



Implementing and interpreting multi-country longitudinal studies through the COVID-19 pandemic

Shirley Jeoffreys-Leach and
Bobby Berkowitz

GCRO: Collecting Social Data

August 2020

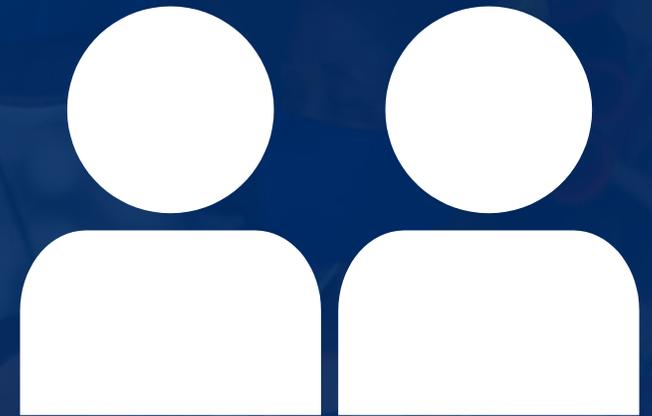
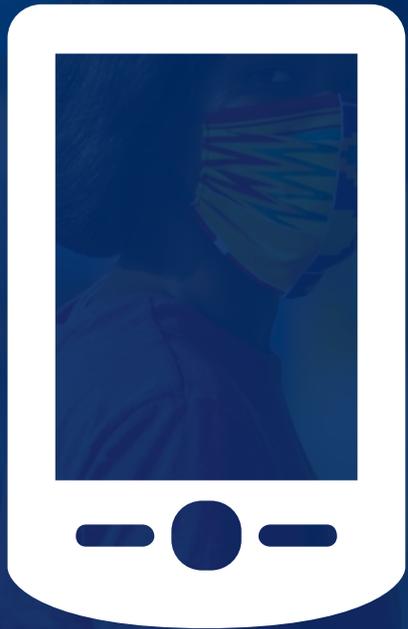
Contents

FinMark Trust and data

Sampling and design effects

Cross country learning

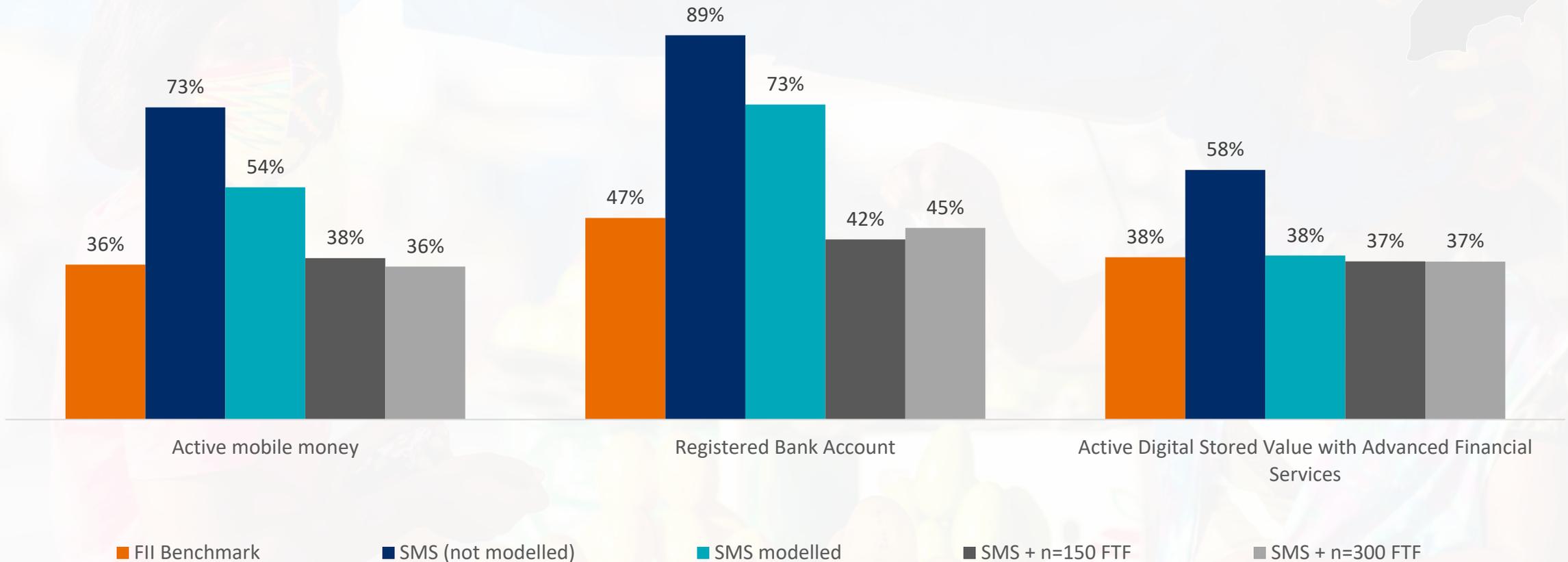
Using the data



Modelling accounts for sample and mode effects and works best with a small face to face sample included

DFS Indicators

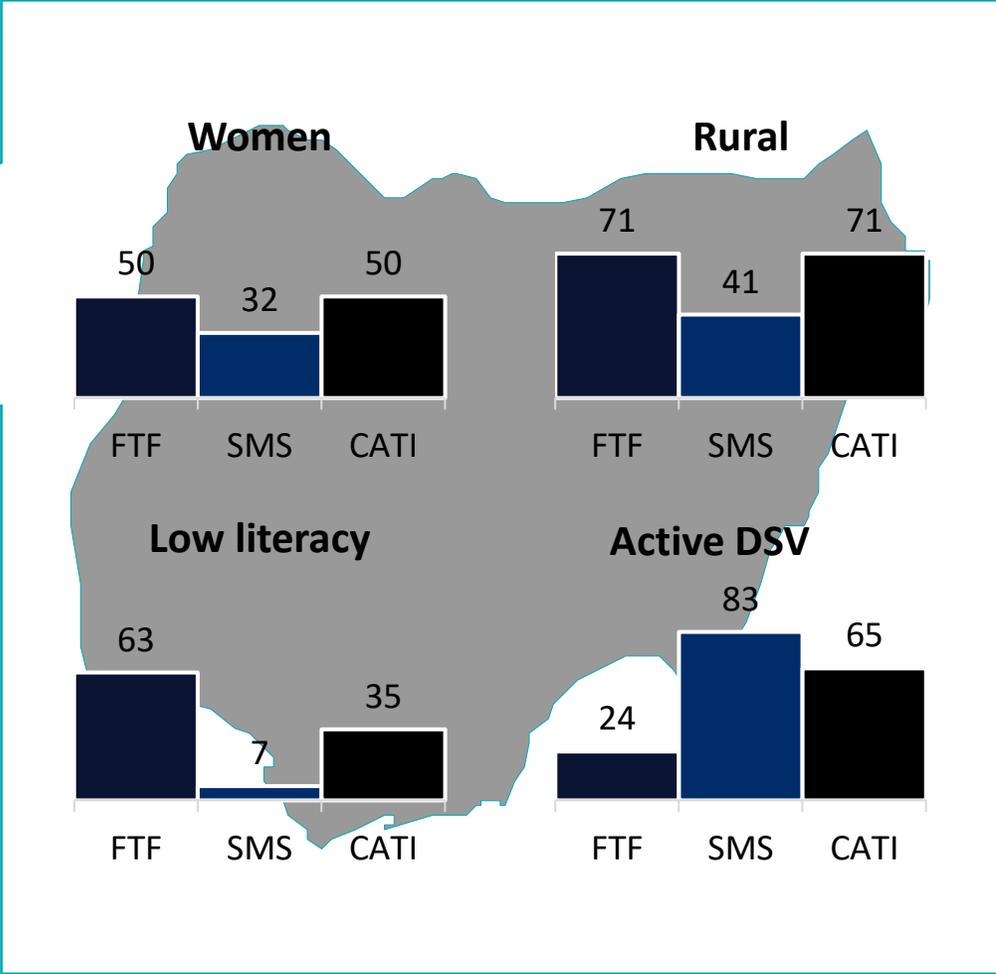
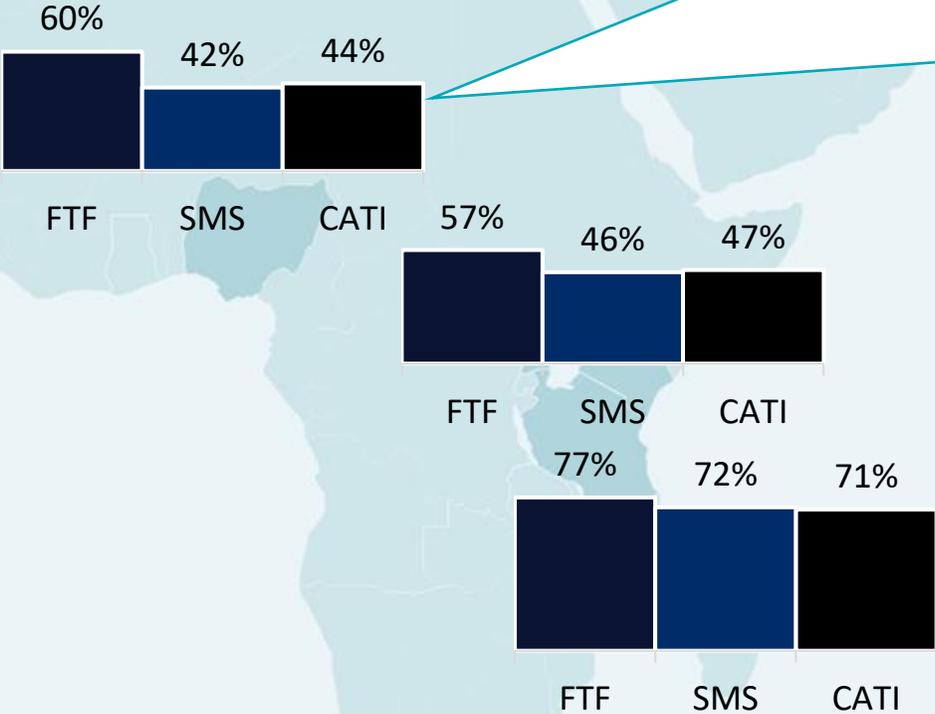
Uganda





While they are sometimes under-represented, mobile does reach poor people

Short-form Poverty Probability measurement of those below the poverty line





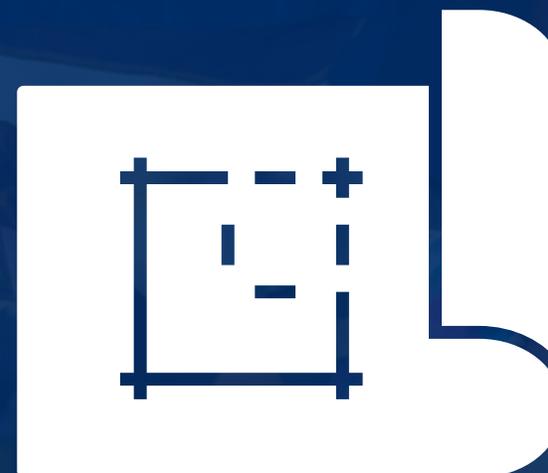
Reference population

Household and population weights

DHS



Weighting – Design vs modelling



Raking adjustment variables

Individual-level adjustment variables	Household-level adjustment variables
Region	Region
Urban/rural	Urban/rural
Language	Language
Age category	Household size
Gender	Number of children in the household
Education	Number of elderly in the household
Relationship status	
Key household assets	Key household assets



Trimming



Bias-variance trade-off



Design effect

Rake weighting performance

Country	Wave	Education recode	Lowest level of education		Individual weight max	Design effect
			COVID tracker	DHS		
Kenya	1	True	5	34	15	4.38
	2	True	4	34	15	4.27
	3	True	4	34	15	4.99
	4	False	11	34	15	2.17
Nigeria	2	True	3	38	20	7.38
	3	False	12	38	30	6.79
	4	False	17	36	30	7.15
Rwanda	2	False	15	61	20	4.76
	3	False	12	61	20	5.22
	4	False	55	60	10	1.85
South Africa	2	False	10	19	20	2.83
Uganda	1	True	4	53	25	10.38
	2	True	2	53	40	13.6
	3	False	12	53	25	6.37

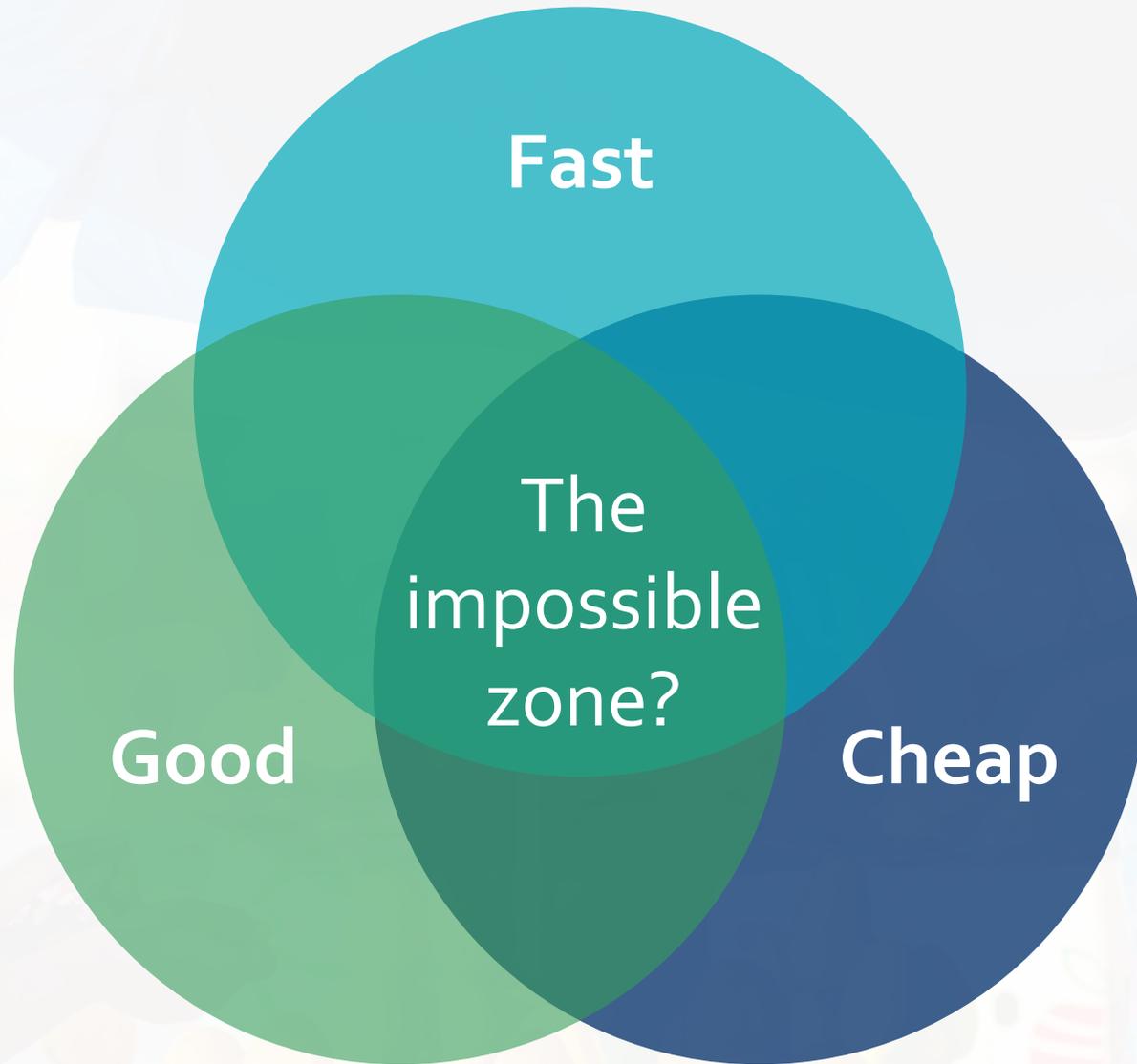
Demonstration

Row %		Not making money	Own business/ self employed	Wage/ salary job	Casual labour	Farming
Unweighted						
Wave 2	Woman	39%	20%	19%	5%	11%
	Man	22%	26%	23%	7%	15%
Wave 3	Woman	27%	19%	17%	7%	19%
	Man	16%	25%	21%	10%	16%
Weighted						
Wave 2	Woman	19%	32%	4%	3%	36%
	Man	18%	22%	8%	16%	30%
Wave 3	Woman	27%	16%	16%	7%	22%
	Man	14%	20%	14%	10%	30%

Limitations of raking and other considerations

- biased estimates of outcomes among subgroups
- uncertainty intervals around estimates based on raked weights do not typically reflect the uncertainty in the generation of the weights themselves, and therefore they tend to overstate the accuracy of the estimates
- Different population base e.g. mobile phone owners for better tracking instrument
- Other modelling approaches





Field dates*	Kenya	Nigeria	South Africa	Uganda	Rwanda	Zambia	Ghana
8 April – 28 April	X	X	X		X		
24 April – 8 May	X	X	X	X	X		
22 May – 4 June	X	X	X	X	X	X	
9 June – 17 June	X	X	X	X	X	X	X
26 June – 4 July				X		X	X
13 July – 21 July							
30 July – 7 Aug						X	X
17 Aug – 25 Aug	X	X	X	X	X	X	X

*Future dates are based on current estimates and may change

South Africa lockdown and data collection timing

Tightening

Lockdowns implemented in South Africa on the 26th of March

Lockdown measures include:

Curfews, travel restrictions, closing non-essential services and schools, banning social gatherings, banning interprovincial travel, closing education facilities, border closures

Further extension of lockdown regulations to the 30th of April

lockdown extended again by levels with most restrictive at level 5

W1
Apr 8 – Apr 17

W2
Apr 24 – May 8

March

April

May

Easing

- Lockdown regulations amendments - commuter transport services prohibited, except rendering essential services – taxi services not to carry more than 70% of licensed capacity

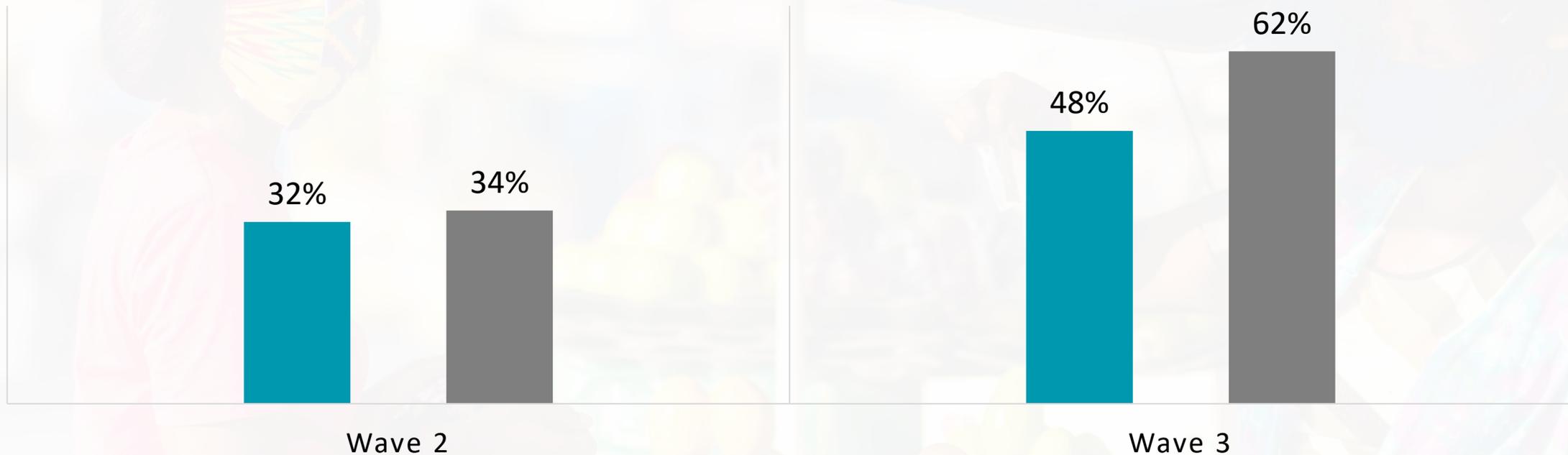
- South Africa opens up certain sectors in stages e.g. mining, essential repair & maintenance (electricians, plumbing, FSP's & professional services, restaurants for takeaways, public transport for individuals in permitted facilities)

W3
May 23 – Jun 3

Despite easing of restrictions, more women are experiencing deteriorating incomes

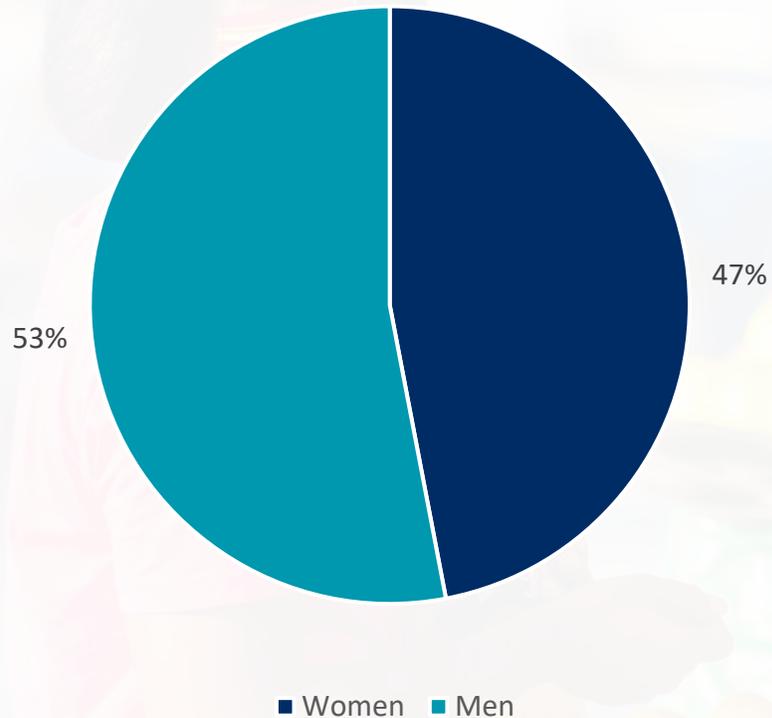
Proportion of adults with reduced income

■ Men ■ Women

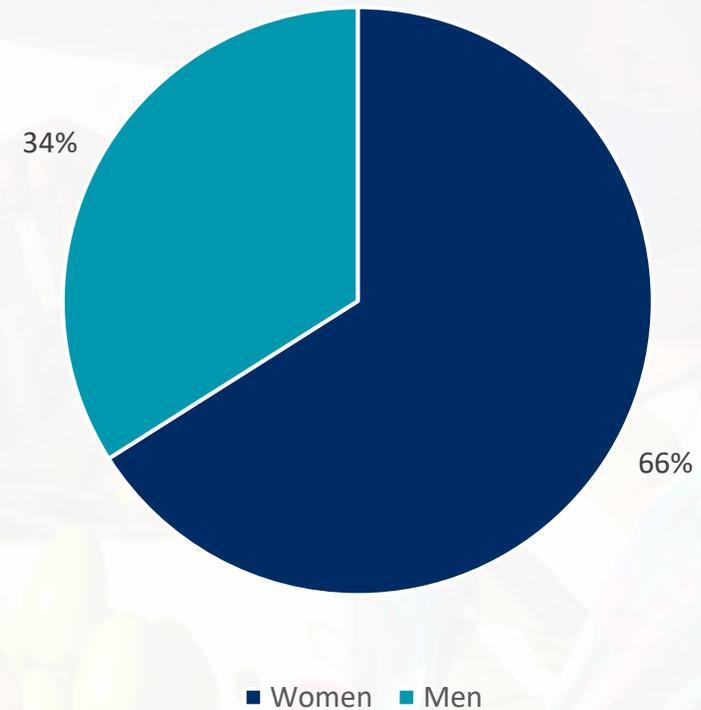


..women accounted for 2/3rds of the approximately 2,9 million net job losses

Share of total employment in Feb 2020



Share of net job loss, Feb – April 2020



Thank You



#Covid19tracker



@Finmarktrust



<http://covid19tracker.Africa/>



/FinMarkTrust



finmark.org.za

Our partners:

