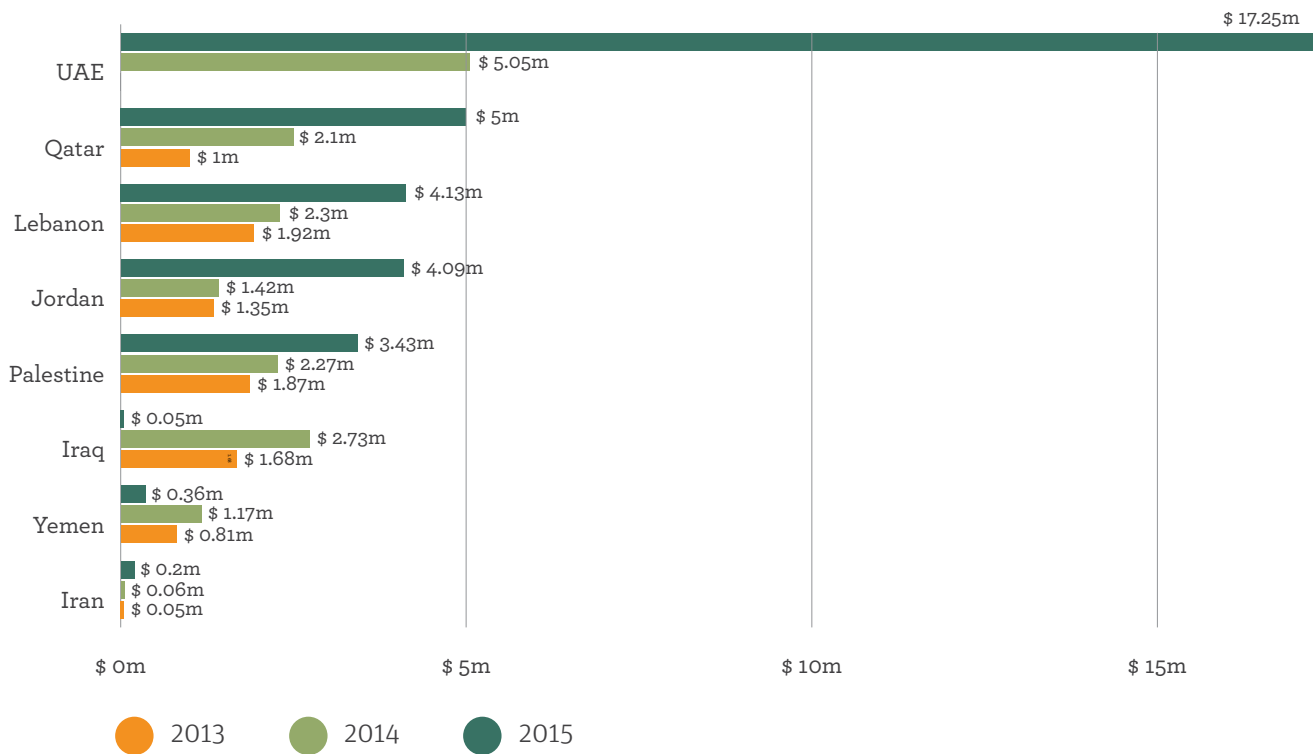


Figure 16b. Total Online Alternative Finance Volumes by Country for the Middle East (excl. Israel), 2013-2015

Israel

The clear market leader in the Middle East was Israel, with a total transaction volume of \$122 million in 2015; unsurprising given the country's unique and specific market context. Israel has a long tradition of investing in and fostering innovation and technology incubation. Innovative financing is complementing this tradition, resulting in a surge in the development of new products by entrepreneurs. This trend is most evident by the vast majority of alternative finance in the country attributable to equity-based crowdfunding

(\$106.5 million) accounting for around 87% of the total national market. The form of crowdfunding is primarily financing technology, ecommerce and internet based businesses. Reward-based crowdfunding (\$7.65 million in 2015) and peer-to-peer consumer lending (\$8 million) each accounted for roughly 7% of market activity in 2015, while microfinance provided a small fraction of a per cent in 2015. There was no other market data recorded for any other alternative finance model in Israel in the period 2013-2015.

United Arab Emirates

Another key country for market activity in the Middle East in 2015 was the UAE, with over \$17 million raised, accounting for almost 11% of the regional total. This represented a substantial rate of growth, year on year, in the region, far exceeding the \$5.05 million raised in 2014 - the first year alternative finance platforms began intermediating funding in the country. In 2015, almost 53% of funds were amassed via real estate equity

crowdfunding (\$ 9 million), with a further 40% of funds raised by way of peer-to-peer business lending (\$6.85 million). This is markedly different from Israel, where equity-based crowdfunding dominates, as well as much of the rest of the Middle East where microfinance, reward and donation-based crowdfunding make up the majority of market activity. The remaining 7% in the UAE was provided via reward-based crowdfunding (\$1.29 million).

Qatar, Lebanon, Jordan & Palestine

Outside of Israel and the UAE, Qatar, Lebanon, Jordan and Palestine, markets that have grown year on year from 2013-2015, each had similar total market volumes in the current period, coming in at around the \$4

million mark. In 2015, these total market volumes were dominated by both non-financial return microfinance, and reward and donation-based crowdfunding - akin to the market composition recorded for Africa.

Iraq, Yemen, Syria, Kuwait & Bahrain

In contrast, market volumes in Iraq and Yemen, which had increased between 2013-14, dropped substantially between 2014-15. This drop is potentially due to ongoing conflicts in these countries. Similarly, in Syria, there were very low levels of reward-based crowdfunding recorded

in 2013 with these volumes dropping to almost zero in both 2014 and 2015. As for Kuwait and Bahrain, the reward-based crowdfunding activity recorded for these countries was almost negligible and only began in 2015.

MIDDLE EAST REGULATORY LANDSCAPE

Further to the above, the leading online alternative finance markets in the Middle East are also those with the most progressive regulatory environment - Israel and the UAE.

A number of laws in Israel affect online alternative finance platforms depending on the nature of the specific services provided, including the Israeli Securities Law,¹⁴ Protection of Privacy Law,¹⁵ Regulation of Investment Advice, Investment Marketing, and Investment Portfolio Management¹⁶, as well as the proposed Credit Data Services Law.^{17,18} In December 2015, the Securities Law and Joint Investment Trust Law was amended with respect to the “Advancement of Investments in Companies Operating in the Hi-Tech Field”,¹⁹ with the objective of allowing start-ups and SMEs to raise capital from the public via investment crowdfunding websites without the requirement to publish prospectuses. The legislation includes start-up/SME fundraising thresholds, to be raised up to: A) ILS 1m (\$258,000) annually without any restrictions; B) ILS 2m (\$516,000) as long as there is a lead investor; and C) ILS 3m (\$774,000) if the Office of the Chief Scientists approves. Investors can allocate up to ILS 10,000 (\$2,580) into a single company and ILS 2,000 (\$516) in a single platform.

As for the UAE, with its federation of seven emirates, there are currently five online alternative finance platforms with a market volume of around \$17.2m. Dubai, followed by Abu Dhabi, is the most advanced FinTech emirate. While there is currently no distinct regime covering the online alternative finance market in the UAE, the financial services sector is regulated by the Central Bank, the Securities & Commodities Authority (SCA), and specific to the Dubai International Financial Centre - the Dubai Financial Services Authority (DFSA). The DFSA and its legislative committee are currently developing a crowdfunding framework²⁰ which is

expected to be released sometime in the first quarter of 2017.²¹ The Abu Dhabi Global Market (ADGM), “the world’s newest international financial centre”, launched in 2013 and includes three independent authorities - the Registration Authority, the Financial Services Regulation Authority and ADGM Courts. The ADGM “aims to become the leading FinTech capital of the Arabian Gulf”²² and in November 2016 was the first authority in the region to launch a ‘regulatory sandbox’ - the Regulatory Laboratory (RegLab)²³. This allows new FinTech firms to receive a temporary licence for two years to develop, test and launch products/services before meeting the full authorisation criteria.²⁴

In the Middle East, FinTech companies, however, continue to be challenged by the fact that most markets regulate nationally, which, in some cases, had led to regulatory differences between the various ‘free-zones’ despite countries being small and cross-border opportunities making cultural and economic sense. Furthermore, capital requirements vary significantly in each nation/free-zone. As a result, much time and money is spent on legal matters determining if and how alternative finance platforms are permitted to operate.

Many emerging markets’ regulators seem to be drawing inspiration from the work of developed market regulators but they often add hard limits - as opposed to taking a lighter touch approach. The Capital Markets Authority in Lebanon (CMA) is a case in point. In 2011 CMA issued a decree regulating equity-based crowdfunding including requiring platforms to submit feasibility studies forecasting hefty minimum capital requirements to get a license. Adding to this, fundraisers need to raise a minimum of LPB 30m (approximately \$21,000) and funders must invest between LPB 750k and LPB 15m (approximately \$500-\$10,000)²⁵ (the average investment amount in equity-based crowdfunding often exceeds \$10,000 in other countries). Despite the

early efforts to introduce a crowdfunding regulation framework, only two platforms operate in the country, perhaps, in part, due to these types of barriers.

For FinTech companies, and especially for alternative finance marketplaces (including marketplace/P2P lending- and equity-based crowdfunding), various laws (e.g. KYC requirements to meet customers face-to-face) and lack of data (e.g. public data on companies and

credit bureaux data/credit scoring data) are some of the ongoing challenges facing the region. To illustrate some of the hold-ups, it was only in November 2016 that the first equity-based crowdfunding platform secured its licence in Dubai.²⁶ It is therefore likely that equity-based crowdfunding will continue to grow in the Middle East over the 2016-17 period as more trading activity takes place in the region.

INDUSTRY PERCEPTIONS OF EXISTING REGULATIONS IN THE MIDDLE EAST

With respect to existing regulation, over half (55%) of the survey respondents in the Middle East indicated that no specific regulation governing their model existed but that it was needed. Just under a fifth of survey respondents in the Middle East stated that, while there were no existing regulations, they were not needed, while around 9% stated that online alternative finance was not legal in their country. Almost 80% of surveyed platforms in the Middle East recognised an absence of regulation that governs alternative finance activity in their respective countries.

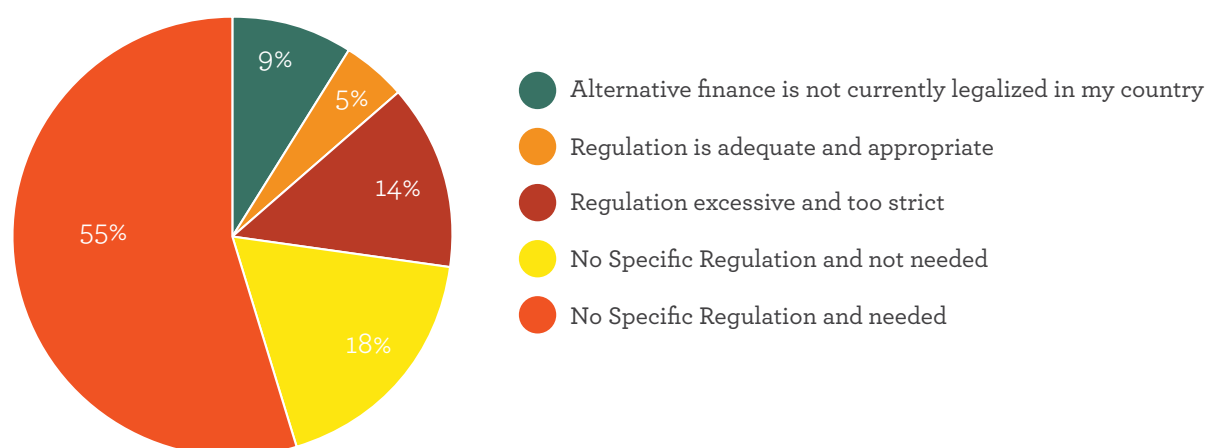


Figure 17a. Industry Perceptions towards Existing National Regulations in the Middle East

INDUSTRY PERCEPTIONS OF PROPOSED REGULATIONS IN THE MIDDLE EAST

With respect to proposed regulations across the Middle East, opinion is sharply divided over the upcoming changes to the regulatory landscape. Almost a quarter of surveyed platforms in the Middle East identified the proposed regulation to be adequate while just under a fifth highlighted the proposals as excessive and strict. In contrast, only 5% perceived the proposed regulation to be

inadequate and too relaxed. A further 19% stated there were no proposed regulations and that they were not needed, while an equal number of survey respondents said there were no proposed regulations but that they were needed. An approximate 14% of surveyed platforms deemed there to be no proposed alternative finance regulations.

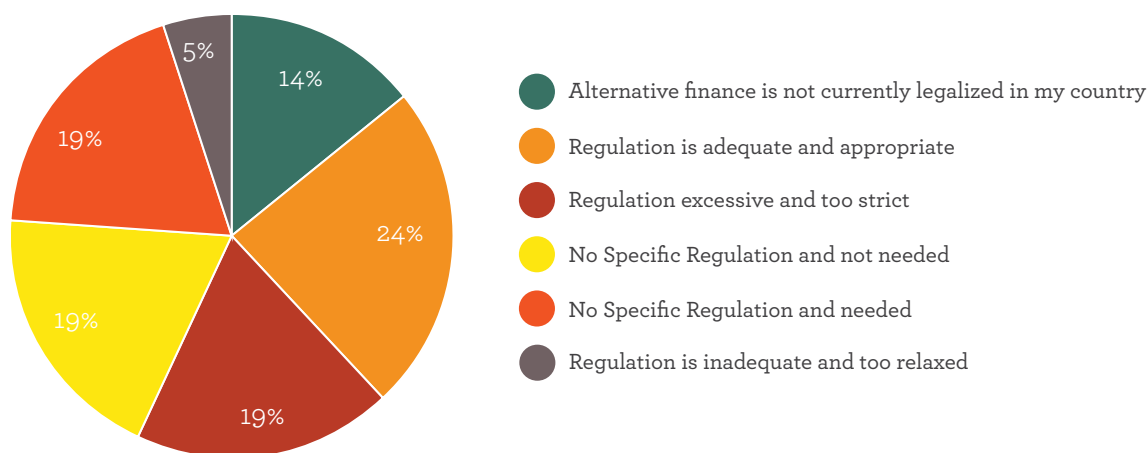


Figure 17b. Industry Perceptions towards Proposed National Regulations in the Middle East

ISLAMIC FINANCE AND ISLAMIC CROWDFUNDING

While still small, Islamic finance is growing rapidly. Nearly a quarter of the world's population are Muslims²⁷ but only just over one percent of total global financial assets are Islamic finance assets. According to a PwC study, it is expected that Islamic finance assets will more than double from USD 1.3 trillion to USD 2.6 trillion by 2017.²⁸

Islamic finance is based on Islamic law (Sharia), a form of code of life in respect to economic, political and social elements. Broadly speaking, money must be used in a productive way, promote social justice and

be ethically traded. Sharia does not allow investment in unethical (Haram) industries including but not limited to arms, entertainment, gambling, and non-halal food. Key principles of Islamic finance are asset-based investments and risk-sharing (profit and loss sharing). Unlike conventional debt financing, instead of charging an interest rate, the financier will receive a return as a portion of the profits earned based on a predetermined ratio, and the financier will also share any losses (Musharakah). Interests can neither be paid nor be received.

The Islamic finance industry is concentrated. The core international participation banking industry markets are Bahrain, Qatar, Saudi Arabia, Indonesia, Malaysia, UAE, Turkey, Kuwait, and Pakistan, which together account for 93% of the industry's assets.²⁹ Outside the Muslim world the United Kingdom is the centre of Islamic financing. It was the first country to launch an Islamic bond (Sukuk), and today six Islamic banks plus 20 lenders offer Islamic financial services products in the UK.³⁰

There are various Islamic finance bodies but the main standard-setting organisations are the IFSB (Islamic Financial Services Board), AAOIFI (Accounting and Auditing Organization for Islamic Finance Institutions) and GSIFI (Governance Standard for Islamic Financial Institutions) whose rules both the DFSA and ADGM refer to. Following an IOSCO (International Organization of Securities Commissions) survey of regulatory responses to crowdfunding in December 2015, the IFSB will follow the development and assess whether there could be future work in the area.³¹ While regulators in Malaysia and Singapore established Sharia-compliant related regulatory guidelines for venture capital firms and crowdfunding platforms, this has not yet been seen in the Middle East. However, Islamic online alternative finance platforms exist in the region and they are checked to see if they are Sharia-compliant via different organisations, including the DMCC Tradeflow Commodity Murabaha platform. Although there are a number of standards and codes across the world, these are not yet applied in a consistent manner and remain a challenge, especially for new Islamic crowdfunding platforms that might have to operate across borders to reach scale.

The Middle East is considered a relationship-based society where funding and investment opportunities depend on closed circles of family and friends. In turn, Islamic finance business dealings are built on trust, openness, respect and transparency - aspects which, in

many ways, align with crowdfunding. Islamic finance also advocates knowing the asset and transaction you are going to invest into, often a feature of crowdfunding. Given these dynamics and corresponding features, as well as the region being home to a large, young, Internet savvy population with limited access to capital and investment opportunities, online alternative financing - in particular Islamic crowdfunding - opens up many potential growth opportunities for the region.

A handful of Islamic online investment-based alternative finance platforms operate in the Middle East. Some of these platforms offer a choice of Sharia-compliant investments only, while others offer Sharia-compliant investments and/or conventional investments. While it is still early days, there is a high demand for Islamic products, with governments increasingly focusing their efforts on understanding and supporting the development, and innovation, of alternative SME financing solutions throughout the region.

Outside of the Middle East, it is estimated that there are fewer than 25 active, Islamic crowdfunding platforms,³² not all of which are formally Sharia-compliant, located in Southeast Asia and the West. Most of these platforms use Murabaha contracts (cost plus profit margin) and Mudarabah (profit sharing) while there are a number of other structures, and unique models, including an Islamic endowment crowdfunding platform.³³ Some of the Islamic crowdfunding platforms are promoted as ethical crowdfunding platforms, thus attracting non-Muslim investors as well.

THE AFRICAN ONLINE ALTERNATIVE FINANCE MARKET



Turning now to review the alternative finance market in Africa, a total of 46 countries' data was gathered and analysed for the purposes of this study. The African online alternative finance market volume was \$83.2 million in 2015, a 36% increase from 2014's \$61.4 million. Unlike the Middle East, the majority of this funding was raised by platforms located outside the continent. Though showing steady growth, the 2014-2015 year-on-year growth rate was slightly less than the 38% increase noted between 2013-14. Across the period 2013-15, a total of \$189 million was raised for projects, businesses and individuals in Africa.

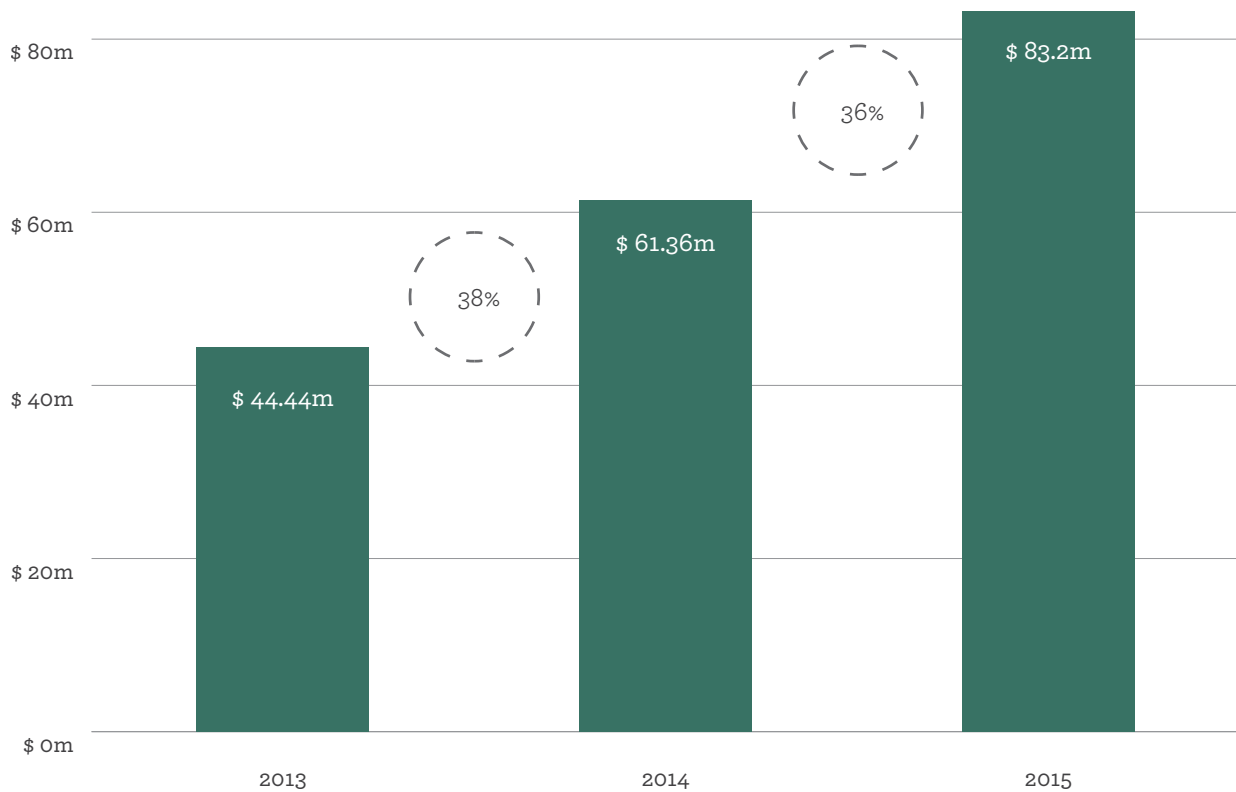


Figure 18. Total Online Alternative Finance Market Volume for Africa, 2013-2015 (\$ USD)

AFRICA'S ALTERNATIVE FINANCE TAXONOMY BY MODEL

Of the total funds raised across Africa between 2013-15, a large proportion of market volume comes from non-financial return models, including the market leader - microfinance. This model accounted for nearly 42% of the African alternative finance market volume in 2015, and for just over \$101 million over a three-year period. Though the predominant model, it is interesting to note that on a year-on-year basis, this model has experienced decline from 2014 to 2015 (-4%), dropping from \$36.32 million in 2014 to \$34.72 million in 2015.

Donation-based crowdfunding is the second most prominent model in Africa, accounting for \$31.4 million over the 2013-15 period. Year-on-year this model grew at a slower pace in 2014-2015 (+40%) compared with the growth rate seen in 2013-14 (+47%).

The third largest model in Africa was peer-to-peer business lending, which totalled \$16 million in volume over a two-year period between 2014 to 2015. This model

experienced rapid growth, starting from a modest \$2 million in 2014, to a sizable \$14 million in 2015.

Equity-based crowdfunding, introduced during the period, raised over \$4 million in Africa in 2015. Real estate crowdfunding, also introduced in 2015, raised \$2.23 million in the same period. Reward-based crowdfunding saw activity levels of almost \$8.5 million between 2013-15 with a slow but steady annual growth rate of 12-14% across the period. Peer-to-peer consumer lending really only began in 2015, with just over \$2 million raised.

As the figure below indicates, business lending (which co-mingles volumes from balance sheet business lending and debt-based securities models), accounted for significant volumes in 2015 (\$8.64 million). However, like many of the models discussed above, growth rates decelerated on a year-on-year basis, with a 14% decline for these co-mingled models between 2014 to 2015.

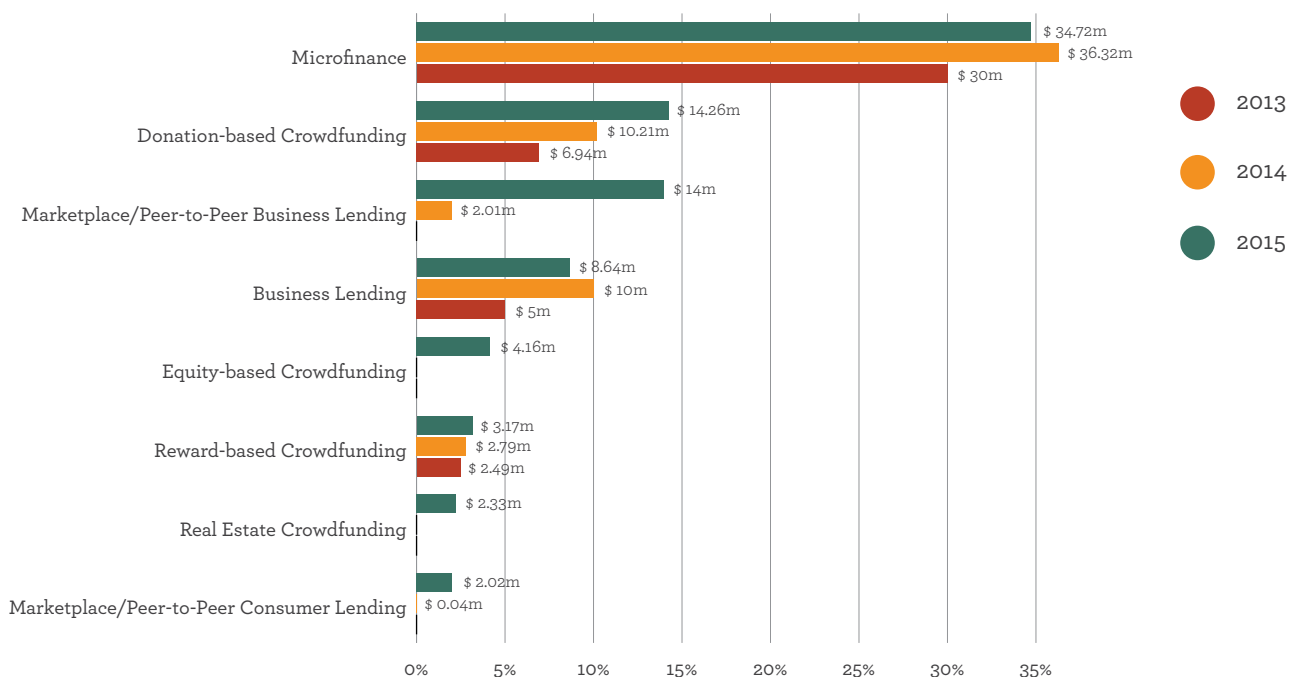


Figure 19. Alternative Finance Volume by Model in Africa, 2013-2015

As highlighted earlier, 42% of the 2015 African alternative finance volume is attributed to microfinance. Non-financial return models accounted for the largest proportion of market activity in Africa, with microfinance, donation-based crowdfunding and reward-based crowdfunding making up a combined 63% of all

activity. Debt-based models, including peer-to-peer business lending, peer-to-peer consumer lending, and business lending, accounted for 30%. Though relatively new to the scene, equity-based crowdfunding and real estate crowdfunding accounted for 5% and 3% of the market share, respectively.

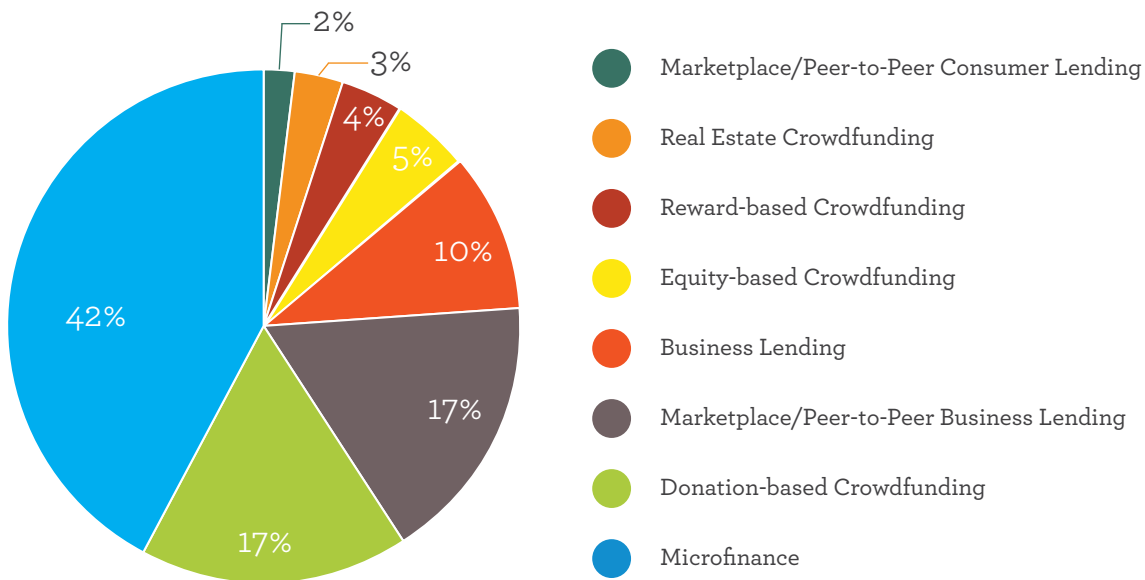


Figure 20. Market Share by Alternative Finance Model in Africa, 2015

AVERAGE DEAL SIZE BY ALTERNATIVE FINANCE MODELS

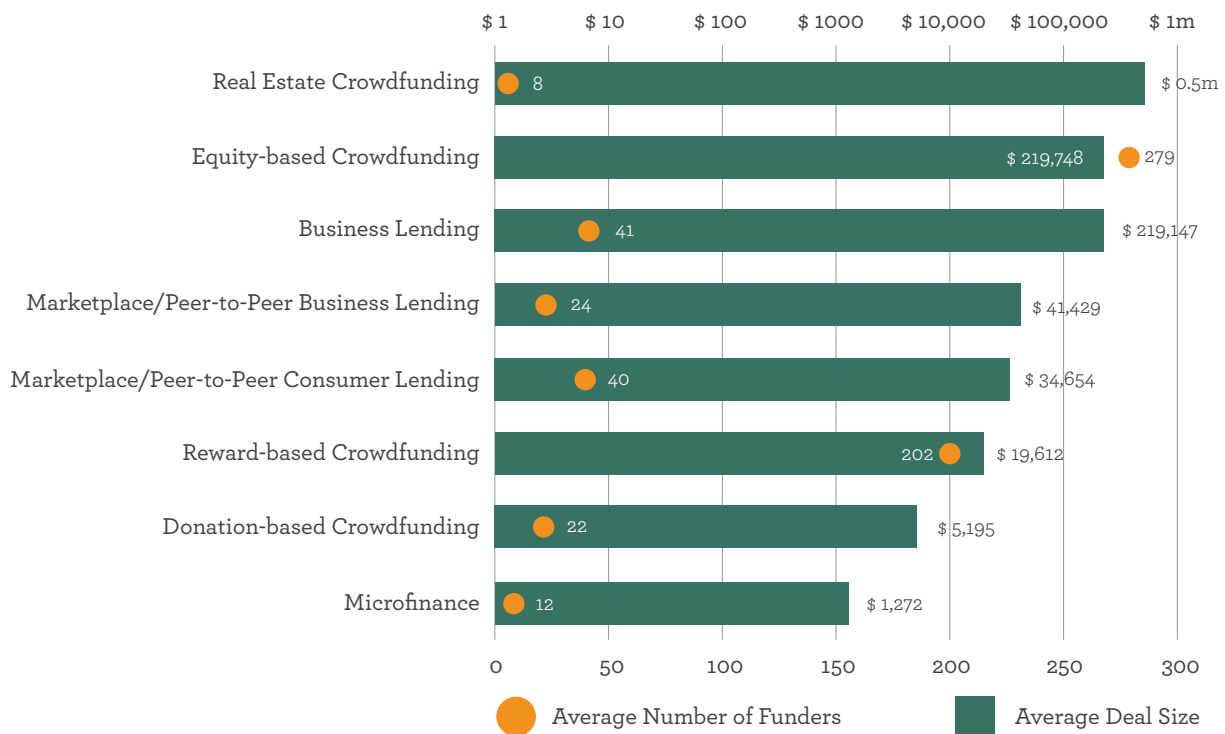


Figure 21. Average Deal Size and Number of Funders by Model in Africa

Across Africa, the average deal (fundraise) size and number of participating investors (per fundraise) varied significantly across models. Real Estate Crowdfunding had the highest average deal size (\$500,000) while Equity-based crowdfunding had the highest average number of funders (279) in Africa. Peer-to-peer business lending had a much lower average deal size (\$41,000), with an average of 24 lenders per fundraise. Peer-to-peer consumer lending saw an average amount raised

of \$35,000, with an average of 40 lenders contributing to each loan. Reward-based crowdfunding had an average deal size of almost \$20,000 (high when benchmarked internationally), with over 200 backers per campaign. The average deal size in the donation-based crowdfunding model was just over \$5,000 per campaign with around 22 investors apiece. Microfinance raised an average of almost \$1,300 per fundraise.

REGIONAL VARIATIONS OF ONLINE ALTERNATIVE FINANCE ACTIVITY IN AFRICA

Given its vast size and diversity it is useful to review the alternative finance market activities in Africa by geographic region: East Africa , West Africa , Southern Africa , Central Africa and North Africa . By size, the East African region is the clear market leader, with a total market share of 41% in 2015. West Africa came in second with just under a quarter of the total African market by volume, followed by Southern Africa with a 19% share of the market. Central and North Africa lag behind with 12% and 4% respectively.

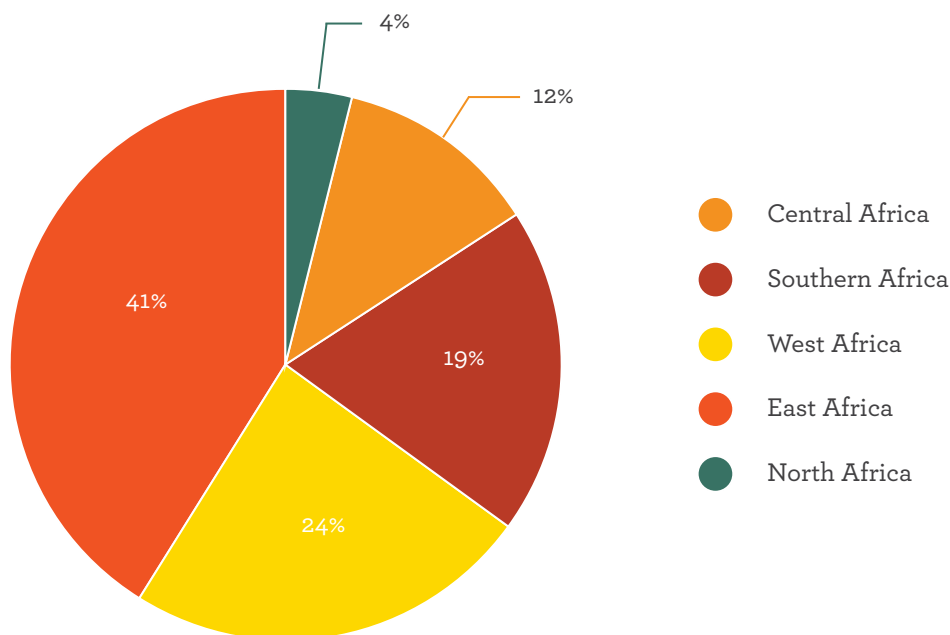


Figure 22a. Market Share by Alternative Finance Model in Africa, 2015

Over the course of 2013-15 the regional market dynamics shifted substantially. As the regional leader, East Africa has slowed somewhat, growing 38% between 2013-2014 and 6% during 2014-15, a three-year average growth rate of 22%. On an overall basis, the market in West Africa also grew over this period, experiencing a 38% year-on-year growth rate from 2013-14, partially offset by a 1% market contraction from 2014-2015. Conversely Southern Africa, driven by trading activity in South

Africa, declined 33% from 2013-2014 before growing an exponential 822% between 2014-15. This growth was largely due to the emergence of the peer-to-peer lending alternative finance model in South Africa in 2015. As for Central Africa, the three-year annual average growth rate was 102% over the period from 2013-2015, while Northern Africa grew by an average of 87% year-on-year over the three years, despite a steep drop between 2013-2014.

A key distinction separating the African alternative finance market from the rest of the world is the dominance of non-investment based alternative finance models. With high levels of microfinance, donation and reward-based crowdfunding in Africa, the majority of funds (raised from funders outside of Africa), seems to be ‘aid’ money. This contrasts markedly from every other region covered by the CCAF whereby commercial lending and to lesser degree, equity funding, dominate market activity.

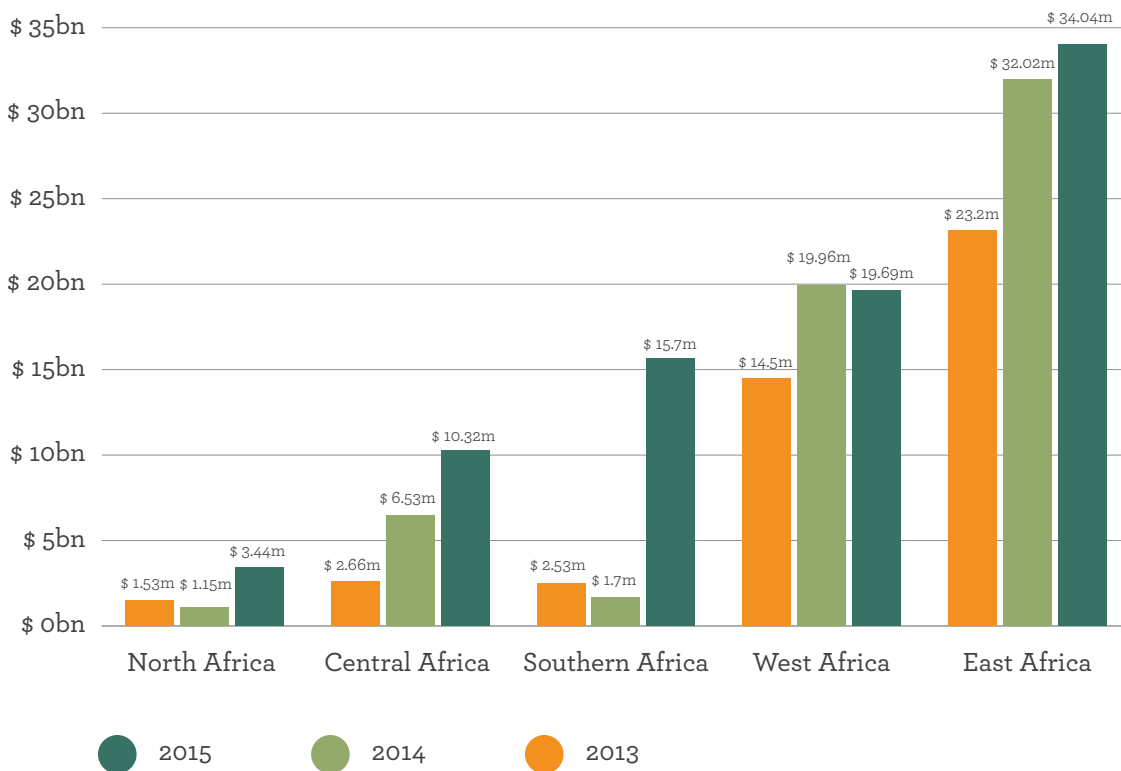


Figure 22b. Total Online Alternative Finance Market Share by Region in Africa (2015)

KEY ALTERNATIVE FINANCE MARKETS IN THE MIDDLE EAST AND AFRICA

The chart below maps out the online alternative finance market in Africa, by size, on a regional basis. While this is useful, it must be remembered that these figures are underpinned by regional market leaders that typically account for the majority of market activity. For East Africa, the market is dominated by Kenya, Rwanda, Uganda and Tanzania, while South Africa dominates the Southern African market. In West Africa, Nigeria, Ghana and Senegal are the regional market leaders and Cameroon accounts for the principal share of Central Africa's alternative finance activity. The small amount of market activity in North Africa is largely attributable to Egypt.

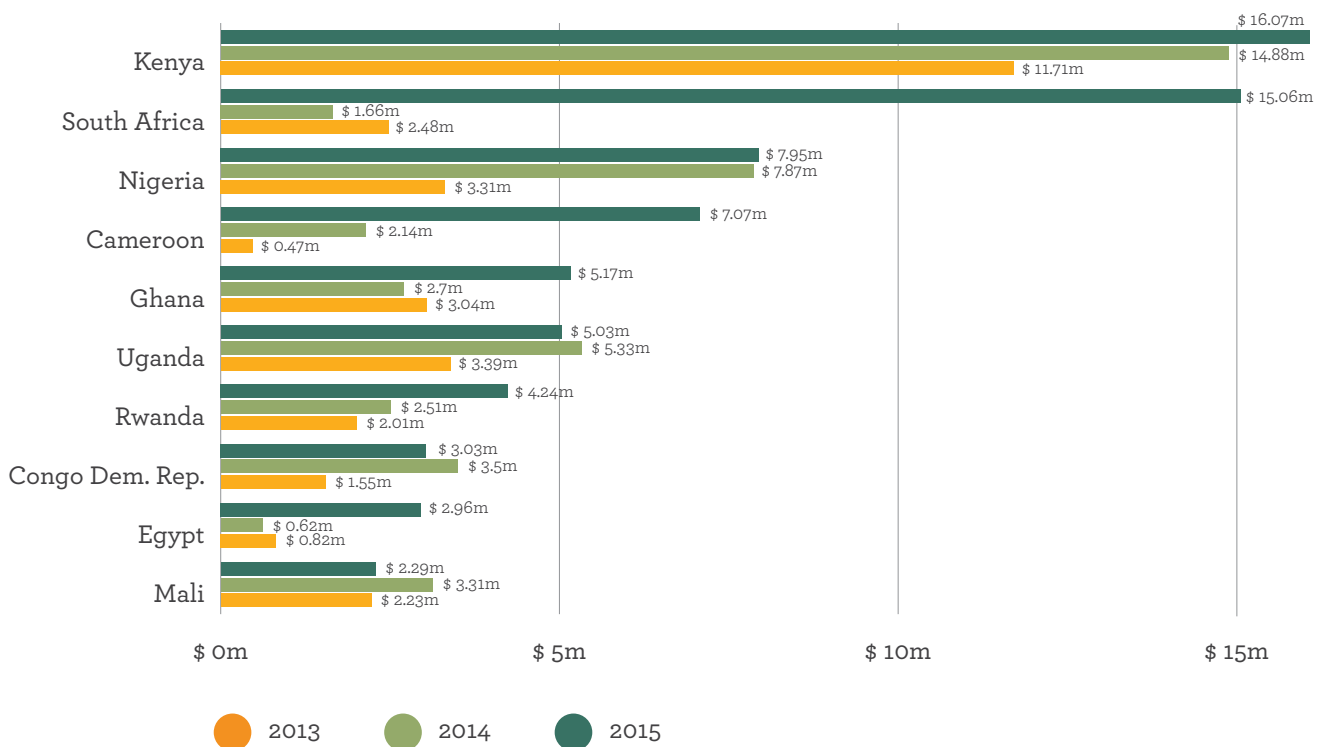


Figure 23. Total Online Alternative Finance Volumes by Country for Africa, 2013-2015

Unlike the Middle East (Israel), Asia Pacific (China), Europe (UK) or the Americas (USA), in Africa there is no stand-out market leader which accounts for the vast majority of market activity. Instead the market is relatively evenly distributed across 10 core countries. This is likely due to online alternative finance models partly acting as a distribution channel for 'aid' in each of these regions. Interestingly, in four out of five of these ten leading markets, the level of trading activity actually shrank during the period from 2014-15, compared with activity levels from 2013-14 (Nigeria, Uganda, Tanzania and Senegal), considered to be reflective of the volatility of non-investment philanthropic capital from individuals.

In Africa, Kenya is clearly the online alternative finance market leader for the continent, with a total of over \$42 million being raised from 2013-2015 via various online alternative finance models – predominantly online microfinance. In 2015, Kenya accounted for almost 20% of the total African online alternative finance market.

The other leading market in Africa was South Africa which, in 2015, represented just over 18% of the total African market with a little over \$15m raised. Prior to this period, the South African market was estimated to be substantially less, at around \$2 million per year. Correspondingly, across the three-year period from 2013-15, South Africa accounted for approximately 10% of the total market activity – substantially less than Kenya.

The make-up of the South African market also differs markedly from the rest of Africa. In 2015, the vast

majority of the South African market activity (\$13.8m) came from peer-to-peer consumer and business lending, with the remaining \$1.2 million spread across microfinance, donation-based and reward-based crowdfunding. The rapid growth and emergence of online peer-to-peer lending models in South Africa suggests that this model will likely dominate the national market there and potentially propel South Africa's position as the emerging market leader for both online consumer and business peer-to-peer lending in Africa.

Nigeria raised almost \$8 million in 2015 with the majority of this coming from peer-to-peer business lending and equity crowdfunding (over 90% of activity). The remaining 10% can be attributed to microfinance, donation and reward-based crowdfunding. In the Central African region, Cameroon saw over 95% of its market activity come from peer-to-peer business lending with the rest attributable to microfinance and donation and reward-based crowdfunding. In both Nigeria and Cameroon, this online business equity and debt market activity is attributed to platforms based outside of Africa financing issuers within these two countries as opposed to domestic-based platforms. For Rwanda (\$4.24m) and Uganda (\$5.03m) in 2015, the vast majority of market activity can be attributed to online microfinance models with a small fraction coming from donation and reward-based crowdfunding. Similarly, for Ghana in West Africa, a clear majority of market activity came from microfinance models with donation and reward-based crowdfunding accounting for a small fraction of the total market activity in this country.



CROWD FUNDING
FOR ENERGY ACCESS
IN AFRICA

The explosive growth of crowdfunding in the last few years has led many actors in the development sector to see the crowd as a potential solution to the financing challenges faced by organisations seeking to help people living in poverty. A recent article in The East African newspaper, for example, reported on three renewable energy businesses raising funds from the crowd to finance their growth.³⁴ Under the sub-heading, ‘Hub for cash’, the article reported \$37.2m in crowdfunding raised in East Africa in 2015, with \$34 billion raised globally by the industry.

The global numbers, and the growth rates, sound impressive but we actually understand very little about the specifics of what is being raised where, and for what, when it comes to international development.³⁵ How much is raised? Who does it go to and how is it used? Does it achieve a development impact? These questions are hard to answer given our current state of knowledge. Because of this the UK Department for International Development contracted Energy 4 Impact in May 2015 to conduct research on the use of crowdfunding in the off-grid energy access sector.

The programme, called Crowd Power, has two components:

- a. mapping of the scale and nature of activity specifically related to energy access in less developed countries – how much is being raised, what type of funding is it, what kinds of organisations are raising funds, who is contributing funding to these ventures, where are they, and what are their motivations?
- b. the provision of matched funding to support energy access campaigns on a selected number of platforms with a view to determining how a donor agency might best deploy matched funds in future. This involves analysing the degree to which matched funding helps attract funding from the crowd for different types of campaigns, and what impact the organisations raising funds achieve with those resources.

The research programme is a deep dive into a specific sector, analysing the potential role of the crowd in helping meet development finance challenges. The programme runs until 31 March 2018.

RESEARCH FINDINGS TO DATE

In May 2016 E4I published Crowd Power: Mapping the Market for Energy Access. The research identified \$3.4m raised for energy access activity in Africa and Asia in 2015. This includes donation-, reward- and equity-based crowdfunding campaigns as well as debt-based transactions. Currently funds raised from the crowd for this sector are a fraction of the total funding available for energy access organisations. Bloomberg New Energy Finance estimated that off-grid solar companies alone raised \$276m in investment in 2015.³⁶ So it’s small scale.

Moreover, crowdfunding for energy access was dominated by debt - 75% of all funds raised. Most of this was micro-finance debt raised through Kiva. Micro-finance lending is concentrated in particular countries where vibrant energy access markets have emerged. In Africa, Kenya accounted for half of Kiva’s micro-lending for energy access. The dominance of micro-finance is consistent with the broader findings in this CCAF report.

Reward-based crowdfunding campaigns were the next most significant in terms of overall volumes with just over \$0.5m raised. The objectives of reward campaigns vary and not all were fully funded. The most successful were campaigns by companies like Gravity Light offering a product sample as a reward for support.

Donations to support energy access projects stood at just under \$0.25m. Global Giving, which enables community-based organisations to raise funds from donors, was the leading platform for this kind of funding.

Equity raises by companies offering products and services to off-grid customers in developing countries was very limited, with \$81,119 raised by a single campaign. In early 2016 two equity-based crowdfunding campaigns on CrowdCube raised \$2.25m, which seemed to indicate much greater potential for the crowd to provide equity for energy access start-ups, but we have not seen a repeat of these kinds of campaigns in the past 12 months. Raising equity from the crowd appears to be a ‘last resort’ for entrepreneurs.

Almost all of the funding, of whatever type, was raised in the US and Europe. There are very few platforms in Africa raising funds from the local crowd on any scale and, outside of South Africa, most of this is in the form of donations because of regulatory obstacles to raising debt and equity. Again this is consistent with the data in this CCAF report.

MATCHED FUNDING

By the start of February 2017, E4I had supported eighteen energy access related campaigns across eight different platforms with over \$300k of matched funding. All of the campaigns successfully met their funding targets, raising in total just over \$1.8m, a significant sum given previous levels of activity in this sector. This included donations, rewards, debt and equity.

As we had expected, according to the broad industry experience, the offer of ‘matched funding’ does help campaigns attract support. Matched funds have been provided in a variety of ways – first tranche, matching *pari passu*, as first loss guarantees, and as vouchers – to test different tactical approaches. Given the small number of campaigns it is hard to draw firm conclusions at this stage about the best ways tactically to deploy matched funds. Tactics may need to differ depending on the nature of the platform and the campaign. But it

is clear that matched funds do incentivise funders to support these kinds of campaigns.

FORTHCOMING REPORTS

The second Crowd Power report will be published in Spring 2017 and seeks to analyse the ‘impact’ achieved by organisations which have raised funds through crowdfunding. Donations to civil society groups can enable poorer households to acquire solar lanterns, micro-businesses can use loans to finance the provision of energy services as well as the manufacture of products that can benefit local households, and reward-based, debt and equity funding can enable SMEs to bring innovative products to market and help them grow their businesses. Examples of these kinds of impacts will be analysed in the report. Three further reports will be published covering (i) what makes for a successful campaign, (ii) who is the crowd funding energy access and what are their motivations, and (iii) a summary report of the overall research findings.

SOME PRELIMINARY CONCLUSIONS

In E4I’s view, the majority of people in Africa and Asia currently without access to an electricity supply will be ‘connected’ either through grid expansion or through businesses capable of servicing large numbers of customers with off-grid solutions such as solar home systems. It is hard to see how philanthropic donations, given the limited scale of giving, can match the scale of need, though donations to community groups may benefit particularly vulnerable people.

Innovative businesses active in the energy access market typically require grants/donations in the early stages of their evolution, with equity, and eventually large amounts of debt, needed to finance growth. The crowd potentially

can help finance start-ups, though raising funds from the crowd is not an easy option and other funding sources such as grants and business plan competitions are often an easier route. We expect there to be relatively few crowd equity raises, and expect these to probably be used to top up a funding round with the majority of the funding coming from angel investors. This may change if more African countries allow their own citizens to invest in equity locally.

Debt financing for SMEs seeking to grow is the area where we currently see significant potential for impact because platforms such as Lendahand and Trine, which specialise in this area, have a network of investors from which funding is raised. There are challenges. Companies that offer the lowest risk to the crowd have typically already reached a scale where the minimum size of deal they will consider is several millions of dollars – a big ask for a crowdfunding campaign. Businesses seeking funding on this scale also have other sources of debt funding available to them. Companies looking for smaller amounts of debt are smaller and younger and, therefore, are higher risk. But despite these dynamics we believe many businesses with growth potential could benefit from crowd sourced debt. Changes to regulations in African countries allowing the local crowd to participate could also increase funding potential.

Micro-businesses, particularly those providing services to an off-grid community, are also helping to meet important needs. Micro-loans can play a role in enabling such businesses to acquire the equipment needed to run these services, and micro-lending is an area likely to grow as more countries develop vibrant off-grid markets.

FUTURE INITIATIVES

Partly based on these early findings, DFID commissioned E4I to engage an existing crowdfunding platform to raise debt for solar home system businesses in Africa from the UK public. The aim of this initiative is to transform this area of crowdfunding, with a target of \$20m to be raised over the first three years. A joint venture between the UK-based Ethex platform and Lendahand, a Dutch social venture, has been contracted to deliver the initiative. They will receive a contribution towards set-up costs, and initial campaigns on the site will be supported through matched funding. E4I has helped introduce potential borrowers to the platform. This activity is additional to the Crowd Power programme described above. The aim is for the joint venture to become commercially self-sustaining and to become an important source of debt for promising early stage businesses looking to expand.

ONGOING REGULATORY AND POLICY DEVELOPMENTS IN AFRICA

Regulation and policy for alternative finance is at the very earliest of stages of development for many financial regulators globally, as is the case in Africa. Nevertheless, there have been a number of positive steps towards developing a specific regulatory response to this emergent industry that provides additional and vital channels of financing for individuals, start-ups and SMEs. What is clear is that there is no bespoke, tailor-made alternative finance regulation regime that has been enacted in Africa as has been the case in other more established markets, for instance, in the UK, Italy, the USA or Malaysia for example. Although bespoke regulations have not yet been enacted in Africa, existing, generic financial services regulation still likely apply to firms seeking to provide services that fall within the remit of these existing laws.

In Kenya, for example, potentially relevant regulation from the Kenyan Central Bank that could be applicable to platforms providing peer-to-peer lending include³⁷ the Central Bank of Kenya Act (the CBK Act), National Payment Systems Act No. 39 of 2011 (NPS Act), the National Payment Systems Regulations 2014 (the NPS Regulations), Money Remittance Regulations (the MR Regulations), Banking Act Cap 488 Laws of Kenya (the BA Act), Microfinance Act No of 2006 (the MA Act) and Credit Reference Bureau Regulations 2013 (the CRB Regulations).

In Uganda,³⁸ a number of laws and regulations likely affect equity and peer-to-peer lending platforms seeking to operate. Examples include the Financial Institutions Act 2004, the Microfinance Deposit Taking Institutions Act 2003 (to regulate and oversee credit issuance), The Capital Markets Authority Act (Cap 84), Money Lenders Act (Cap 273), the Uganda Communications Act 2013 and The Anti-Money Laundering Act 2013.

In Tanzania,³⁹ the regulations that likely apply to equity-

based crowdfunding or peer-to-peer lending include The Bank of Tanzania Act, 2006 (BOTA), The Capital Markets and Securities Act, Authority (CMS Act), The Banking and Financial Institutions Act, 2006 (BAFIA), The Banking and Financial Institutions (Microfinance Activities) Regulations 2014 (the Microfinance Regulations), National Payment Systems Act 2015 (the NPS Act), National Payment Systems Regulations 2015 (the NPS Regulations), National Payment Systems (Electronic Money) Regulations 2015 and the Electronic Money Regulations.

Interestingly, there seems to be common themes between some of the regulatory jurisdictions reviewed by the CCAF in Africa in terms of the types of regulations that likely apply to alternative finance platforms. Some of these common themes include laws and regulations relating to National Payments Services, KYC (Know Your Customer) and AML (Anti-Money Laundering), Money Lending and microfinance rules, registration and financial institution licensing procedures, public offer stipulations or rules governing deposit-taking activities, for example. Therefore, while there are no specific regulations that have so far been created for the alternative finance models reviewed in Africa, existing regulations likely still apply. Platforms seeking to legally operate their platforms in Africa will therefore need to be aware of, and abide by, these existing regulations.

The legal and consultancy costs associated with determining what regulations and rules are applicable to an alternative finance platform seeking to operate in Africa are usually very high. This has led to many of the surveyed platforms in Africa identifying regulatory issues and the associated difficulties of ascertaining what is required in each jurisdiction to be one of the biggest challenges facing their operations. While these issues are prevalent in nearly every alternative finance

market, they are particularly pronounced in Africa where the market is at the very earliest of stages.

Lack of regulatory clarity over what is required make it very challenging for alternative finance firms to operate and may well be hindering market development of equity and peer-to-peer lending models. At present, with the exception of South Africa, many countries in Africa are dominated by non-investment based alternative finance and this is perhaps, in part, due to the regulatory situation, or rather, lack of it across the continent.

Despite these regulatory challenges, there have been a number of very positive developments. In East Africa, the regional alternative finance market leader, a high level conference was held in Kenya in June 2016⁴⁰ hosted by the FSD Africa. This meeting brought together, for the first time, a number of key policy makers and regulators from regional central banks and capital market authorities and other key supervisory and policy-making bodies from across East Africa to discuss crowdfunding and other forms of alternative finance. Since this meeting, there have been a number of initiatives to assess the growth and development of different alternative finance models in East Africa as well as determining the most appropriate next steps in order to facilitate alternative finance market development in this region and Africa more broadly.

The Cambridge Centre for Alternative Finance and the FSD Africa undertook a review of existing regulations

in East Africa that would apply to platforms seeking to operate in the region and raise funds domestically while also drawing insights from more established markets outside of Africa. This research was published in January 2017 a programme of follow up sessions are to be conducted with regulators in East Africa in 2017 in order to build on the findings and proposed recommendations.⁴¹

The key recommendations emerging from this review were grouped into three phases. Firstly, the process of mapping out the existing platforms operating in the region was proposed alongside engagement activities between the African financial regulators and industry players in order to raise awareness and build capacity of the regulators with regard to these emergent innovative financial services. In the second phase, crowdfunding ecosystem trust-inducing initiatives were proposed. This would encompass developing a register of regulation-acknowledged firms, a regulatory sandbox and supporting the formation of regionally or nationally focussed industry associations. The third phased set of recommendations for East Africa relate to government support and endorsement of the alternative finance industry in the region. This third phase of recommendations includes developing a regulatory signposting system to guide firms through the national regulatory requirements to operate different alternative finance models, as well as a public/private co-investment fund replicating the initiatives in the UK, for example where the British Business Bank has lent directly

EXISTING AFRICAN REGULATIONS

Given the regulatory situation in Africa, we now turn to the survey responses of the platforms with regard to their perceptions of alternative finance regulation in Africa. Regarding existing alternative finance regulations across the African continent, 59% of survey respondents stated that there is no existing alternative finance regulation in their respective countries. This grouping was divided more or less equally into three further sub-sections: with 18% stating there is no specific regulation but that is

needed; 18% stating further regulation is not needed and finally 23% stated that alternative finance is currently not legal in their respective countries. For the remaining 41% of surveyed platforms, 20% stated that regulation was adequate in their national jurisdictions, whilst slightly less (18%) stated national regulation was excessive and too strict. The final 3% of surveyed platforms stated that national regulation is inadequate and too relaxed.

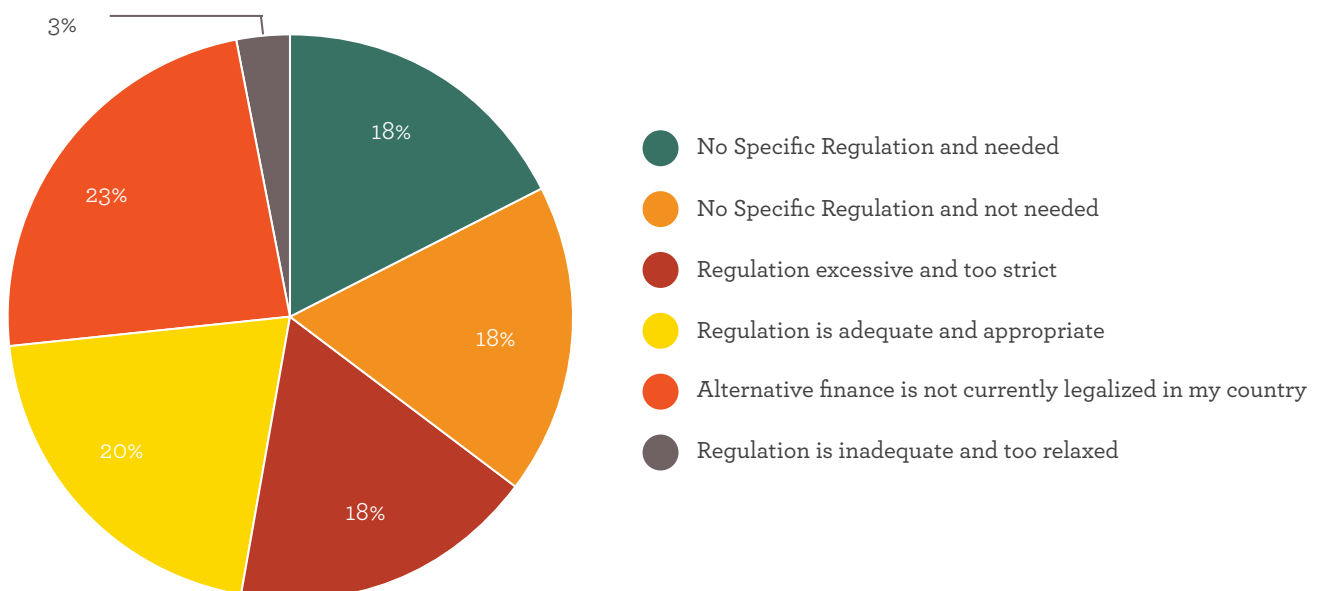


Figure 24a. Industry Perceptions towards Existing National Regulations in Africa

PROPOSED REGULATIONS

In terms of proposed regulations across Africa, over a third of survey respondents viewed the proposed regulatory developments positively, perceiving them to be adequate and appropriate, while only 13% viewed proposed regulations as excessive and too strict. A further 13% also viewed alternative finance to not be legalised even in the proposed, upcoming regulations. In addition, a third of platforms stated that there are no proposed regulations, with 23% of this grouping stating that they are needed, while a substantially smaller proportion (10%) saw no need for further regulations.

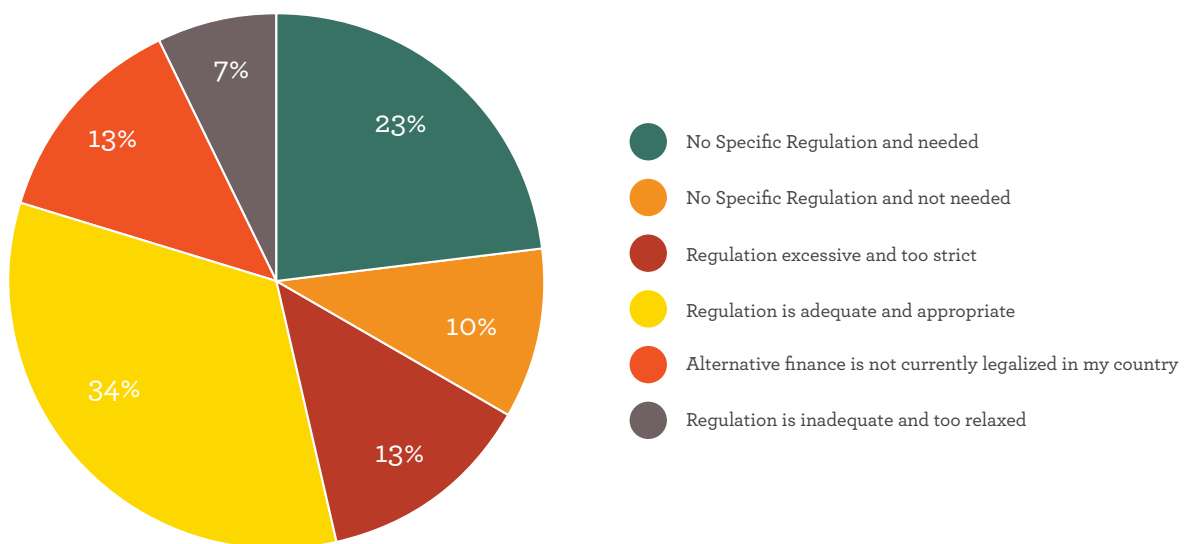


Fig 24b. Industry Perceptions towards Proposed National Regulations in Africa



**PAYMENT
SYSTEMS
IN AFRICA
AND THE
MIDDLE EAST**

The future of payments is arguably being invented not in advanced economies or financial capitals such as London and New York, but in Middle Eastern and African countries such as Kenya – especially where traditional financial services fail to meet the needs of the people.

Kenya is the birthplace of the wildly successful M-Pesa mobile money system, which is now used by over 20 million Kenyans, or approximately two-thirds of the adult population.⁴² By comparison, Apple Pay is used regularly by as few as 5% of eligible users.⁴³ Indeed, M-Pesa has become so widely used in Kenya that it can now hardly be considered ‘alternative’.

What explains the success of M-Pesa, and what makes the Middle East and particularly Africa such fertile regions for payments innovation in general?

The reasons commonly cited for why M-Pesa succeeded in Kenya when so many other mobile money systems have floundered or struggled to gain similar levels of adoption include accommodating regulators, strong operational execution and clever marketing by Safaricom (the owner of M-Pesa), and beneficial timing.⁴⁴ Unlike many traditional financial services, M-Pesa was also well-designed and suited for its target market. While other factors certainly played a role, including the fact that sending money prior to M-Pesa was expensive, high intra-country money transfer costs are not unique to Kenya.

While M-Pesa and other services such as M-Shwari and M-Kesho have had a positive impact on increasing financial inclusion in Kenya, much work remains both there and in other African countries.

FINANCIAL INCLUSION IN SUB-SAHARAN AFRICA BY COUNTRY

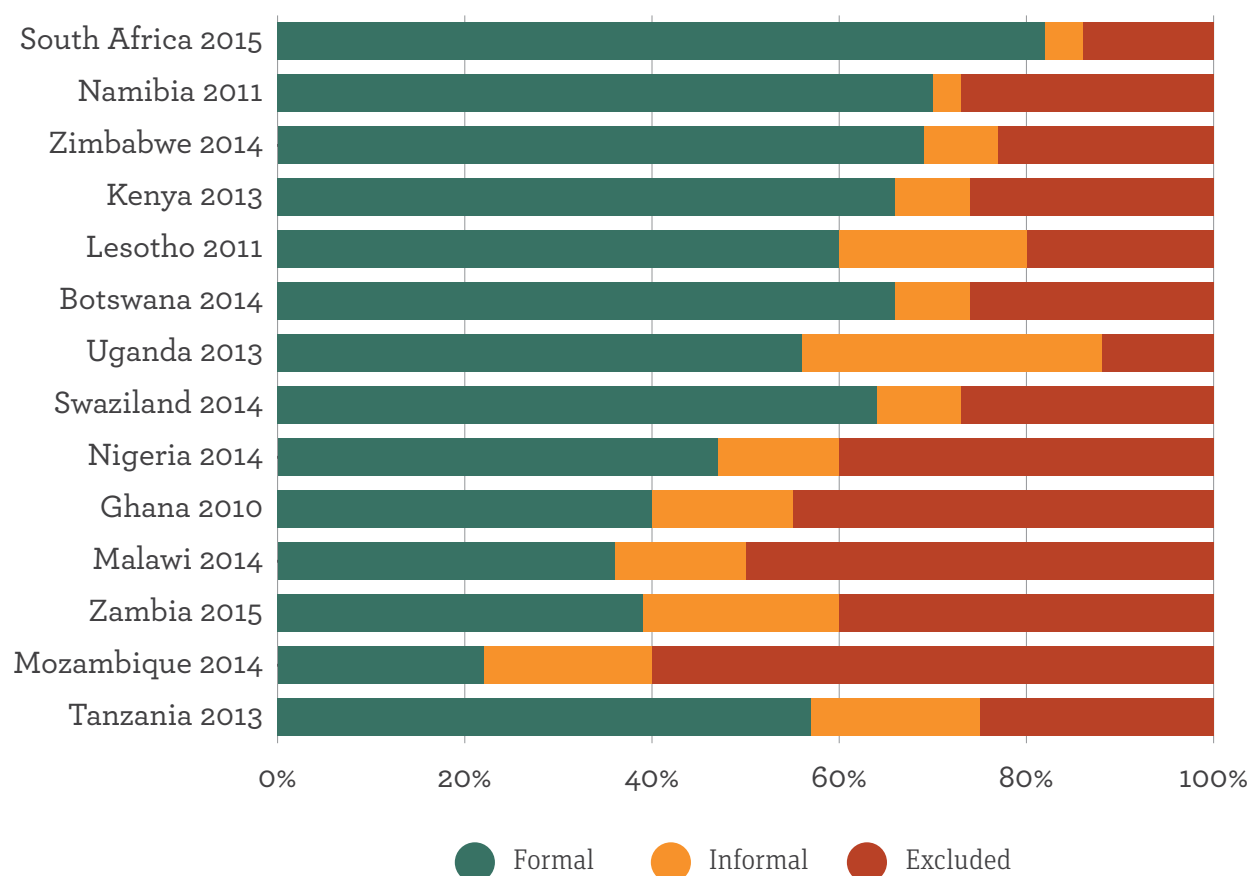


Fig 25. Sub-Saharan African Countries: Percentage of Population Using Financial Services
(Source: FinMark Trust, Finscope Survey)

Looking at international payments, according to World Bank data Sub-Saharan Africa remains the world's most expensive region for international remittances. The average cost of receiving a remittance in Sub-Saharan Africa was 9.52% during Q3 2016.⁴⁵ This is well above the goal set by the G20 to reduce the global average cost of remittances to under 5 percent. The average cost of receiving remittances in the Middle East and North Africa is also well above the G20 objective, at approximately 7%. South Africa is the costliest G-20 country to remit money from, with an average sending cost of 16.9%.

WHY ARE INTERNATIONAL REMITTANCE COSTS SO HIGH?

The need for new payments channels is further supported by the fact that banks continue to be the most expensive means of sending international remittances, with an average global transaction cost of 11.2%

TOTAL AVERAGE REMITTANCE COST BY SERVICE PROVIDER TYPE

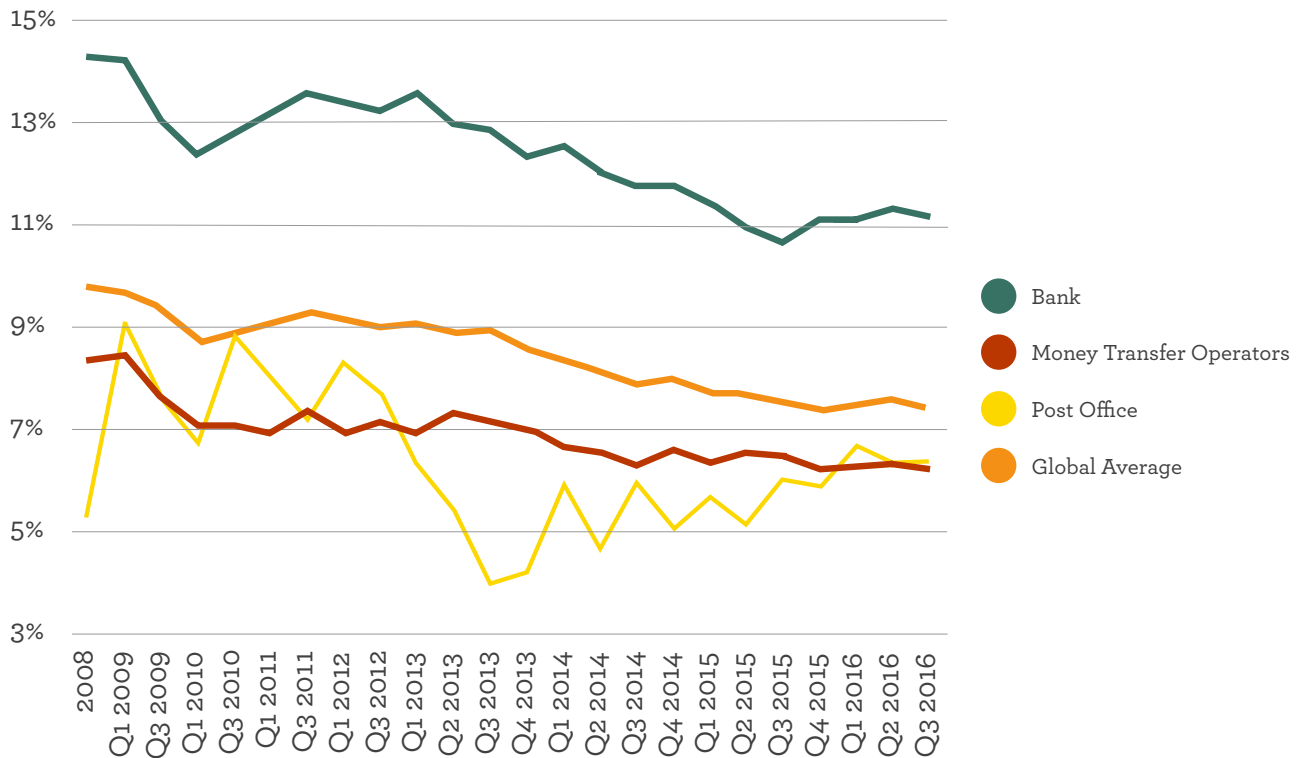


Fig 26. Remittance cost 2008-2016. (Source: The World Bank)

What is less well understood or agreed upon are the reasons for why sending money across borders is so expensive. Some cite an antiquated correspondent banking model, while others blame costly regulation. In recent years ‘de-risking’ by banks and money transfer operators (MTOs) in the wake of additional regulator and compliance burdens has led to a reduction in competition, or even a complete loss of remittance options in a few cases.

In early 2015 Somalia was completely cut-off from receiving formal bank remittances from the United States when the last U.S. bank to provide such services terminated its Somalia transfer operations.⁴⁶ UK and Australian banks have also ceased remittance services to Somalia.⁴⁷ International remittances represent approximately 20% of Somalia’s GDP, so a significant reduction in remittances can have a severe impact on one of the world’s poorest countries.

EMERGING ALTERNATIVE PAYMENT PLATFORMS

In addition to being the year that M-Pesa first started to gain significant traction, 2008 was the year that a mysterious paper was released on an obscure cryptography mailing list describing a new “peer-to-peer electronic cash system”. Eight years on and \$1.3 billion in venture capital has now been invested into the blockchain industry, including into Middle Eastern and Africa-based payments start-ups like BitOasis and BitPesa. Companies like BitPesa utilise the bitcoin network as an international ‘payment rail’ and integrate directly into Kenya’s M-Pesa network to facilitate local currency conversion and withdrawals.

Why have venture investors and payments entrepreneurs flocked to cryptocurrency startups? Cryptocurrencies like bitcoin (over 600 cryptocurrencies have now been created since 2008⁴⁸) offer a range of compelling features, including fast payment settlement times (10 minutes as compared to three days for credit cards), inclusiveness/accessibility (e.g., no need to have a bank account or financial history to setup

a bitcoin wallet and transact), and economically viable micropayments (e.g., bitcoin features eight decimal places and comparatively low cost transaction fees).

In a paper published in 2014, CCAF senior research associate Dr Garrick Hileman developed the BPMI composite index to measure where cryptocurrencies such as bitcoin would have the greatest utility.⁴⁹ The index utilises a data set with 40 variables covering technology penetration, international remittances, inflation, informal economy, financial repression, financial crises (historical), and bitcoin penetration. The index showed that Sub-Saharan Africa is the most fertile region for bitcoin adoption, followed by Latin America and the Middle East/ North Africa. Five of the top-10 countries are located in either Africa or the Middle East.

BITCOIN MARKET POTENTIAL INDEX REGIONAL CONCENTRATION – STANDARDISED DATA

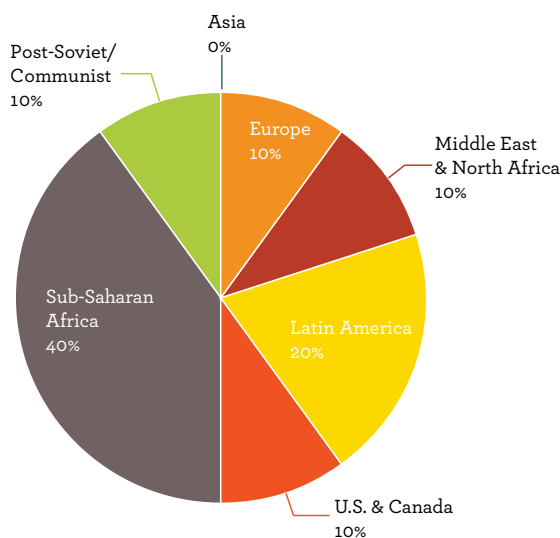


Fig 27. BPMI regional distribution – top 10 countries

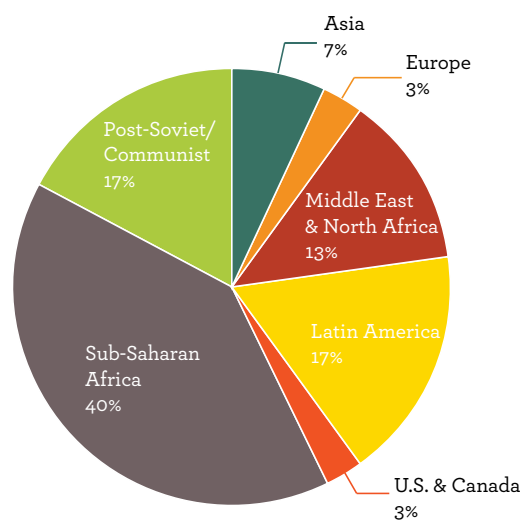


Fig 28. BPMI regional distribution – top 30 countries

BMPI TOP 10 COUNTRIES - STANDARDISED AND RE-SCALED DATA

Ranking	Country (Standardised)	Country (Re-scaled)
1	Argentina	Argentina
2	Venezuela, RB	Venezuela, RB
3	Zimbabwe	Zimbabwe
4	Malawi	Iceland
5	United States	Malawi
6	Belarus	Guinea-Bissau
7	Nigeria	Congo, Dem. Rep.
8	Congo, Dem. Rep.	Belarus
9	Iceland	Nigeria
10	Iran, Islamic Rep.	Angola

Fig 33. BMPI Top 10 Countries

Several countries in the Middle East are actively investing in developing fintech and blockchain hubs. Abu Dhabi regulators are recruiting blockchain startups for a FinTech incubator, while Dubai has created a public-private partnership between businesses, government and startups called the Global Blockchain Council.⁵⁰

To better understand the emerging alternative payments landscape in the Middle East and Africa the CCAF is currently undertaking a global blockchain and cryptocurrency benchmarking study. Results from the study will be published in early 2017. For any questions about this study please contact Dr Garrick Hileman at g.hileman@jbs.cam.ac.uk.

END NOTES

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