# Financial Health and nexus with Digital Financial Services: Deconstructing the Gender Gap

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# Introduction I

- World over, people continue to struggle financially and striving to be financially healthy
- This impacts on their lives and ability to weather life's ups and down while fulfilling their dreams.
- Digital financial services (DFS) can enhance ability to create economic assets that leads to financial resilience.
- Digital revolution and adoption of DFS is likely to affect people's financial activities, key in achieving sustainable development goals (SDGs) and shaping financial health.
- SDG 5 (gender equality), 8 (decent work) and 10 (reduce inequalities)

# Introduction II

- What is financial health (FH)?

  - Preparedness to meet and recover from financial shock, ability to meet ongoing financial and consumption needs.

  - To make choices that allow enjoyment of life, feels financially secure and manage finances without stress (CFPB, 2015; Chobhthaigh, 2019; Rhyne, 2020).

- What is DFS? - Credit, savings, insurance, payments and remittances accessed and delivered through digital channels (online or via mobile phone) (Agur et al., 2020).

- What is Gender?

  - Social opportunities and attributes associated with being female and male.

# Research Questions

- Technological revolution led to increase in DFS utilization in Kenya, but decline in financial health. DFS taunted to enhance financial health - what is the relationship? We aim to:

To deconstruct the gender gap and analyze the nexus between DFS and financial health of Kenyan households

- Research Questions

1. Does gender moderate the relationship between DFS and FH?
2. Does gender gap exist in the nexus between DFS and FH?
3. What policies can enhance a gender sensitive approach to DFS utilization through inclusive finance to increase FH?

# Literature Review I

- In America, 57% (of 138 million adults) are not financially healthy.
- In Canada, financial well being score is 66% with disparities observed among individuals, social groups and regions (FCAC, 2019).
- FinAccess survey report of 2021 observed that access to finance increased from 82.9% to 83.7% between $2019 - 2021$ but financial health decreased from 39.4% to 17.1% in $2016 - 2019$ period (CBK, 2021).
- Financial resilience in the world ranges from low of 16% to high of 94%, varies across countries and regions in a country (Gubbins, 2020).

# Literature Review II

- Mobile phones fastest spreading technological innovations with unprecedented rate of adoption due to rapid population growth in sub Saharan Africa (SSA) (GSMA, 2022)
- In 2019 – 2020, mobile money enabled payments grew from 28% to 43% in value, volume and merchant activity
- Mobile money decreased female-headed extreme poverty by 2% and increased their consumption by 18.5% (Suri and Jack, 2016)
- Gender gap of 9% in financial inclusion in favor of men has existed since 2011 in low and middle income countries with women being 7% more likely to be excluded from DFS in SSA (Molinier, 2019).

# Methodology

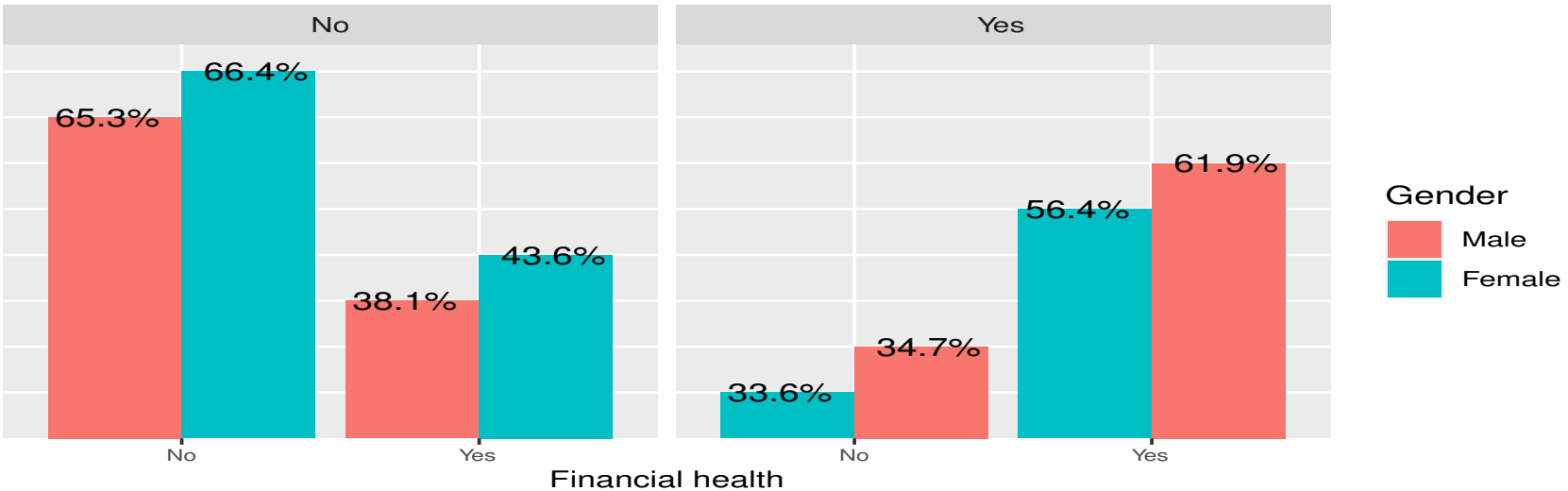
- FinAccess 2021 data with gender lens: 22 categorical variables
- Socio-demographics (Income, education, age and marital status) and Moderator (Gender)
- Response variables: DFS utilization and Financial health (FH)
- Financial health (without food, emergency money, savings for old age, manage day-day, without medicine, money specific purpose, cope with risk, invest in livelihoods, budgeting)
- DFS (loan default, digital savings, active MM account, own mobile phone, active digital account, and MM provider loan)
- Probit model regression with four models
- (1) Model A (Gender with DFS/FH) (2) Model B (FH/DFS with respective variables) (3) Model C (Variables significant in Model B) (4) Model D - Model C and control variables

# Results - Descriptive Statistics (Percent)

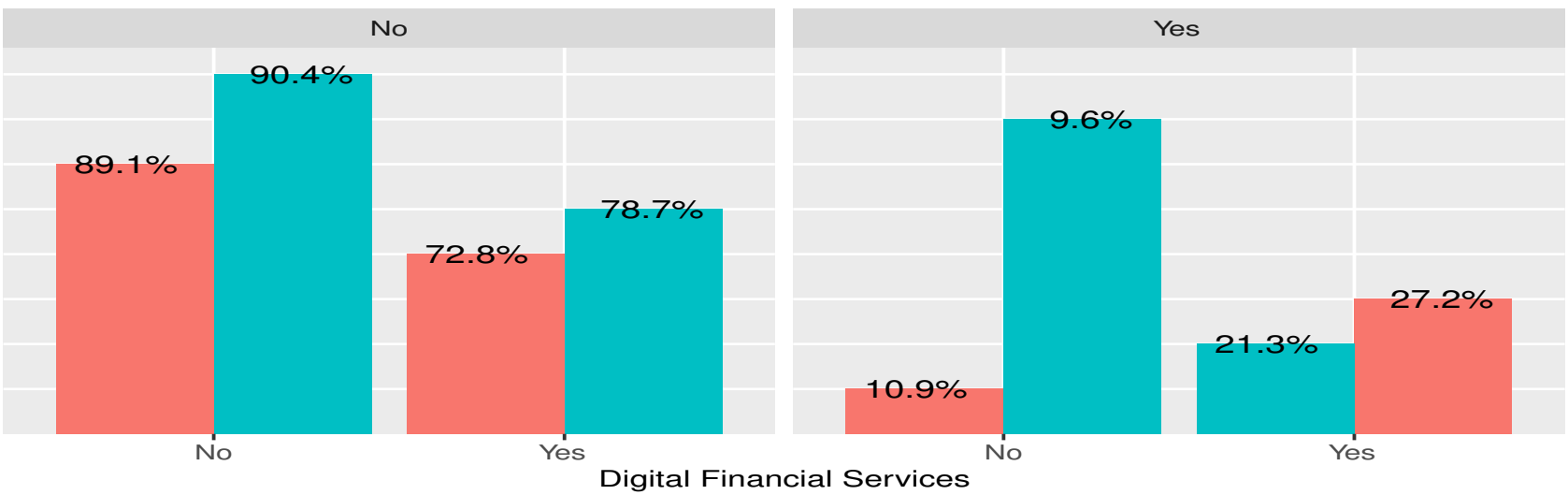
| | | | | | | |
|---|---|---|---|---|---|---|
| FH | Yes | No | | **Gender** | | |
| F(M) | 51.7 (48.3) | 58.2 (41.8) | | | 57.2 (42.8) | |
| DFS | Yes | No | | DEF | Yes | No |
| F(M) | 55.6(44.4) | 58.3(41.7) | | | 58.3(41.7) | 56.7(43.3) |
| Phone | Yes | No | | AMM | Yes | No |
| F(M) | 56.1(43.9) | 62.3(37.7) | | | 55.4(44.6) | 61.8(38.2) |
| DIG | Yes | No | | DL | Yes | No |
| F(M) | 55.7(44.3) | 61.5(38.5) | | | 55.0(45.0) | 61.1(38.9) |
| ML | CU | UTU | NU | | | |
| F(M) | 49.3(50.7) | 53.3(46.7) | 59.3(40.7) | | | |
| Educ. | Tertiary | Secondary | Primary | None | | |
| F(M) | 51.4(48.6) | 52.8(47.2) | 56.6(43.4) | 70.0(30.0) | | |
| Age | $16-17$ | $18-25$ | $26-35$ | $36-45$ | $46-55$ | $>55$ |
| F(M) | 48.3(51.7) | 60.0(40.0) | 59.4(40.6) | 52.3(47.7) | 53.4(46.6) | 60.5(39.5) |
| Inc. | $101.1.5K$ | $1501.3K$ | $3001.7.5K$ | $7501.15K$ | $15001.30K$ | $>30K$ |
| F(M) | 69.5(30.5) | 66.0(34.0) | 57.9(42.1) | 47.3(52.7) | 41.1(58.9) | 36.9(63.1) |
| DIG-Dig. AC, DL - Dig. loan, Phone-Own mob. phone, DEF-Loan Default, F-Blue, M-Red | | | | | | |
| AMM- Active Mob. Money, ML- Mob. loan, CU-Cur.use, UTU-Used to use, NU-Never used | | | | | | |

# Results - Relationship between DFS and FH (Gender)

Financial health and gender influence on DFS




Digital usage and gender influence on financial health



# Results - Relationship between DFS and FH (Gender)

- Financial health increases chances of DFS usage by 0.619 (men) and 0.564 (women)
- In absence of financial health chances of being DFS user is 0.347 (men) and 0.336 (women)
- Financial health is a strong predictor of being a DFS user

# Results - Model A

- Model A: Gender, DFS and Financial health (Marginal effects)

| Variable | Gen | ME | std.err | Variable | Gen | ME | std.err |
|---|---|---|---|---|---|---|---|
| fh.yes | Women | 0.215** | 0.012 | dfs.yes | Women | 0.109** | 0.006 |
| fh.yes | Men | 0.259** | 0.013 | dfs.yes | Men | 0.153** | 0.008 |
| Response: dfs.yes | | | | Response: fh.yes | | | |

- A unit increase in DFS increases FH by 10.9% (women) and 15.3% (men)
- A unit increase in FH increases DFS by 21.5% (women) and 25.9% (men)
- A gender gap of 4.4% in favour of men is evident in nexus between DFS and financial health.
- DFS and FH are key in unlocking the ability of marginalized, poor and women to be financially resilient.

# Results - Model B Table

| Financial health with selected variables | | | | DFS usage and selected variables | | | |
|---|---|---|---|---|---|---|---|
| Term | Gen | ME | std.err | Term | Gen | ME | std.err |
| dfs.yes | F | 0.012** | 0.003 | fh.yes | F | 0.113** | 0.012 |
| dfs.yes | M | 0.014** | 0.004 | fh.yes | M | 0.160** | 0.012 |
| without.food | F | 0.052** | 0.005 | default.loans | F | 0.019** | 0.009 |
| without.food | M | 0.045** | 0.006 | default.loans | M | 0.043** | 0.011 |
| Emergency | F | 0.072** | 0.006 | digital.loans | F | 0.084** | 0.011 |
| Emergency | M | 0.079** | 0.007 | digital.loans | M | 0.105** | 0.013 |
| save.pension | F | 0.045** | 0.004 | active.mobile | F | 0.045 | 0.03 |
| save.pension | M | 0.055** | 0.005 | active.mobile | M | 0.004 | 0.039 |
| manage.day | F | 0.364 | 2.985 | digital.account | F | 0.144** | 0.03 |
| manage.day | M | 0.387 | 3.474 | digital.account | M | 0.205** | 0.04 |
| without.medi. | F | 0.058** | 0.006 | own.mobile | F | 0.202** | 0.016 |
| without.medi. | M | 0.066** | 0.007 | own.mobile | M | 0.135** | 0.022 |
| save.purpose | F | 0.048** | 0.004 | loan.mob.cur. | F | 0.040** | 0.012 |
| save.purpose | M | 0.053** | 0.005 | loan.mob.cur. | M | 0.062** | 0.013 |
| cope.risk | F | 0.344 | 2.985 | loan.mob.used | F | 0.124** | 0.017 |
| cope.risk | M | 0.352 | 3.473 | loan.mob.used | M | 0.080** | 0.018 |
| plan.spend | F | 0.047** | 0.007 | | | | |
| plan.spend | M | 0.048** | 0.007 | | | | |

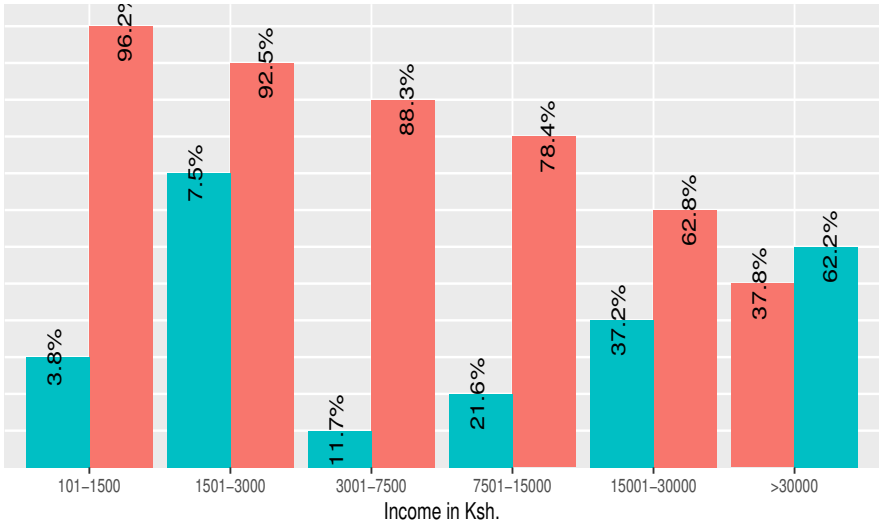
# Results - Model B

- DFS usage, not going without food, not going without medicine, money for emergency, saving for old age, saving with a purpose, and budgeting significantly influences financial health
- Financial health, defaulting on loan, having digital loans, having a digital account, mobile phone ownership and having a mobile loan increases DFS usage.

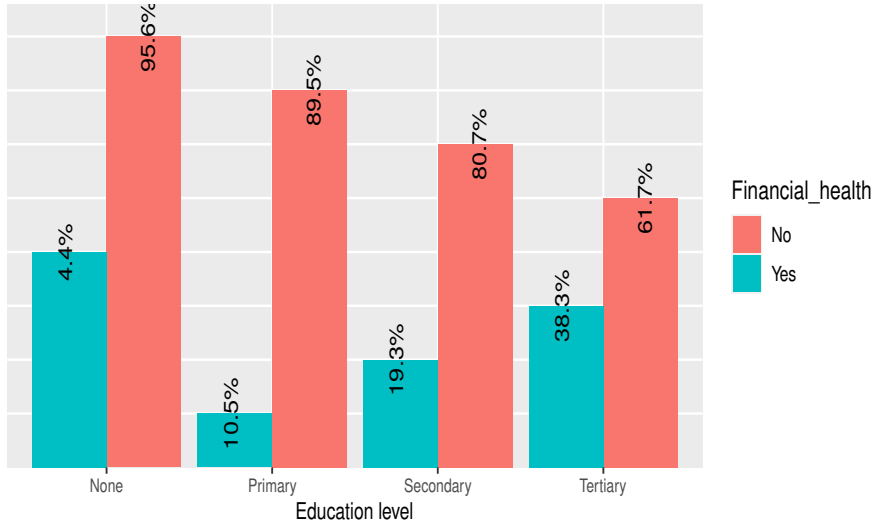
Model C and D uses the significant variables from Model B.

# Results - Financial Health and Socio-demographic

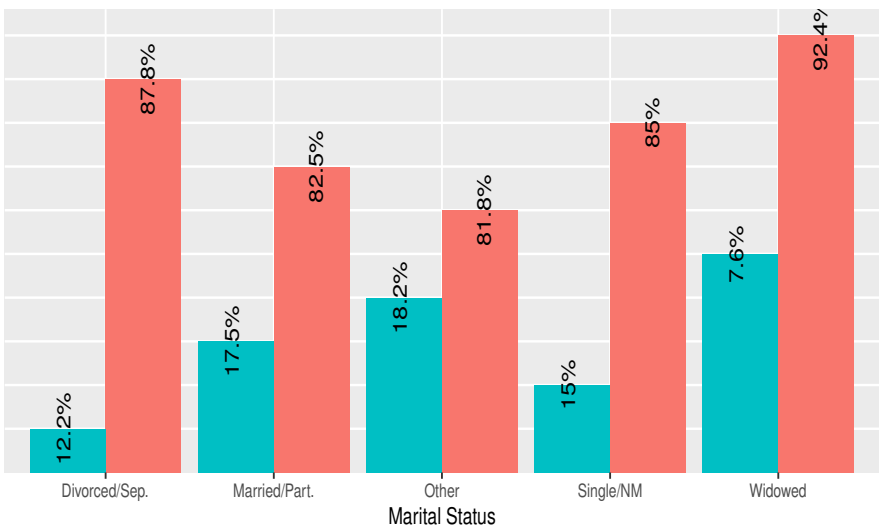
Income and financial health



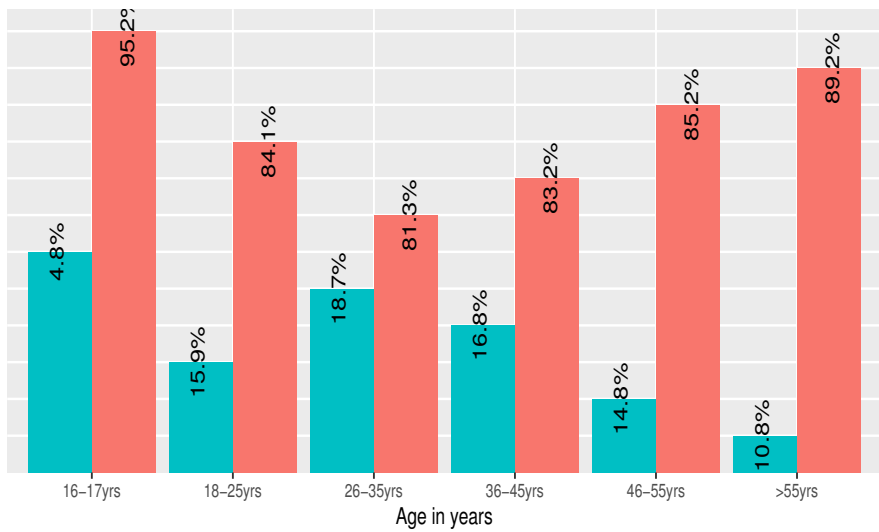

Education and financial health




Marital status and financial health




Age and financial health



# Results - Model C and D

- Financially healthy and unhealthy households cut across all levels of income, age, marital status and education levels.
- Most financial healthy households are found among
  - Education at tertiary level
  - Income of $> 30,000$
  - Age 26 to 35 years
  - Married or with partner and other

# Conclusion I

- Unit increase in financial health increases DFS by 23.2%
- Unit increase in DFS increases financial health by 13.1%
- Gender gap of 4.4% in DFS and FH among men and women
- A DFS user and has a 0.272 (men) and 0.213 (women)chance of being financially healthy
- If financially health, there is 0.619 (men) and 0.564 (women) chance of being DFS user.
- Financial health is a strong predictor of DFS usage among the households
- Financially healthy/unhealthy households cut across all levels of income, education, marital status and age groups.

# Conclusion II

- Gender gap in favour of men is evident in financial health, mobile ownership, DFS usage, digital account, and having an active mobile money account.
- Policy insights
  - Digital/financial skills - targeted interventions among vulnerable.
  - Increase financial health outcomes through consumers understanding of their financial behaviors
  - Affordable infrastructure through mobile phone ownership programs (eliminate taxes among vulnerable - low end market phones)

# THANK YOU

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# APPENDIX - References I


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