## FINANCIAL HEALTH IN KENYA, BEYOND FINANCIAL INCLUSION

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# Organization of the of presentation



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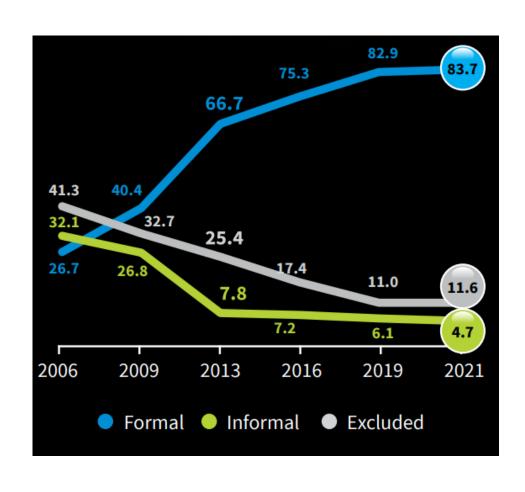


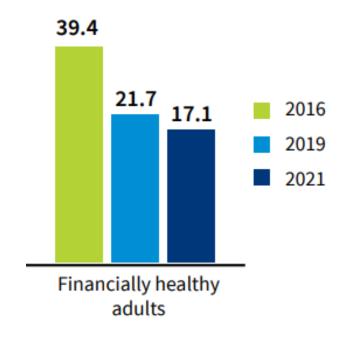
**Policy Implications** 

#### Introduction

- Financial institutions are necessary drivers in the provision of financial, economic, and monetary service in country.
- Financial sector in Kenya has evolved over the years to adopt technological innovations. Such as mobile money, digital apps and ATMs.
- Financial source from formal and informal, registered and unregistered
- Financial inclusion from 26.7% in 2006 to 88.4% in 2021 Mostly attributed by rapid uptake of digital and mobile loans since 2007.
- Financial Health, is a composite index derived from ability to achieve three core outcomes that finance can enable: ability to manage day-to-day needs; ability to cope with shocks/risks; and ability to invest in future goals.

## Trends in overall Financial inclusion and Financial health in Kenya



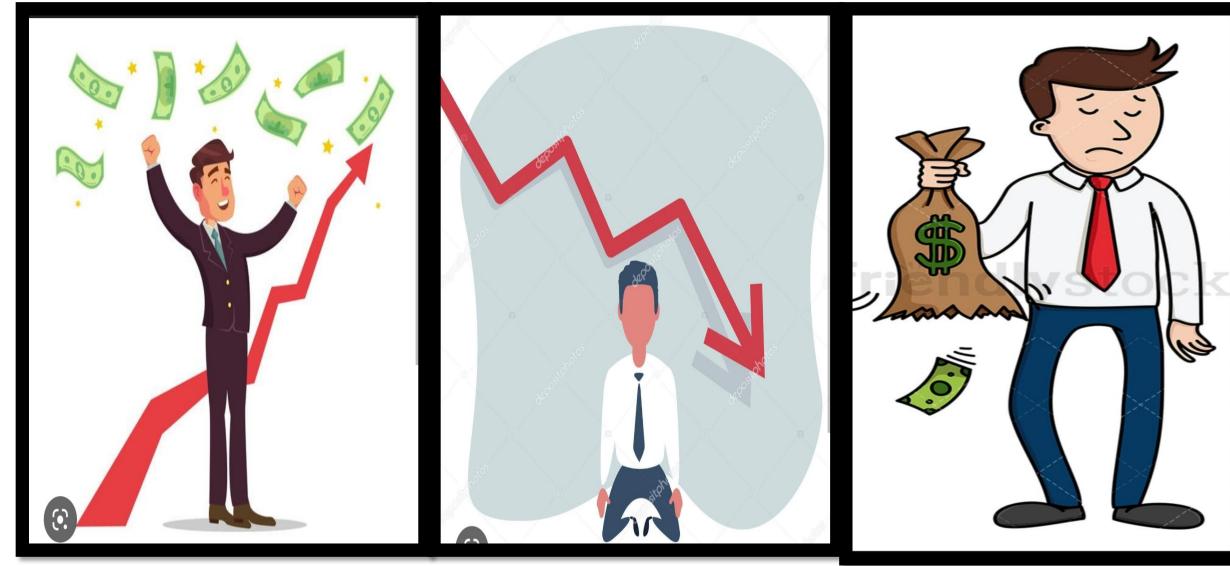


#### So, what the problem?

#### In Kenya:

- Financial increased from 26.7% in 2006 to 88.4 % in 2021.
- However, National Financial Health has Declined from 39.4% in 2016 to 17.1% in 2021.
- Implies that more men and women are unable to use financial products and services for their daily needs to cope with shocks and risks, and to invest.
- The co-existence of high financial inclusion with poor household financial health forms the crust of the research problem in this study.
- Then, clearly Financial inclusion is not enough. Look beyond.

#### What is the Problem?





#### **Objectives**

- Study hypothesize that choice of financial source contributes to individuals' financial health
  - To access the relationship between sources of financial services and household financial health in Kenya.
  - To estimate the determinants of household financial health in Kenya.

## Theoretical Literature

Efficiency of credit market

Stiglitz and Wess (1981)\_Credit Rationing Theory

#### Theoretical Framework

 Walker and Akiva(2002)\_Random Utility model

$$\underbrace{U_{ij}\left(X_{ij}; Z_{ij}\right) = V_{j}\left(X_{ij}; \beta\right) + \epsilon_{j}}_{\text{Where;}} \tag{1}$$

$$i = 1, 2, 3, \dots N$$

$$j = 1, 2, 3, \dots M$$

 $U_{ij}(X_{ij}; Z_{ij})_j$  = individuals i's derived utility from credit choice of alternative j

 $X_{ij}$  observed characteristics of individual i and credit choice of alternative j

 $Z_{ij}$ = unobserved characteristic of individual i and credit choice of alternative j

 $V_i(X_{ii}; \beta)$  = deterministic component of the utility

 $\varepsilon_i$ = utility random component of the utility

#### Methodology

- Multinomial Probit model to analyze determinants of choice of financial source in Kenya.
- Preferred to Multinomial logit model due to its critic on Independence of Irrelevant Alternative (IIA) property. The dependent variable, which is the sources of financial services,
- Since sources have three alternatives. (formal, formal others, informal)
- The logistic distribution function is given as:

$$Prob(Y_i = j) = \frac{exp(\beta'_j X_i)}{\sum_{k=0}^{8} exp(\beta'_k X_i)}, \ j = 0,1,2,3.$$

## Methodology cont.'

• Use Maximum likelihood estimator on the specific econometrics model. Given as..

Sources of financial services (FS)= $\theta_0^2$ + $\theta_1^2$  gender+ $\theta_2^2$  education+ $\theta_3^2$  age+  $\theta_4^2$  age2+ $\theta_5^2$  marital\_status+ $\theta_6^2$  income+ $\theta_7^2$  financial health+ $\theta_7^2$  mobile ownership ···+ $\theta_7^2$ 

### 2. Probit model to analyze determinants of financial

- Financial health is given as multidimensional index which takes the value 1 for financially health and 0 otherwise.
- Study aims at estimating probability (*pi*) that individual is financially health given the explanatory variables
- Using (MLE), the study estimates the following log-likelihood function

#### **Results and Discussions**

- Financial sources claim that people who use traditional banks are financially healthy. Hence, the source of financial services is important in explaining financial health in Kenya.
- More men use formal financial services, but more women use formal unregulated and informal sources for financial services.
- sex, age, marital status, education, income, and mobile ownership are the primary factors influencing the choice of financial services in Kenya.
- Education, income, and financial source are the primary factors of financial health.
- Majority of Kenyans seek services from unregulated sources, which include mobile money and digital loans. Individuals borrowing from such sources are less likely to be financially healthy compared to those seeking financial services from formal regulated sources such as banks.
- Therefore, the question is: Do financially sound people use banks, or do banks aid in the development of financially sound people? It is noteworthy that 3.4% of the excluded population have stable finances.

## Policy Implication

- Financial health for households and individuals is not always given just because they have access to financial markets.
- To ensure non-predatory financial services, client protection and regulation should go hand in hand with financial inclusion.

