dmac
data management
and analytics
capabilities

Financial Exclusion in Sierra Leone

80 per cent of Sierra Leoneans still face financial exclusion even with the emergence of mobile money. However, recent survey data from the World Bank (Global Findex 2017) suggests that financial inclusion is increasing for a segment of the population while others are being left behind. This focus note unpacks these trends and uses other local data sources to characterise both the challenges and opportunities that result from uneven levels of access evident across the country's regions.

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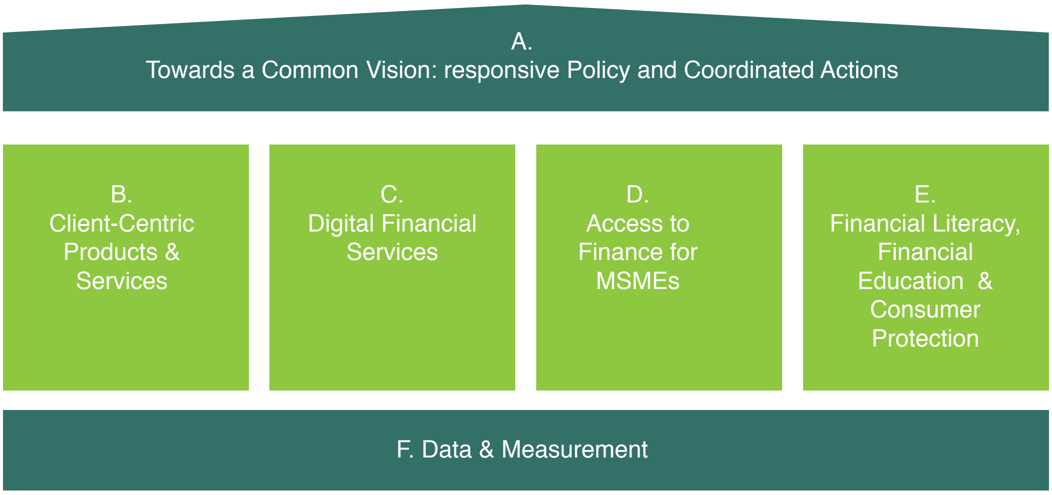
Why does data matter for the financial sector?

Effective access to financial services and funding for catalytic investments helps people make their way out of poverty by facilitating economic growth and stability. The National Strategy for Financial Inclusion (NFIS) 2017–2020 aims to transform the financial sector to serve the underserved and unserved segments of Sierra Leone and contribute to a more inclusive, resilient and economically vibrant country. It highlights data and measurement as the foundation for all its key implementation priorities.

Key areas of intervention in NFIS 2017-2010



The amount of information and data available to Financial Service Providers (FSPs) to enable them to make better decisions about customer needs and risks has grown considerably.

The use of mobile phones and mobile money, as well as of social media and the Internet, are creating valuable ‘digital data’ profiles for people who do not access formal financial services. Hence, there are various sources of data that mean the unserved and underserved should not be seen as one anonymous mass. In this focus note, we highlight a few cases of how public domain data can be used to scope the financial inclusion challenge. In addition, we demonstrate how data presents an opportunity for accomplishing at least three of the six key NFIS implementation areas illustrated above: Client-Centric Products and Services, Digital Financial Services and Access to Finance for small and medium enterprises (SMEs).

Public domain data enables FSPs to segment users and non-users of formal financial services and to make comparisons between their social background, economic wellbeing and geographical location. This facilitates an informed commercial assessment of potential markets amongst unserved and underserved segments. The Data Management and Analytics Capabilities (DMAC) programme seeks to overcome the information and skills gap asymmetry that prevents FSPs from leveraging available data and information – some of it external, some internal – to better understand the financial needs of customers within their operating markets. These data-capacity constraints are costing FSPs missed profit opportunities. Individuals also need to know that they can leverage information assets created from mobile phone, mobile money and internet usage to build credit profiles that will enable them to access more formal financial services.

Where to start?

The first step is to start using the growing body of good quality publicly available data. In this section, we look at four high-quality local data sources that all have a potential relevance to financial inclusion; plus one global source. Table one looks at relevant publicly available data sources and their relevance to the three NFIS key implementation areas identified in the previous section.

Table one: Mapping of five key public domain data sources for their relevance to three of the NFIS key implementation areas

	National Census (2015)	Integrated Household Survey (2011 + 2018 due)	Labour Force Survey (2014)	MIS-DHS (2016)	Findex (2011/2014/2017)
General relevance	Very fine microdata on who lives where and basic characteristics that can support access point catchment area planning	Wealth grading data + income/ expenditure at household level plus educational status and employment status of household members	Labour force survey with full detail on employment and un/ under-employment plus relative formality/ informality	Malaria Indicator Survey / Demographic and Health survey with relatively up to date household profiling	World Bank Group's triennial Global Financial Inclusion database – small sample but gives trends/ benchmarks
Particular relevance to NFIS Area (B) – Client centric Products and Services	No direct relevance	Has basic question on access to both formal/ informal saving and credit and allows profiling of served / unserved by region Including age profiling	May be possible to provide extra detail on sources of income for individual household members by education/ employment status	Basic question on bank account/ informal saving with some extra detail on women's empowerment	Adds mobile money to IHS formal/ informal definitions (to which it broadly reconciles) and adds some use data to basic access but only at national level
Particular relevance to NFIS Area (C) – Digital Financial Services	Combine with access point geolocation to get population within 2km, 5km, 10km, etc. (already being done within the Bank of Sierra Leone)	Limited – asks about ownership of mobile phones in household (up to two) and access to internet	No questions on mobile phones in either survey		See above re mobile money and also allows estimates of mobile access to other formal finance
Particular relevance to NFIS Area (D) – Access to Finance for MSMEs	Fine granularity market scoping for different levels of involvement in SME and informal MSE	Links level of micro, small and medium enterprise (MSME) involvement to formal/ informal access to savings and credit down to regional level	Detail on family (MSME) farming and non-farm activities (including a borrowing question but no other financial inclusion data)	No direct relevance	Some very basic questions on saving/ borrowing for business plus receiving agri-payments via mobile
Access/ caveats	Special tabulations have to be requested from Statistics Sierra Leone; no access to individual records	Databases and questionnaires/ reports downloadable from World Bank Microdata (need to register for databases but questionnaires/ reports are publicly available). Statistical software is needed to analyse data.			Openly available – from World Bank Group Global Findex with 2011/2014 microdata available

Key findings

NFIS Area B: Client Centric Products and Services – Characteristics of who is and is not being served and how this is changing over time using World Bank data sources

World Bank Group provides financial inclusion indicators for 140 countries (Global Findex) for three separate points in time (2011, 2014 and 2017) and these are available to any FSP as a free download. The DMAC team used this data to analyse trends in take-up of formal finance by different parts of the adult population in Sierra Leone.

Growth in formal inclusion rebounded strongly after Ebola with numbers reached growing at a compound 11 per cent per year since 2014. However, even this rapid growth has not been enough to keep up with population growth so formal exclusion is still growing in numbers terms albeit much more slowly.

Trends in formal exclusion/inclusion

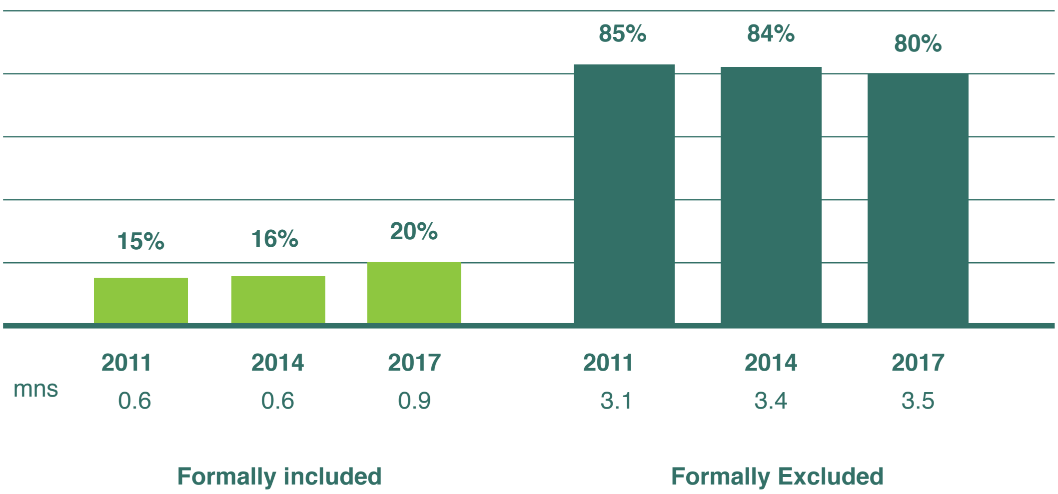


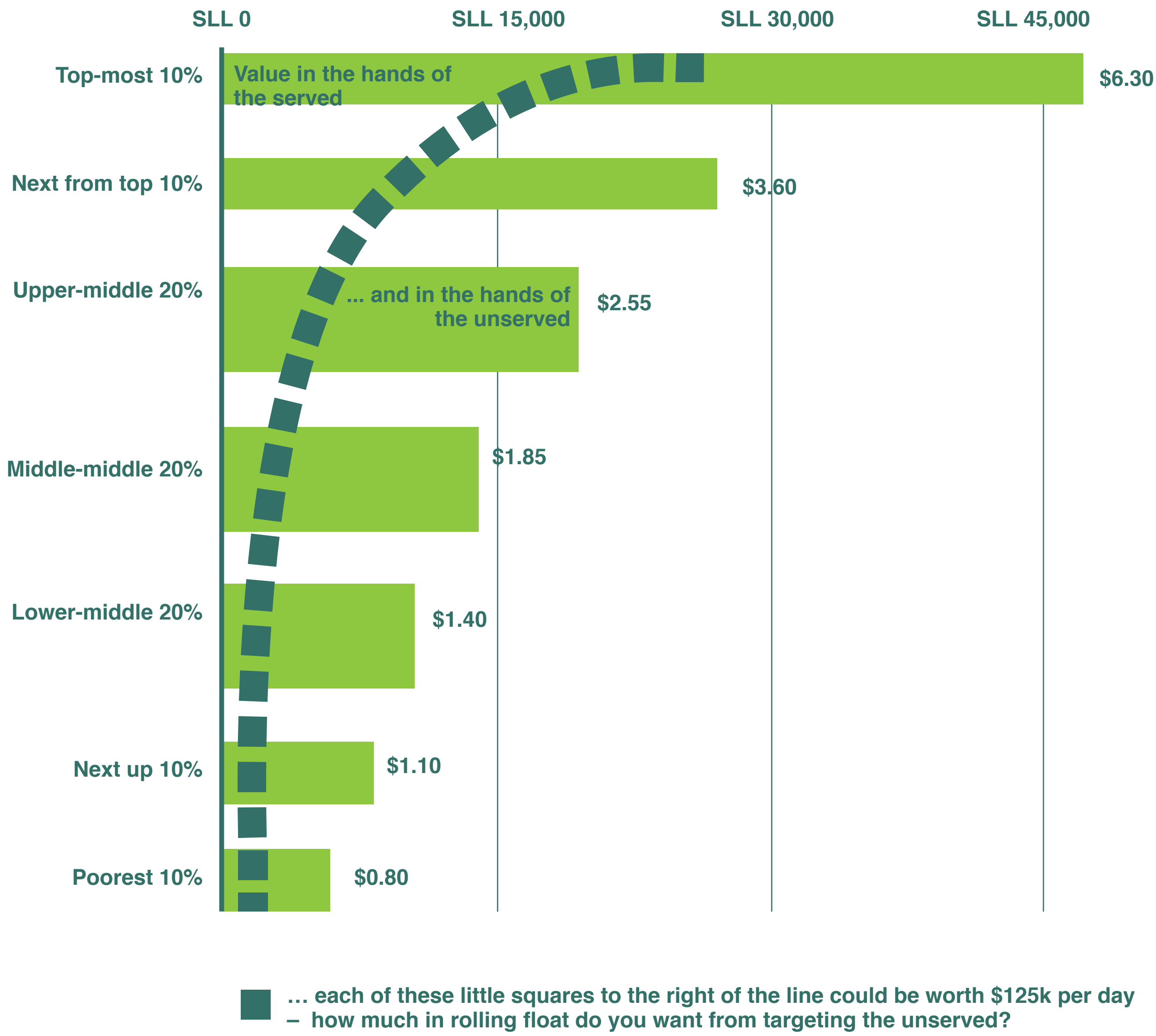
Table two: Financial Inclusion of different population segments

Male access grew by enough to keep the number of excluded men unchanged.	**Men**	25 per cent served by 2017 up from 19 per cent in 2014 12 per cent compound annual growth over 3 years	**Women**	15 per cent served by 2017 up from 12 per cent 10 per cent annual growth
Women and older adults accounted for all the growth in overall exclusion.	**Young adults** (15-24)	19 per cent served by 2017 up from 6 per cent 47 per cent annual growth	**Older adults** (25+)	20 per cent served by 2017 unchanged on 2014 3 per cent annual growth
The real gainers were young adults.	**Bottom** 40%	13% served by 2017 up from 7% 26% annual growth	**Better off** 60%	24% served by 2017 up from 21% 7% annual growth

Poor people gained access much faster than those better-off but there are still large numbers of unserved adults at all income levels.

Right along the income spectrum, more value passes as cash and barter through the hands of the unserved than is handled by the served more formally via accounts or mobile wallets.

Spending power per adult per day



With so much value in the hands of the unserved, this represents a real opportunity for FSPs to bring cash circulating in the informal economy into the formal sphere.

Key findings

NFIS Area C: Digital Financial Services – How mobile money is reaching previously unserved segments

The fact that so much value circulates beyond the direct reach of formal finance, even in the bottom half of the income spectrum, creates an opportunity for Mobile Network Operators (MNOs) to reach financially excluded segments in ways that Formal Financial Institutions (FFIs) cannot. This is already happening in Sierra Leone and Global Findex data was used to draw a distinction between people who have FFI accounts and/or mobile money. Mobile money makes a real difference to how people access financial services in three ways:

Deepening existing access

people mixing mobile money with existing access to FFIs

Substitution

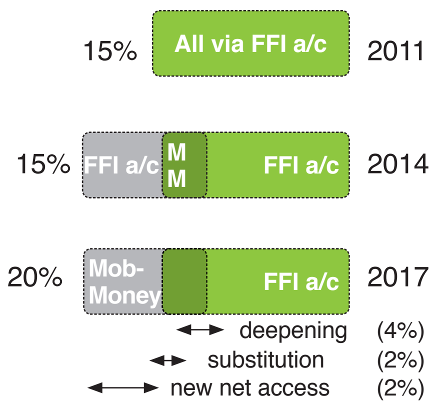
where people use mobile money instead of FFI accounts

Providing new access

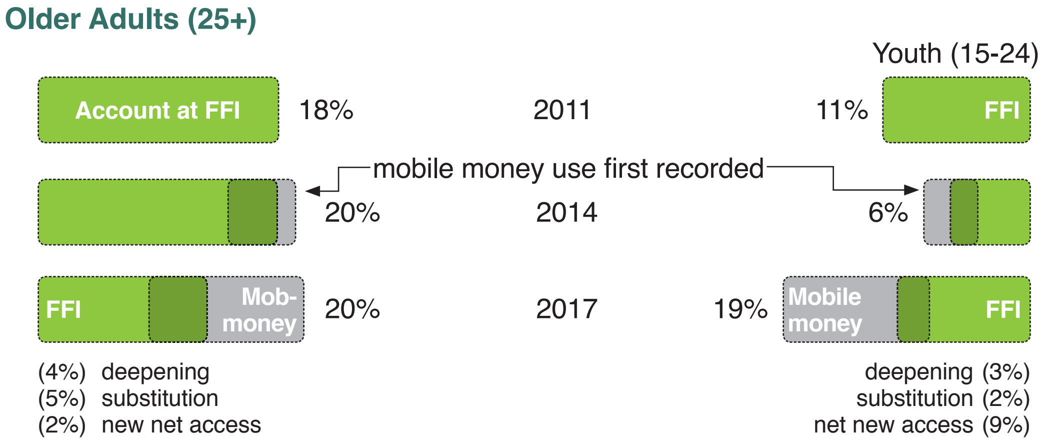
to people who would otherwise never have been served

Between 2011 and 2014 overall inclusion for all adults was unchanged at 15 per cent and early spread of mobile money mostly involved deepening with very limited substitution and no net new access

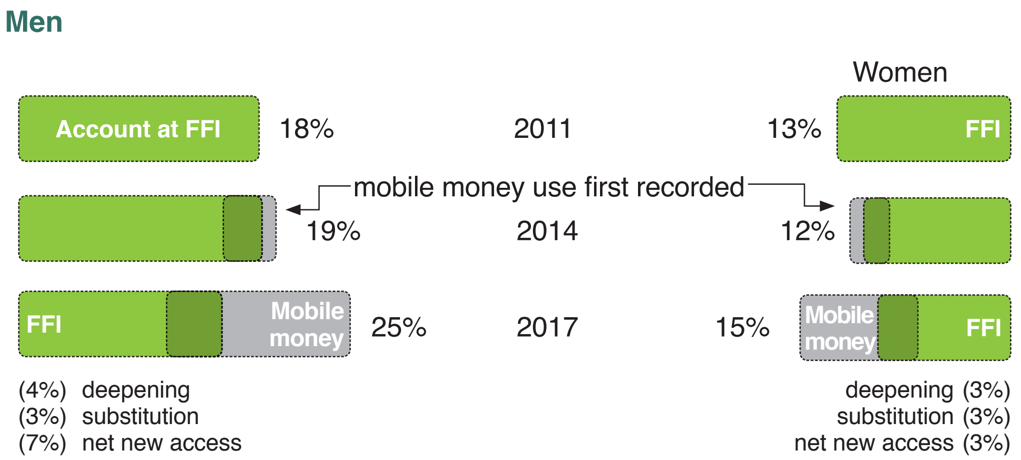
Between 2014 and 2017 there was hardly any more deepening, some very limited further substitution and the steady spread of mobile added 5 per cent net to total access



The rapid growth of formal inclusion for young adults between 2014 and 2017 was all due to the spread of mobile money, with very little deepening or substitution and a lot of net new access being created. In contrast, older adults just substituted increased use of mobile money for previous FFI access.



The difference between improving rates of male inclusion and lagging female inclusion appear to have nothing to do with differences in patterns of uptake. Both have deepened a bit and substituted as well but proportionate rates of expansion in access have been broadly the same. The problem is that women are being left behind by both formats.



Mobile money is clearly working for young adults and poor people. Women, however, constitute a big opportunity for all kinds of FSPs to target.

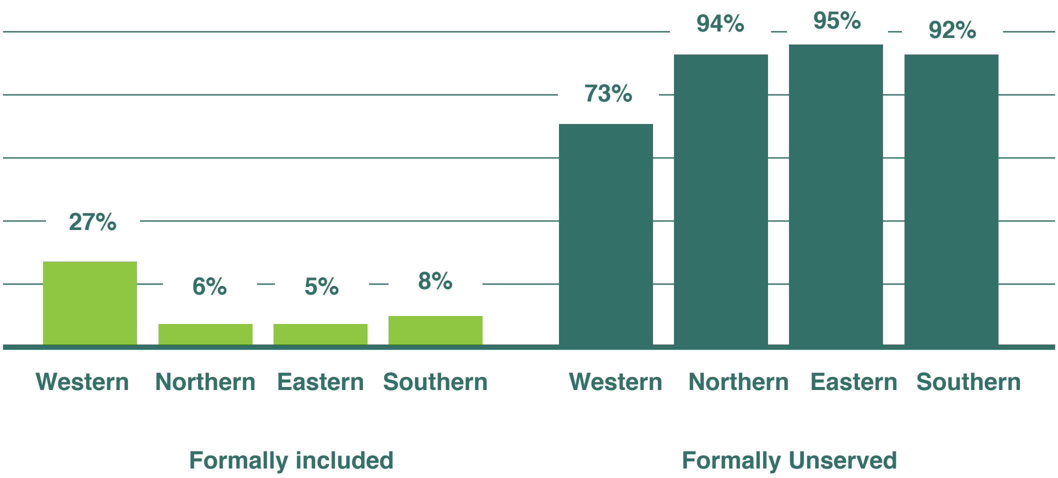
Key findings

NFIS Areas B and C: Client Centric and Digital Financial Services – Using Statistics Sierra Leone survey data to identify the opportunities and challenges of going regional

The World Bank data used so far provides good national insights but involves too small a sample to say anything meaningful about uneven access to financial services across the country. This is a key challenge identified in NFIS 2017-2020. The DMAC team used NFIS data and two large national household surveys to better understand the situation.

One of the national surveys used is relatively recent (the MIS-DHS 2016[1] survey) but does not separate formal from informal inclusion. A better survey for doing this is the 2011 SLIHS[2] but this is rather old. The DMAC team started with the SLIHS and used this to project forward differences around national averages as indicated by Global Findex.

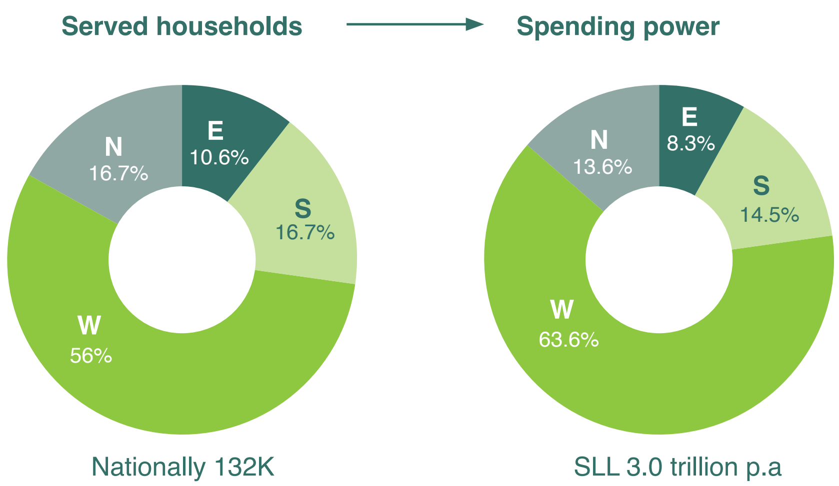
Regional rates of formal inclusion/exclusion

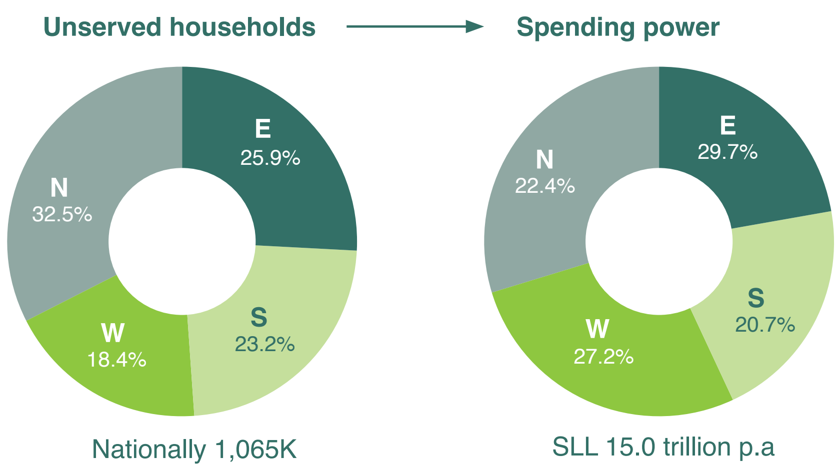


[1] Malaria Indicator Survey (MIS-DHS) 2016
[2] Sierra Leone Integrated Household Survey (SLIHS) 2011

The main focus of the DMAC team work has been to get a regional split of both the number of served and unserved adults and a value split of the spending power passing though the hands of each group. To do this, adjustments had to be made for the differences between individual and household access to formal finance. The rates in the chart on the previous page are household access rates and average 11 per cent across all regions, whereas 2011 Findex data indicated that formal inclusion at an individual level averaged 15 per cent nationally.

These differences are indicative of rich potential pathways for well designed and marketed products to either get into apparently unserved households or spread through them once one household member signs up.[3] Understanding them and their impact on measured data is a potential competitive advantage that DMAC aims to bring to supported partner FSPs. For the purposes of this briefing, however, our analysis focuses on the split of served and unserved households by region and their total household spending power.





[3] Where the individual penetration ratio is higher than the household one it can often indicate either heightened levels of adults within a household all taking some sort of account/wallet or unserved heads of household being unaware of undisclosed account/wallet-holding by other adults in the household.

Conclusions

The purpose of this briefing is to demonstrate the potential for public domain data to help FSPs find genuinely commercial opportunities to start doing business with the 80 per cent of Sierra Leoneans who currently have no FFI account or mobile money wallet. This is a huge target market (3.5 million unserved adults). The analysis of external data has facilitated the profiling of served and unserved segments and the identification of trends in how the served are being reached and where the unserved lie geographically and on the income spectrum.

Even this early-stage analysis suggests a number of opportunities for FSPs to reach potential customers from the unserved and underserved market segment:

- the 80 per cent of adults who go unserved translates one for one into 80 per cent of all household expenditure passing through their hands – FSPs could bring more of this into the formal sphere by offering bank accounts, mobile wallets and other services to those currently only using cash and other informal financial alternatives;
- the unserved are not particularly poor – the bulk of the unserved circulating value of money is moving around in the mass-middle and upper-mass middle market (i.e. not the top quintile nor the bottom two quintiles);
- nor will moving outside the relatively well-served Western region mean going particularly downmarket as the regional splits of both served and unserved spending power are not much different from the matching regional splits for served and unserved households – the challenge of going regional is more supply-side (distribution, understanding market context, etc.) than demand-side (means and affordability);
- women control much of the day-to-day circulation of household spending power but are lagging behind in terms of financial inclusion – this market segment represents a real opportunity for FSPs to expand their customer base and capture cash flow but neither FFIs nor mobile money operators do particularly well in this market;
- young adults across the income spectrum are responding very well to mobile money and now make up for half of total new take-up but there are still eight unserved young adults for every young-adult mobile wallet user. MNOs need to consider value added financial services specifically designed for young adults and FFIs should consider whether this is a better way of reaching the young-adult market than trying to do it all by themselves;
- insurance companies might also explore using mobile phone technology to increase the spread and depth of their services; and given the uptake of mobile money services and other technology, there is also an opportunity for financial technology companies (fintechs) to work with MNOs, FFIs or insurance companies to facilitate digital financial services.

We would encourage FSPs to do further research into these potential new market areas drawing on the external sources we have highlighted in this note. Support is available through the DMAC programme to FSPs interested in using data to develop client-centric products and service-delivery improvements as outlined in our call for proposals.

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DMAC is a two-year programme initiated by Financial Sector Deepening Africa (FSD Africa) in partnership with the International Development Research Centre (IDRC). DMAC is implemented in Sierra Leone, Tanzania and Zambia.

The programme is designed to build capacity within FSPs in SSA to use data-driven evidence to design inclusive and affordable financial products and services that respond to the needs of their customers. It is implemented by Oxford Policy Management (OPM), in collaboration with Accion's Global Advisory Solutions and Master Data Management (MDM).

To find out more,

visit **www.opml.co.uk/projects/deepening-financial-inclusion-in-sub-saharan-africa**

If you would like to be kept updated on our progress from time to time, please email **dmac@opml.co.uk**

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