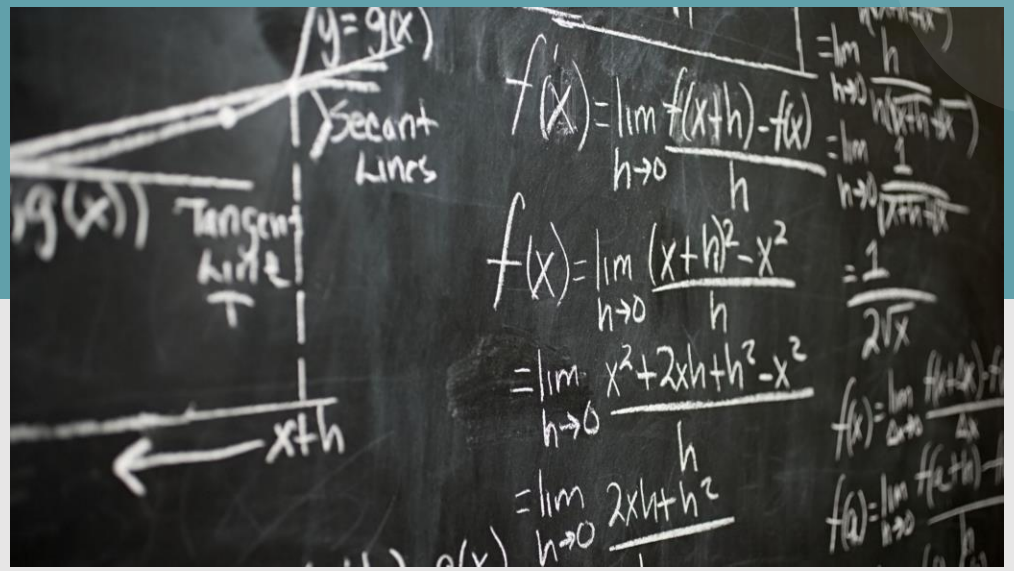
Assessment of the NPopC Enumeration Area frame used for the A2F 2023



Comparison of the 2006 NPopC Enumeration Area Frame to the 2023 NPopC Frame: Implications on Financial Inclusion Indicators since 2018"

By EFInA
September 2023

Context Setting

- Ahead of the initially intended 2023 census, NPopC demarcated the Nigerian population into enumeration areas https://nationalpopulation.gov.ng/EAD . This is to facilitate not only the census but also other nationwide studies. This demarcation is the closest to reality since the 2006 frame. This new frame was adopted for the A2F 2023 survey and was also used to revise the 2018 and 2020 survey to ensure that is realistic. A review of the NPopC 2023 sample frame has uncovered significant discrepancies – especially in the rural-urban classifications which were not available in the 2006 frame. The 2023 sample frame offers a more precise foundation for assessing financial inclusion indicators.
- Details of the Enumeration Areas demarcation can be found on the National Population Commission website https://nationalpopulation.gov.ng/EAD
- The updated enumeration frame ensures that we can accurately measure the progress of our financial inclusion initiatives, allowing us to track our success and adjust strategies as needed. This makes the data appropriate for decision-making.

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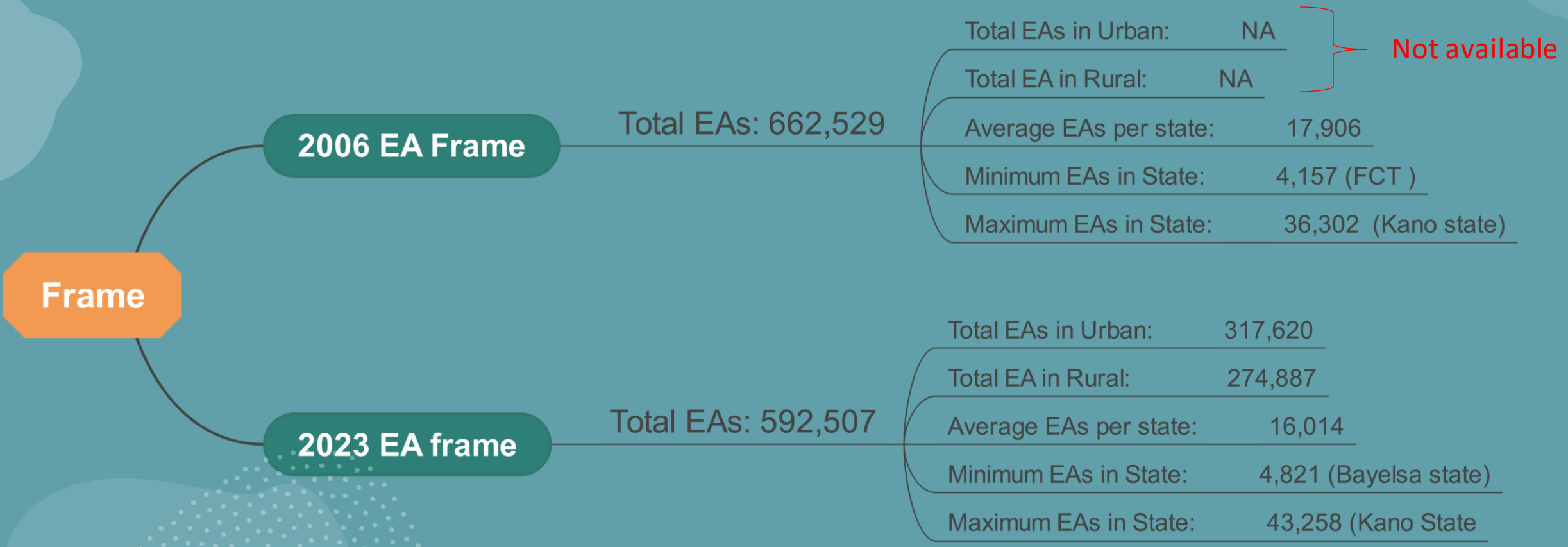
Brief description of Enumeration Areas Frame for 2006 and 2023 Housing and Population Census



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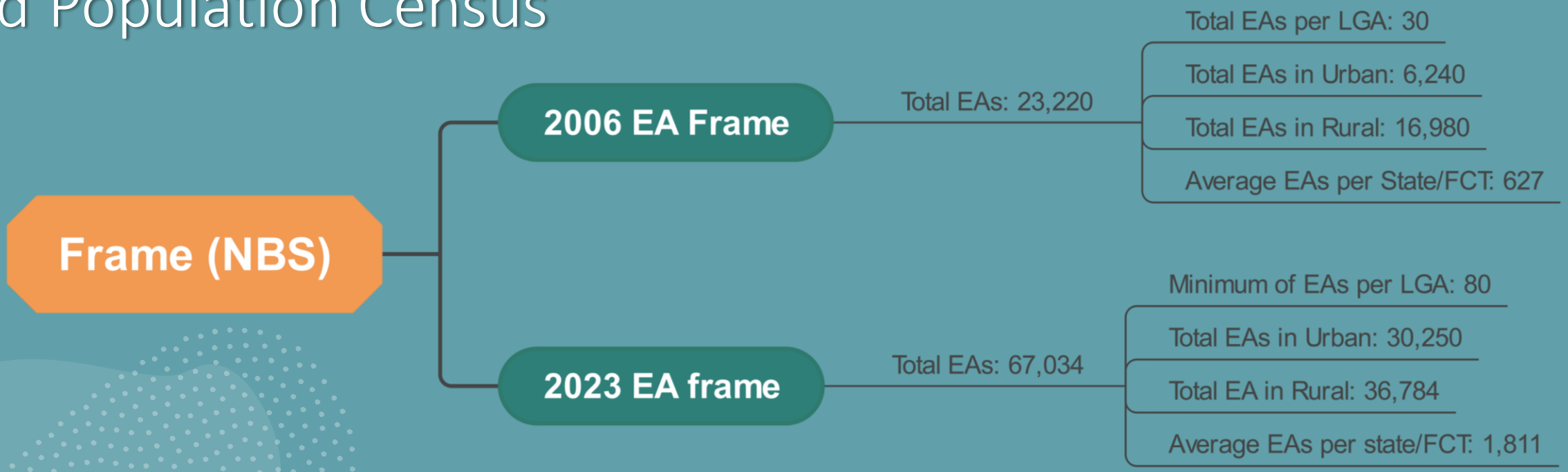
Brief description of **NBS** Enumeration Areas Frame for 2006 and 2023 Housing and Population Census

The thirty(30) EAs studied by NBS was selected systematically to ensure adequate spread of sample points across localities in each LGA.

The 30 EAs was broken into 3 replicates and each replicates contains 10 EAs.

Total number of EAs in state is proportional to the number of local government in the state.



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Sample Weight using 2006 EA Frame vs 2023 EA frame

$$Wt_{sj} = \frac{N_s}{n_s} \cdot \frac{H_j}{h_j}$$

Wt_{zj} = is the weight per EA

N_s = Total number of EAs in the s^{th} State

n_s = Selected number of EAs in the s^{th} State

H_j = Total number of Subscribers listed in the j^{th} EA

h_j = Selected number of subscribers interviewed in the j^{th} EA

2006 EA frame

State weight (Wt_{sj})

- For the next study cycle, two sets of sample weight will be calculated for each state using the 2023 EA frame.
  - Sample weight for Urban
  - Sample weight for Rural

Sample Weight for Rural

$$Wt_{sj\_rural} = \frac{N_s}{n_s} \cdot \frac{H_j}{h_j}$$

Wt_{zj_rural} = is the weight per Rural EA

N_s = Total number of Rural EAs in the s^{th} State

n_s = Selected number of Rural EAs in the s^{th} State

H_j =Total number of adults (18+) listed in the j^{th} Rural EA

h_j =Selected number of adult (18+) interviewed in the j^{th} Rural EA

2023 EA frame

State weight (Wt_{sj_rural}, Wt_{sj_urban})

Sample Weight for Urban

$$Wt_{sj\_urban} = \frac{N_s}{n_s} \cdot \frac{H_j}{h_j}$$

Wt_{zj_urban} = is the weight per Urban EA

N_s = Total number of Urban EAs in the s^{th} State

n_s = Selected number of Urban EAs in the s^{th} State

H_j =Total number of adults (18+) listed in the j^{th} Urban EA

h_j =Selected number of adult (18+) interviewed in the j^{th} Urban EA

A retrospective review of the 2018 and 2020 financial indicators reveals shifts in financial inclusion indicators, particularly among the unbanked and underbanked populations. Financial inclusion is not just a statistic; it's a means there is still the urgent need to ensure that financial services reach every corner of our nation, benefiting individuals and communities alike.

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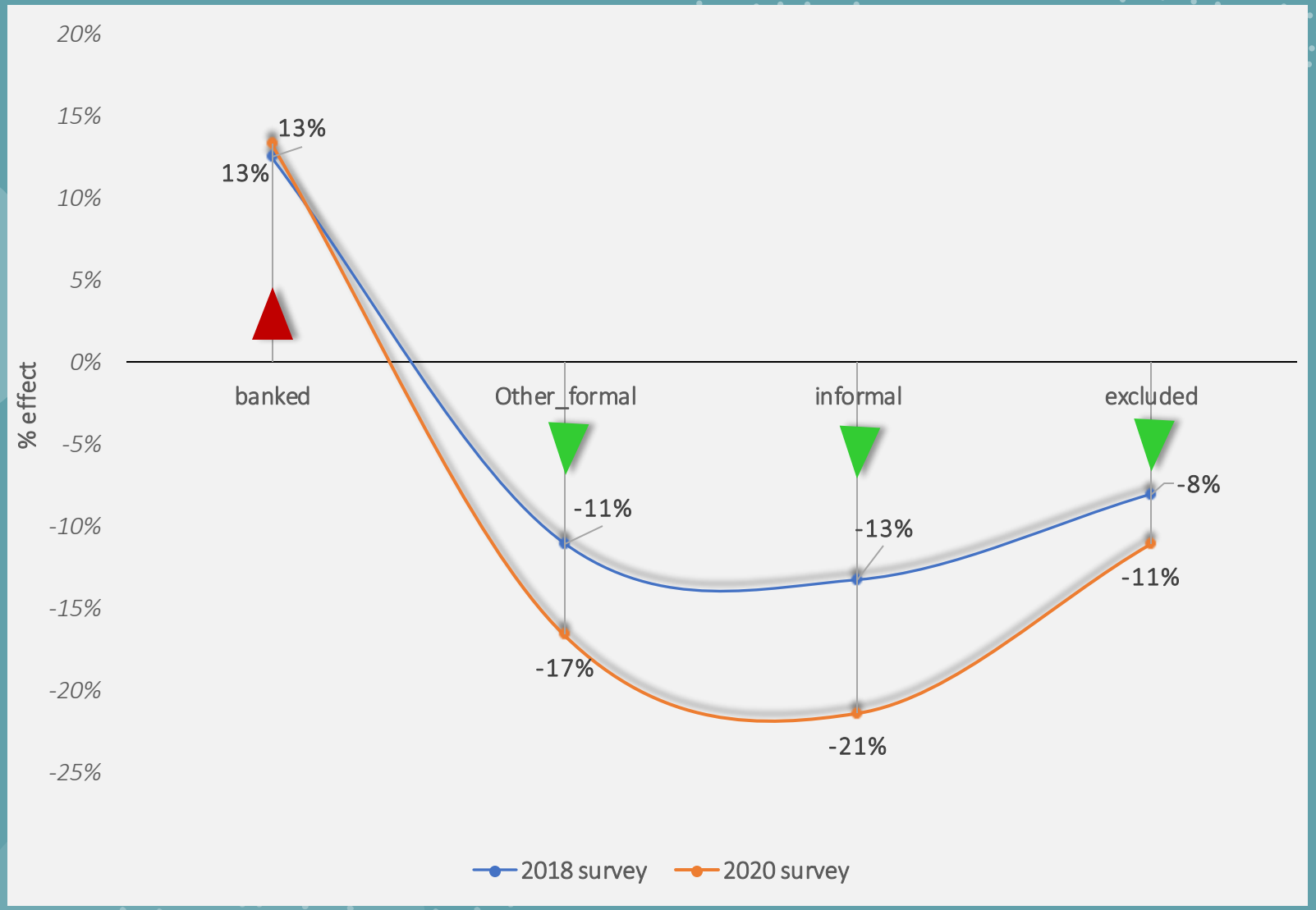
Level of Effect of Sample Weight Application using 2023 EA Frame on Financial Strand indicators



- 2023 EA frame was used to calculate the sample and applied on the 2020 Survey data
- Financial Access Strand indicators were analyzed to show level effects
- There is a significant change compared to the previous results recorded for the 2020 report.

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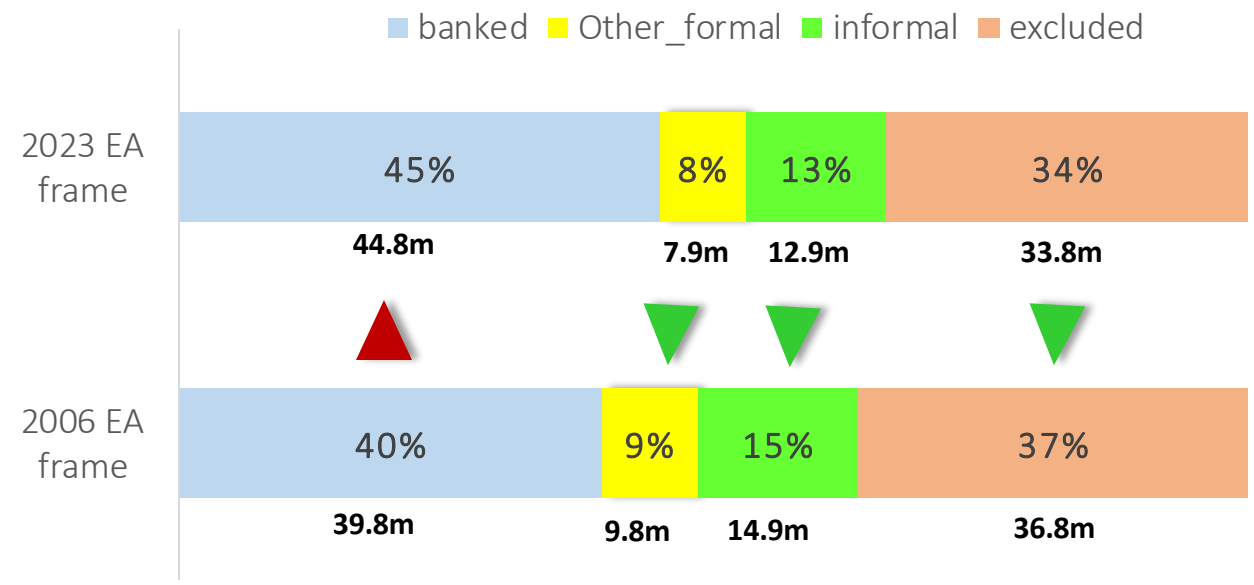
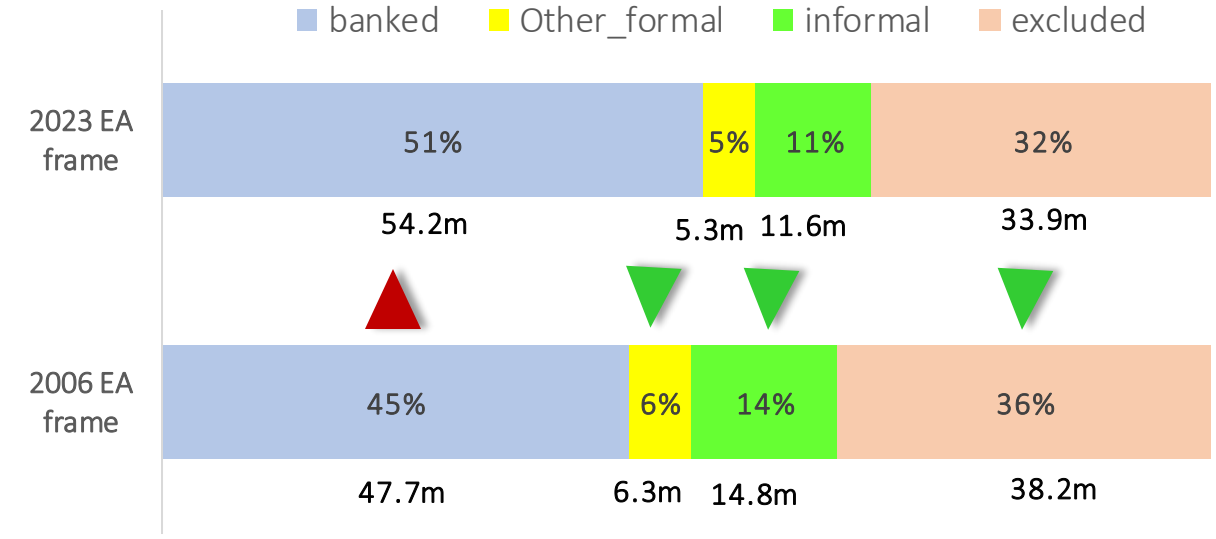
Effect of Weight Application using 2023 EA Frame on Financial Strand Indicators

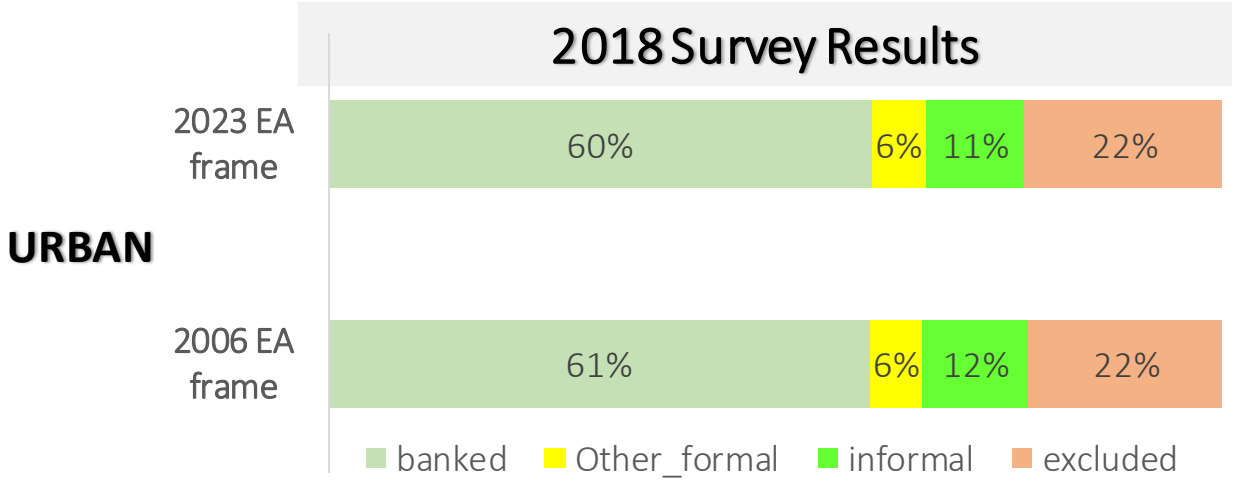
2018 Survey

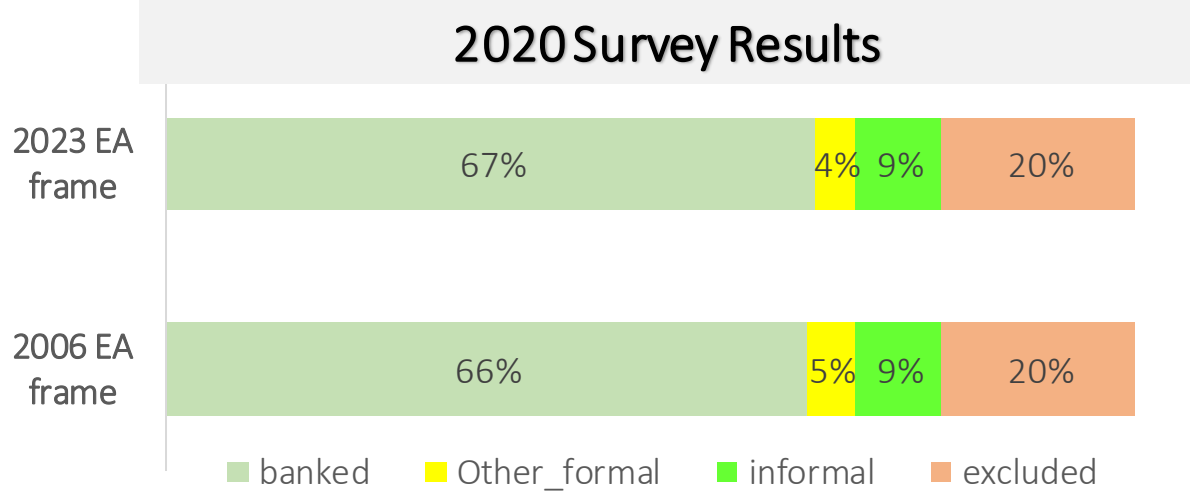


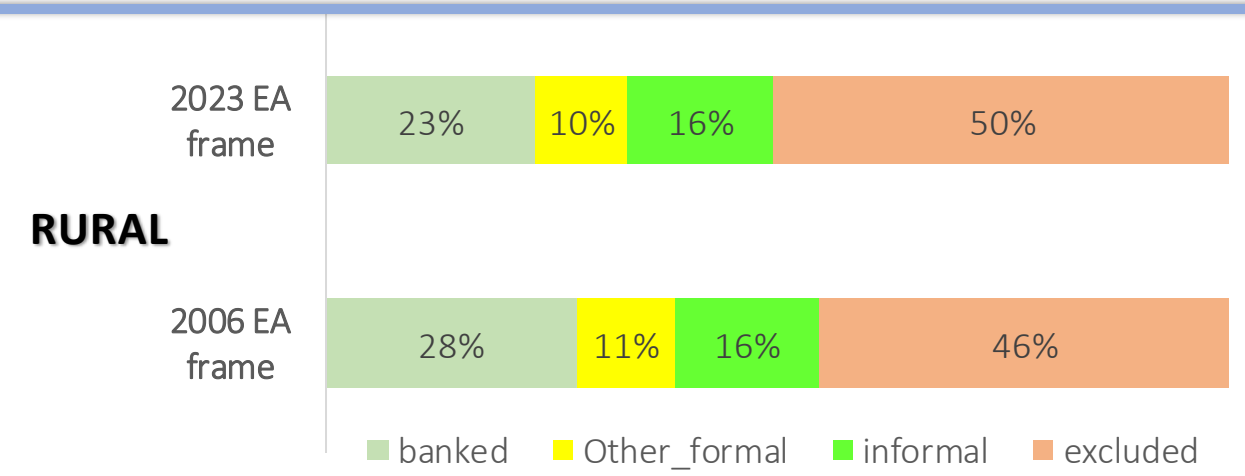
2020 Survey

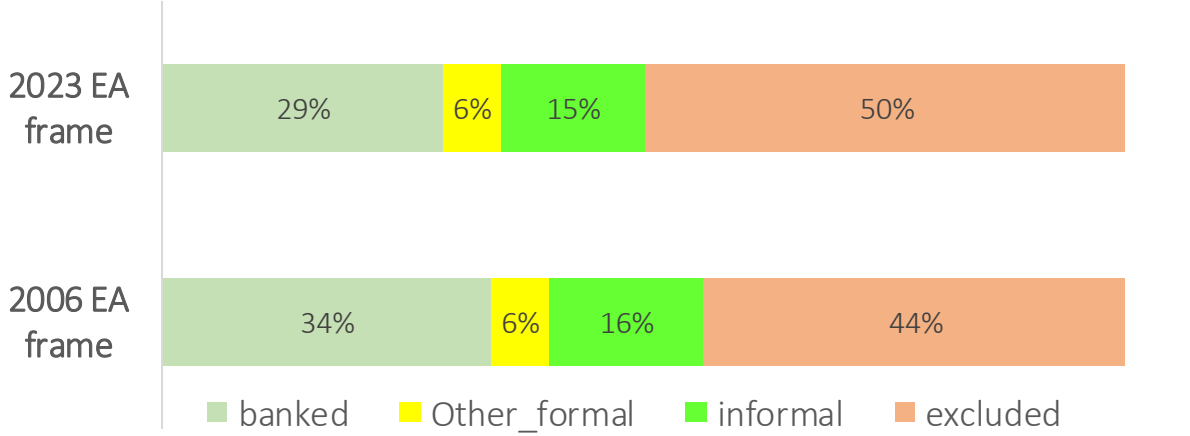


Effect of Weight Application using 2023 EA Frame on Financial Strand Indicators– Urban/Rural Split









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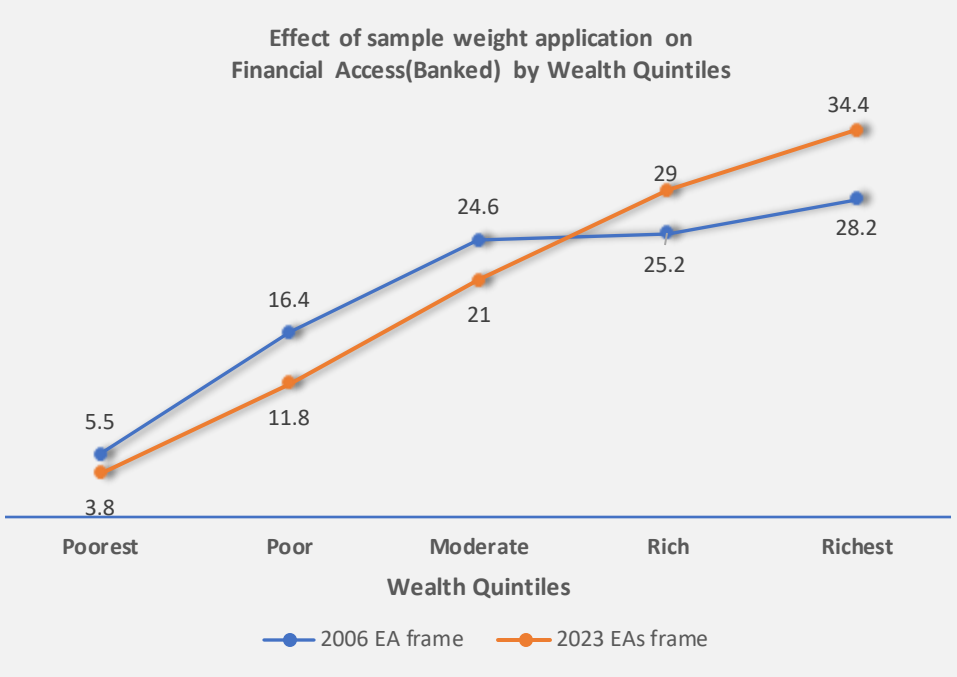
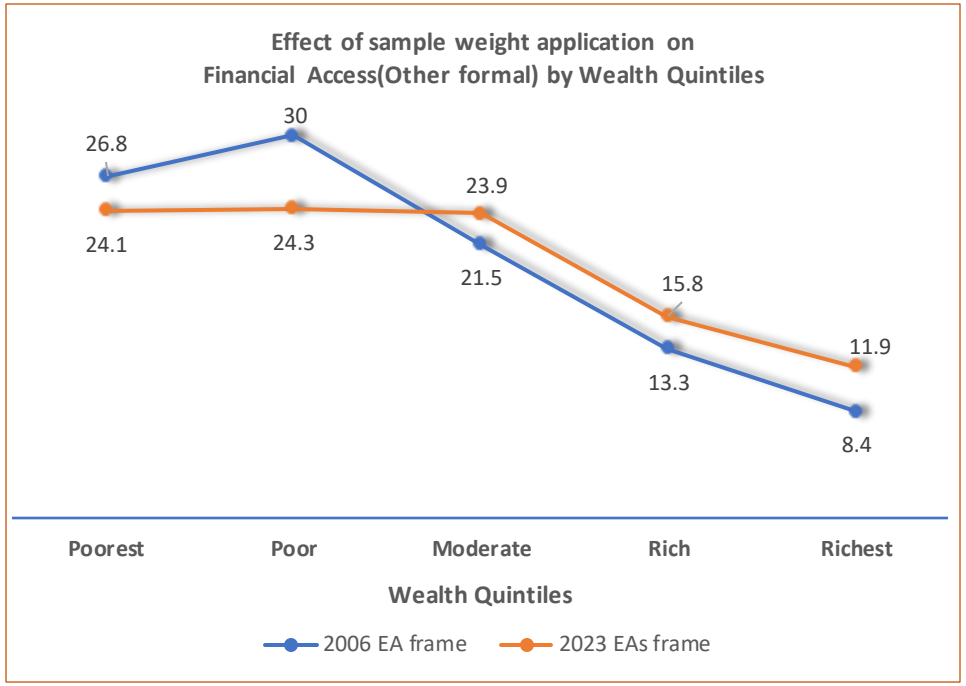
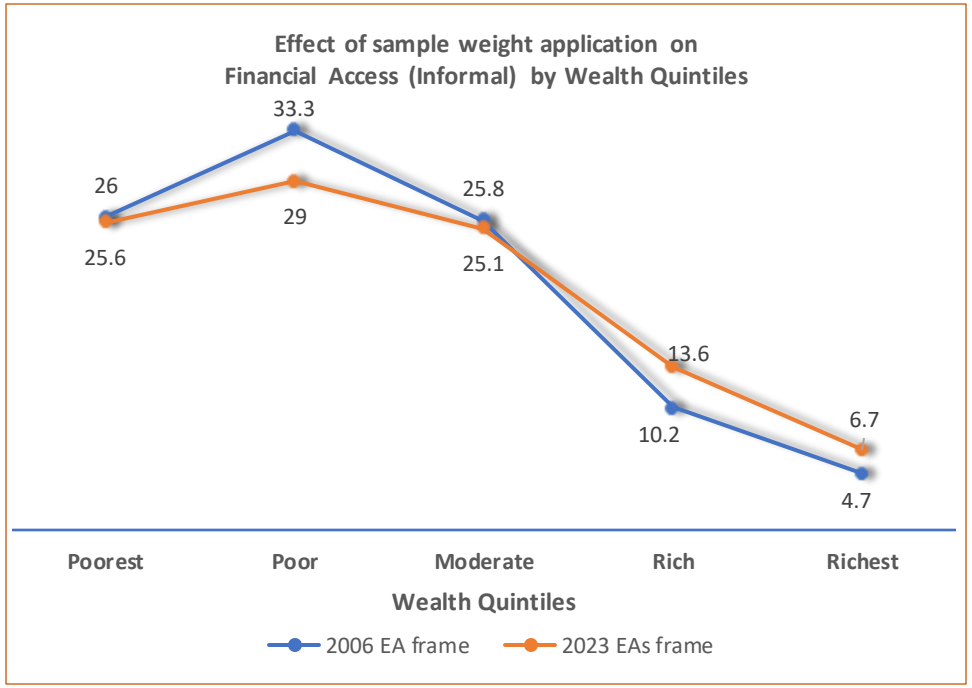
- Effect of Sample Weight using 2023 EA frame on 2020 Survey Data

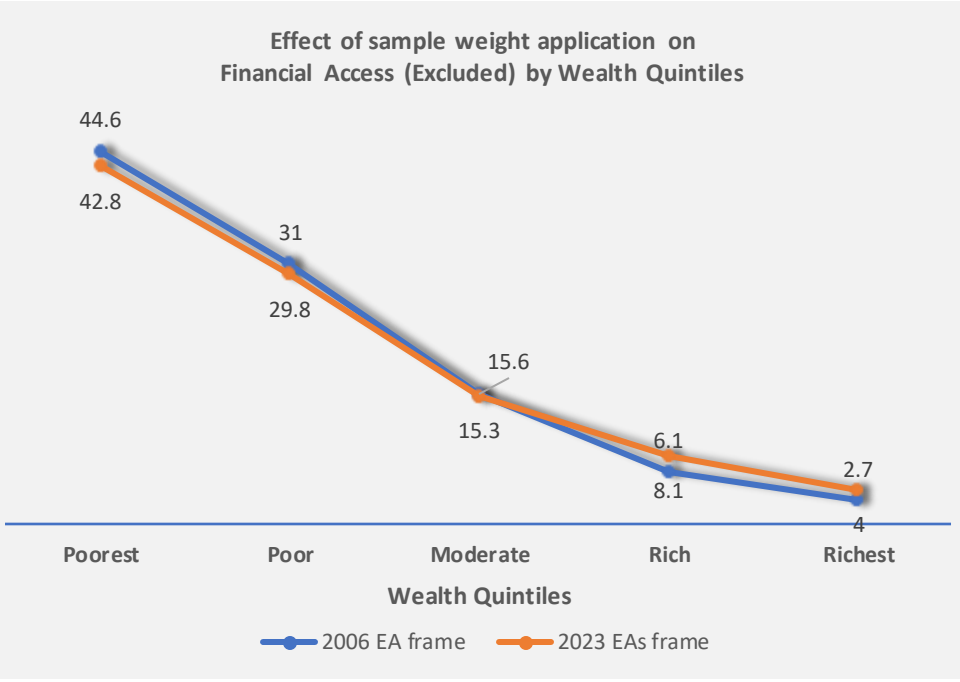
- Financial Assess Strands;
  - ✓ *Banked*
  - ✓ *Other formal*
  - ✓ *Informal*
  - ✓ *Excluded*

- Wealth Quintiles
  - ✓ Poorest
  - ✓ Poor
  - ✓ Moderate
  - ✓ Rich
  - ✓ Richest



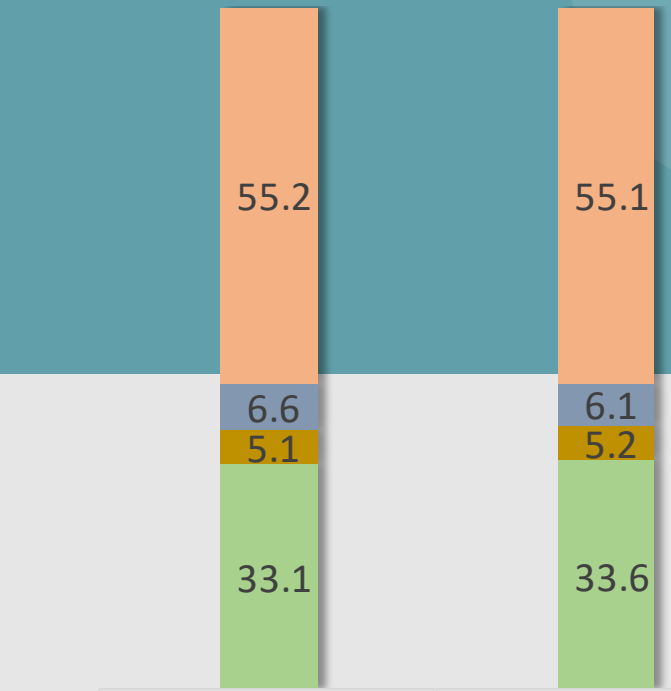






Effect of Sample Weight Application using 2023 EA Frame on Financial Strand Indicators – Kaduna deep dive 2020

- There is not significant different observed on effect of sample weight application Financial Access Strands performance recorded



	2006 Frame	2023 Frame
excluded	55.2	55.1
informal	6.6	6.1
other_formal	5.1	5.2
banked	33.1	33.6

Effect of Weight Application using 2023 EA Frame on Financial Strand Indicators- Urban/Rural Split

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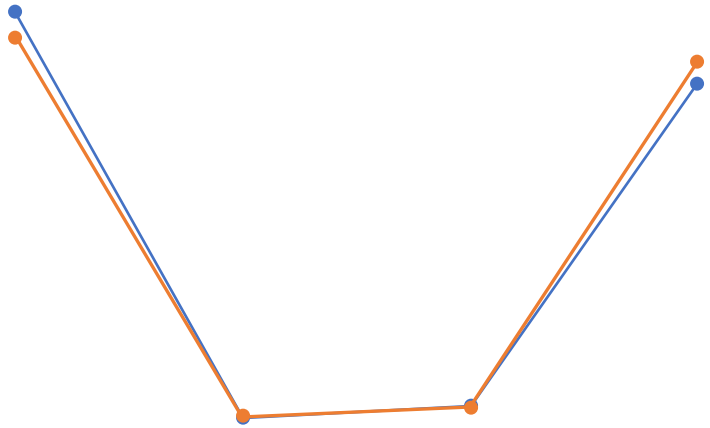
Effect of Sample weight on Urban split

A



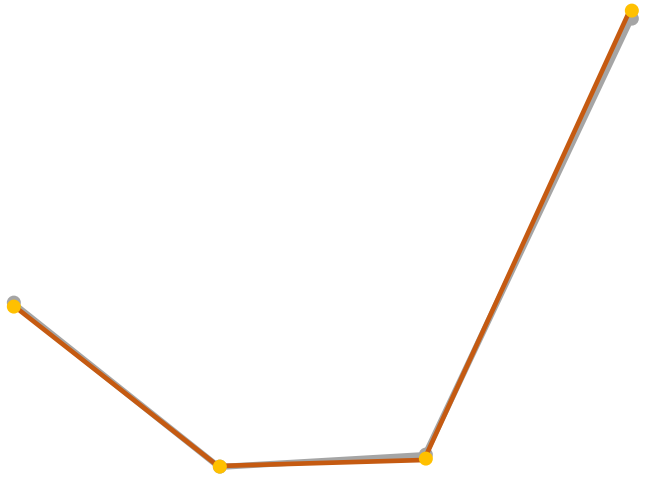
	banked ▼	other_formal ▲	informal ▼	excluded ▲
urban-2006 frame	48.6	4.7	6.0	40.8
urban_2023 frame	45.9	4.9	5.9	43.3

urban-2006 frame urban_2023 frame

- The chart shows a significant change on financial access strand indicators as a result of the application of sample weight calculated using 2023 EA frame. Significant change was observed on Banked and excluded indicators

Effect of Sample weight on Rural split

B



	banked ▼	other_formal ▲	informal ▼	excluded ▲
rural_2006 frame	26.0	5.2	6.9	61.9
rural_2023 frame	25.5	5.4	6.2	62.9

rural_2006 frame rural_2023 frame

- Chart B shows that there is no significant change in financial access strand indicators based on the application of sample weight calculated using 2023 EA frame.

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Conclusion

- The 2023 sample frame ensures that we can accurately measure the progress of our financial inclusion initiatives, allowing us to track our success and adjust strategies as needed. This makes the data appropriate for decision-making.