TRICKLING DOWN & CLIMBING UP:
ECONOMIC TRAJECTORIES OF FINANCIAL DIARIES HOUSEHOLDS TWO YEARS ON

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Trickling down & climbing up:
Economic trajectories of Financial Diaries households two years on

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FSD Kenya
Financial Sector Deepening

The Kenya Financial Sector Deepening (FSD) programme was established in early 2005 to support the development of financial markets in Kenya as a means to stimulate wealth creation and reduce poverty. Working in partnership with the financial services industry, the programme's goal is to expand access to financial services among lower income households and smaller enterprises. It operates as an independent trust under the supervision of professional trustees, KPMG Kenya, with policy guidance from a Programme Investment Committee (PIC). In addition to the Government of Kenya, funders include the UK's Department for International Development (DFID), the World Bank, the Swedish International Development Agency (SIDA) and Agence Française de Développement (AFD).

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Abstract

In late 2015, we followed up with Financial Diaries households to check in on their economic lives two years after the initial Diaries study ended. We wanted to know how they were doing now, the factors driving changes in their economic lives, and the role that financial services and financial choices were playing in their economic trajectories. About half of respondent households feel their situation has improved in the past two years. We find that an increase in income—primarily driven by business investment—is the most dominant driver of improved conditions. However, secondary and higher education and healthcare expenses also play an important role in constraining outcomes, holding families back in the short-run even when incomes rise. We explore some of the complexity underlying proximate drivers of change and draw a few implications about what this all means for high impact financial services.

About the Diaries & the Diaries Update

The original Kenya Financial Diaries study in 2012-2013 was made possible by FSD Kenya and the Bill & Melinda Gates Foundation. FSD Kenya also sponsored the Diaries Update research that feeds into this report. Both rounds of research were led by Bankable Frontier Associates, with fieldwork conducted by a team of researchers at Digital Divide Data Kenya who also provided input and feedback on drafts of this report. Reports and datasets associated with the Kenya Financial Diaries research programme can be accessed on the FSD Kenya website, *www.fsdkenya.org*.

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INTRODUCTION & METHODOLOGY

The Kenya Financial Diaries research in 2012-2013 offered us a new and in depth view of the economic lives of low income Kenyans. By tracking the detailed cash flows and stories of 298 households across five areas of the country, we were able to see the role of income, expenditures and shocks, and the application of financial tools in ordinary people's everyday lives. Our bi-weekly visits over a year offered us a bit of perspective of how events could unfold over time, but even one year can be short when trying to understand a family's struggle to move out of poverty.

To try and better understand these trajectories and the factors that influence them, we returned to our same respondents in September/October 2015, conducting a single in-depth interview aimed at capturing change over the intervening two years since the end of the previous study. We were able to successfully interview 94% (281 of 298) of the households that had completed the previous study. Each interview ranged from ninety minutes to four hours, depending on the depth of respondents' qualitative responses and the scale of changes within the household since our previous visits. We captured updated and codified information on household membership, income, financial device usage and balances, shocks and major events and opportunities, and financial attitudes and perspectives. We also explored qualitatively how the household was doing, major changes they experienced, and the outcomes of household-specific issues and financial plans that had been reported to our team at the end of the previous study. We were very lucky that researchers from the initial Diaries study were available to conduct all of these interviews, leveraging the strong and intimate relationships that have been developed with respondent households over time.

Not all the data we captured in the Update interview is perfectly comparable to Diaries data given differences in recall periods. In the Diaries, we asked the same questions every two weeks for a year, presumably offering us a high level of precision, particularly around minor events and small cash flows. In the Update, we have to estimate things like income by probing incomes from each source of income over an entire year and extrapolating what that would mean for an average month. Though income comparisons are imperfect, they are important for giving us a more objective notion of economic change in a household than perceptions alone. To make the best possible comparisons, we inflate average incomes from the Diaries using the consumer price index (CPI) and adjust per capita figures in the update based on new household membership realities. We also look for a significant level of change in income (more than +/-20%) to indicate a likely true and important change from Diaries levels.

Another important well-being metric for us has been incidence of vulnerable moments, like going hungry and forgoing medical care. We believe the Update underestimates these instances, with less severe incidents being forgotten over this longer recall period.

In spite of some of the limitations in comparisons between the Diaries period and today, this new dataset offers a unique and in-depth view of the way that change is happening within low income Kenyan households, both in terms of direction and driving forces. This focus note attempts to share high-level findings on the broad forces of change, contributing to the current dialogue about the role of financial services in improving the lives of low income Kenyans.

KENYA 2013-2015

In the interval between our studies, Kenya has experienced some important changes affecting the lives of our respondents. Kenya reported 5.3% nominal GDP growth in 2014. Figures are not yet published for 2015, but are expected to be somewhere around 4%. The 2015 Kenya Economic Survey reports 4.4% growth in private sector employment in 2014. The macro environment was relatively stable until mid-2015 when there was a sharp depreciation of the Kenya Shilling and a spike in interest rates.

While such factors certainly have an impact on some of our respondents, they were more likely to remark on the importance of other big contextual changes:

1. **Devolution.** The Government of Kenya has continued its work towards devolving many government functions to the counties. This has opened up opportunities for a few of our respondents to attain low-paying, but regular, salaried jobs within county governments.
2. **Electrification.** The World Bank in partnership with the Government of Kenya added more than one million new connections to an existing user base of just about three million in the course of 2015. Connection charges have plummeted, bringing a grid connection within reach for many low-income households, including 25 of our respondent households. This has had wide-ranging implications, most visibly on property values and rental income in areas with new connections.
3. **Safety nets.** The Government of Kenya has now eliminated user fees at some government primary care facilities, making outpatient care more affordable for many of our households. It's not a complete fix for Kenya's health financing challenges, but there are promising signs that the policy is making a difference. Some of our respondents in Western Kenya have also been registered to receive a cash transfer targeting the elderly and have been enrolled in the National Health Insurance Fund (NHIF) alongside this new programme.
4. **Insecurity.** Many of our respondents continue to be affected by violence, the threat of violence, and drops in income due to the related slowdown in tourism. This was most obvious in Mombasa, where tourism plays a major role in the economy. But insecurity affected other areas as well. One respondent narrowly escaped the attack on Garissa University, losing many of her classmates in the massacre. And a string of violent home invasions and rapes had our respondents in Vihiga on edge, even if the impact on the economy was minimal.

5. **Crackdown on *changaa* (local brew).** The government's attempt to stop the brewing and sale of changaa has caused problems for respondents in Vihiga where there are few other viable livelihood activities. The crackdown put an end to some brewers' businesses, in at least one case forcing an adult to migrate and find new work. For others, it's difficult to see the net effect. Surviving brewers now get more business, but also pay more in bribes to the local police and administrators.
6. **Strikes of government workers.** Government teachers went on a prolonged strike in the second half of 2015. Apart from keeping many children at home, this had the auxiliary effect of dampening respondent businesses. Teachers—especially in rural areas—are a major source of demand for goods and services. Nurses and doctors also went on strike at different times in different counties during the study. One respondent attributes the death of her teenage son to the drop off in care he received at a major government referral hospital during one of these strikes.

The financial sector also shifted in the two year interview gap. By the end of 2015, 75.3% of adults were considered formally included, with M-PESA usage topping 71.4% nationwide.[1] New mobile-only lending models, such as M-Shwari, KCB M-PESA, and Equity Bank's EZ Loans were reaching millions of new customers, creating many first time formal borrowers. Fifty-two Diaries respondents were borrowing on M-Shwari alone at the end of 2015. M-Shwari proved that new, innovative services could begin to reach the low end market at scale. But what kinds of services should be delivered in order to achieve a real impact on the lives of low income people?

ARE LOW INCOME KENYANS' LIVES IMPROVING?

Across both subjective and objective measures of economic well-being, the general trend for our respondent households is a positive one with many feeling their economic lives have improved and our team picking up real changes in per capita household income. Median monthly household income in this sample of 281 households reached in the Update rose from about KSh 7,955[2] to KSh 10,541. The median household experienced about a 31% increase in income, which translated into about KSh 614 per month per capita, a substantial if not transformative increase. Poverty as measured by average income[3] per capita falling below $2/day fell from 67% to 55% of households. Subjectively, 49% of our Update households report their economic situation is better now than it was during the Diaries period.

Where are they now?

Update interviews helped us see the way that shifting local dynamics played out in real life. Morris & Lydiah are a great example. They lived in rural Vihiga with three children, the oldest, Vivian, in her second year of secondary school during the study (2012-13).

Both husband and wife ran separate changaa brewing businesses during the Diaries, and Morris would raise bulls, buying them young and feeding them well until they could help finance a big investment for the family, like the installation of electricity. During the Diaries, we observed as the family managed to come up with a huge sum—around KSh 50,000—to install electricity, even though later in the year Vivian spent about two weeks home from school and nearly missed exams when the family failed to come up with about KSh 5000 to clear their balance at her school. They hoped the electricity would allow them to diversify away from brewing, opening a salon and a welding business out of their home.

When we found Morris and Lydiah in September 2015, they told us that economically they were more or less the same as when we left them. Paying for Vivian's fees and another child who entered secondary school has been a strain.

They've not managed to put together enough capital to buy equipment to start the welding or the salon business. They now say that paying college fees will come before making these kinds of business investments.

The pair consolidated their brewing operations. Morris used to make much of his money by buying changaa locally from a number of brewers and exporting it to other communities. With a government crackdown on changaa production and sales, that became too risky, so he and Lydiah have focused on production alone, since it's easier to evade arrest and to bribe the appropriate local officials.

Morris's mother passed away as well, leaving more of the household chores and childcare responsibilities to Lydiah. She was forced to cut back on casual work. All in all, they say, they've neither moved ahead nor fallen behind. At least they are managing to keep all the kids in school for now, an investment they hope will pay off in the long run.

1 2016 FinAccess Household Survey, February 2016. http://fsdkenya.org/publication/finaccess2016/

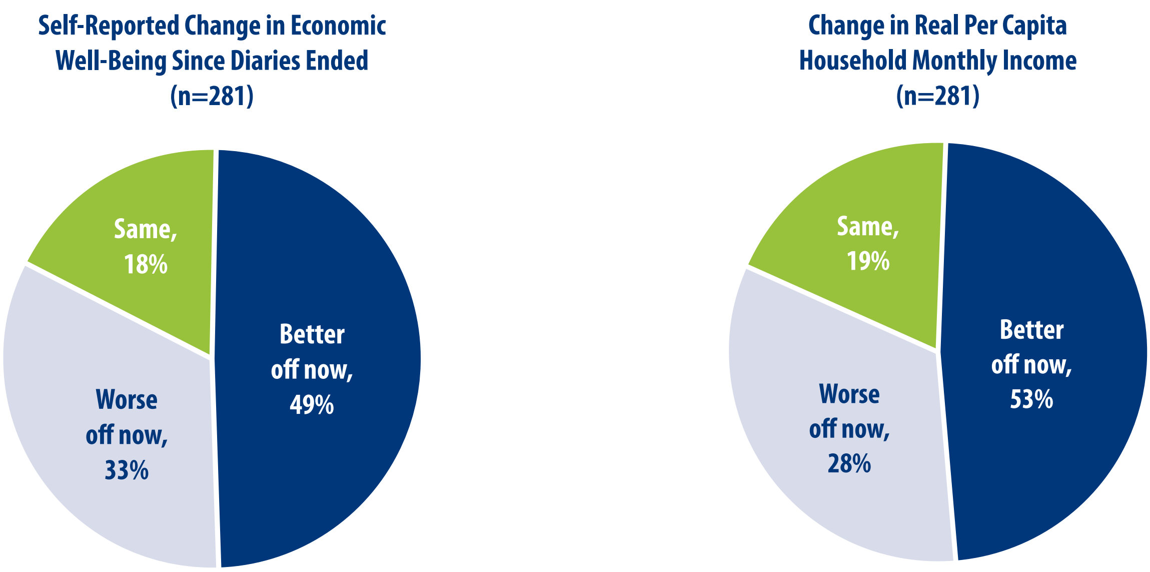
2 This accounts for inflation and excludes households who did not participate in the Update.

3 Due to time constraints, we did not measure consumption in the Update. At the time of the Diaries, 72% of the 298 households completing the study fell below the $2/day poverty line on a consumption basis.

Table 1: Summary of key changes in well-being as measured by income

		2013	2015
Average household monthly income (2015 prices)	median	7,955	10,542
	mean	*13,720*	*20,958*
Average per capita monthly income (2015 prices)	median	2,343	3,715
	mean	*4,663*	*7,435*
Annualized percent change in real per capita income	median		14%
	mean		*25%*
Poverty rate (below $2/day on per capita income measure)		67%	55%

Figure 1: Changes in perceived welfare and household income (%)



Nearly half of our respondents reported that their household was doing better economically two years after the Diaries. [4]

But, just because the two charts in Figure 1 look very similar does not mean that there is perfect overlap in perceived well-being and measureable income changes. While the relationship between our many measures of income change and a feeling of being better off is statistically robust, there is actually quite a bit of variation in experiences below the surface.

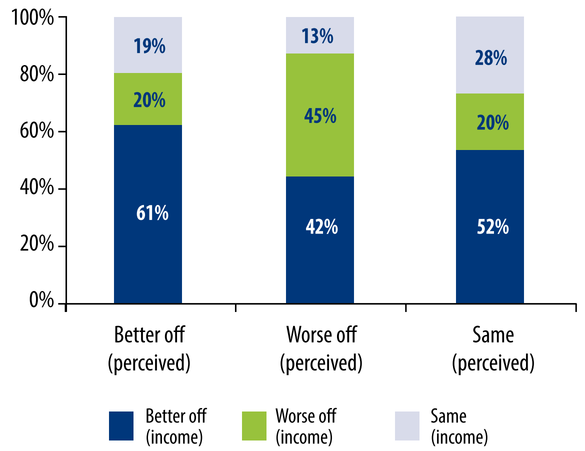
We see that 52% of those who reported that their economic situation had not changed actually experienced an increase in real per capita income exceeding 20% of their Diaries average income. Only about half of those reporting worsening conditions had a demonstrable drop in real per capita income *(Figure 2).*

Digging into exact magnitudes of change in real per capita income is also quite revealing *(Figure 3)*. The median household reporting that their economic situation worsened experienced a 14% decline in real per capita income. Those who reported doing better off had a measurable increase in income at the median, but the increase was quite similar to those who reported no changes. Why might this be?

4 Our income estimation in the Update is less precise than during the Diaries, when exact cash flows were recorded. Here, we clustered income change groups to allow for some mismeasurement in real (CPI-adjusted) per capita income: Worse off=Drop in income of more than 20%; Same=Between 20% above and below; Better off=Increase in real per capita income >20%.

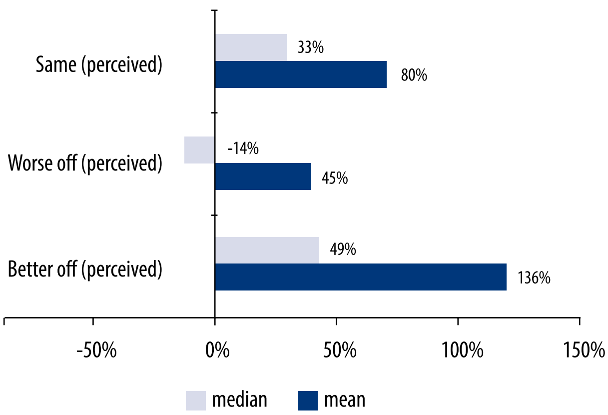
Those in the "same" group could be less perceptive of moderate changes, perhaps shaped by higher expectations for achieving the good life. Or, maybe they are facing an increase in expenditure demands that dampens their feelings of well-being in the face of income growth. In either case, neither the perception of change nor the actual observed changes in income tell the whole story.

Figure 2: Overlay of subjective & objective measures of change (%) (n=281)



While most of those who report being better off experienced a real per capita income gain (CPI adjusted increase >20%), so did a similar portion of those who reported no change in economic situation.

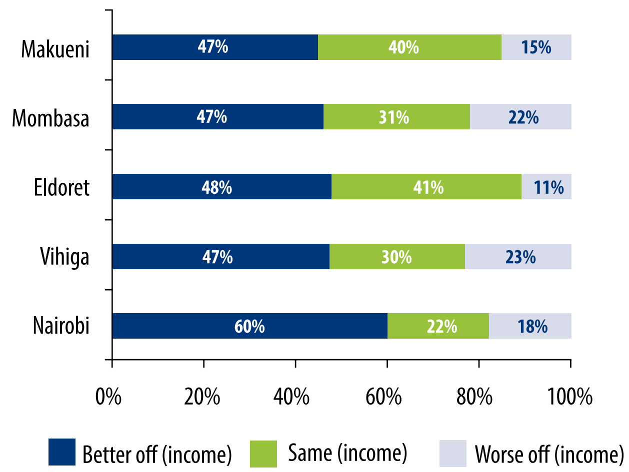
Figure 3: Percent change in real per capita HH income by perception group (%)



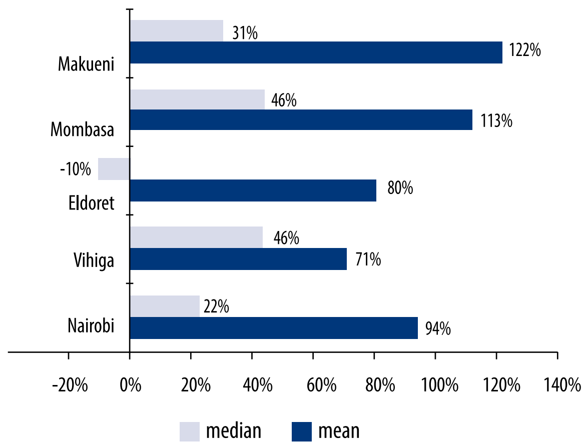
On average, changes in income correspond to perceived changes in economic welfare.

When we disaggregate the data by research area, we see that improvements in perceived well-being are heavily concentrated in Nairobi. But, the change in perceptions is more dramatic than the change in actual incomes. The median household's overall monthly income in Nairobi only increased by 6%. Instead, Mombasa, with a mix of rural and urban households, scores the highest for both mean and median increase in real per capita income, though fewer than half of those households reported improvements in their economic well-being. Income is clearly only part of the story of well-being *(Figure 4)*.

Figure 4: Perceived change in economic well-being by area (%)



Percentage change in real per capita income



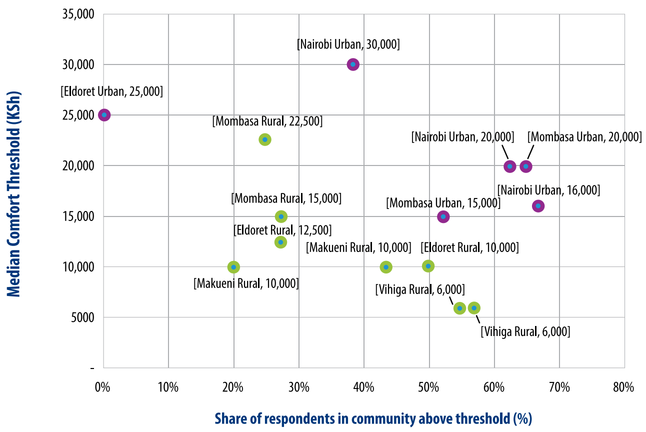
Perceptions and real income changes by research area show even further divergence between objective and subjective measures of economic well-being.

PERCEIVED SCARCITY & COMFORT

Based on our income measures, about 55% of our households could be considered poor based on the measure of earning less than $2/day per capita. But, do they feel "poor"? We asked respondents in the Update interview what level of income their household needed in order to meet their needs and be comfortable. We could then measure the distance between their incomes and this self-determined benchmark figure.

The median benchmark figure reported by our respondents was KSh 10,000 per month (KSh 20,000 in urban areas; KSh 10,000 for rural), quite close to our actual household median income of KSh 10,542, suggesting perhaps that households may gauge their own economic satisfaction against average income levels observed. Comfort thresholds and the share of respondents living at or above those thresholds varies significantly by community *(see Figure 5)*. In rural Vihiga and one rural community near Eldoret, we observe high levels of comfort even at low incomes. While two urban communities have the highest share of respondent households who are living at or above their own comfort thresholds, the other urban sites have large gaps between what households believe they need and what they actually have.

Figure 5: Median comfort threshold (KSh) and share of respondents above their own threshold (%)



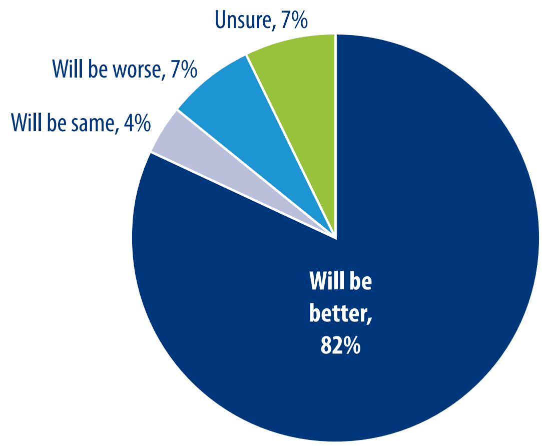
Satisfaction with income levels varies dramatically by research community.

Will living conditions get better?

The overwhelming majority--82%--of respondents felt their living conditions would improve over the next five years (see *Figure 6*). They said there are many reasons to be hopeful:

1. Children are finishing school and training programs and will begin remitting money back to their parents;
2. Investments in livestock, rental houses, and fruit trees will begin to pay off;
3. Expanding businesses will increasing earnings;
4. Lifestyle changes—quitting drinking and smoking, ending costly extra marital affairs, becoming more thrifty—will make it possible for the household to make new investments;
5. Some simply expect that current positive trends will continue; and
6. Others have faith that "God will provide."

Figure 6: Expectations of change in economic well-being next five years (%) (n=281)



Most respondents are optimistic about their economic situation improving over time.

DRIVERS OF CHANGE

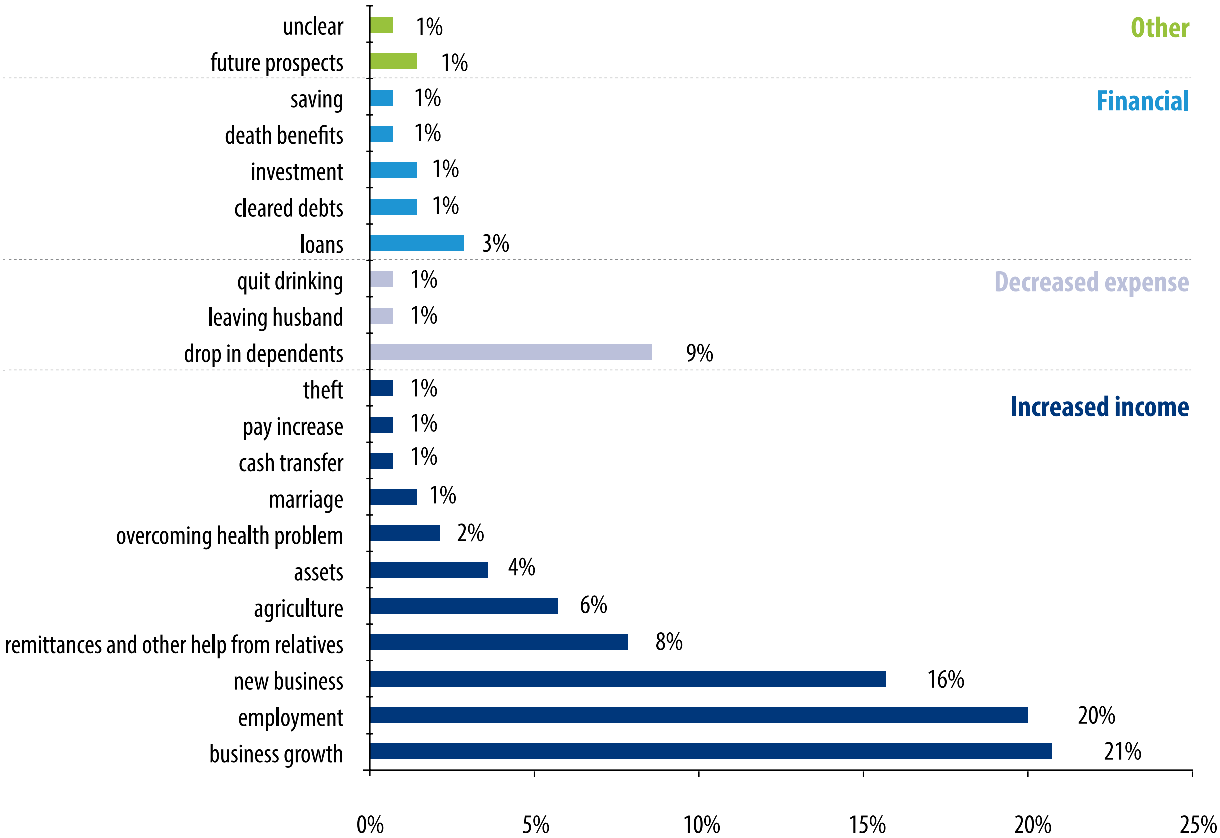
As nice as it is to know that—generally—things are improving for many households and that many more expect improvements to materialize over the next five years, it is even more important for us to understand why some households are improving and others are not. What are the drivers behind the changes in well-being that we observe?

The dataset lets us investigate these drivers in a number of different ways, starting with respondents' own explanations for their perceived change in well-being, looking at changes in income levels from different types of income sources, studying households' experiences dealing with shocks and taking advantage of opportunities, and also by piecing these bits together with respondents' narratives about how their lives have unfolded over the past two years. We cannot expect with this one small study to definitively isolate drivers to poverty and vulnerability, but we do hope to shed some light on the dynamics most affecting our respondents' experiences, particularly as we continue to think about how financial services can do a better job in assisting people like them in their own livelihood journeys.

Proximate drivers

It ought to come as no surprise that the most important factor which respondents report as improving their economic situation is earning more income (see *Figure 7*). For low income Kenyans, that is mostly through self-employment: 37% of those who say their conditions have improved tell us that the main reason is that they started a new business or expanded an old one, and this is very similar for both urban and rural households. For some, particularly rural households and those headed by older individuals, it's also about generating increased remittances, most often because their children have begun to earn enough money to be able to help out. The drop in dependents at home—because children finish school and begin to earn their own money—was the biggest non-income related driver of self-reported improvements in well-being.

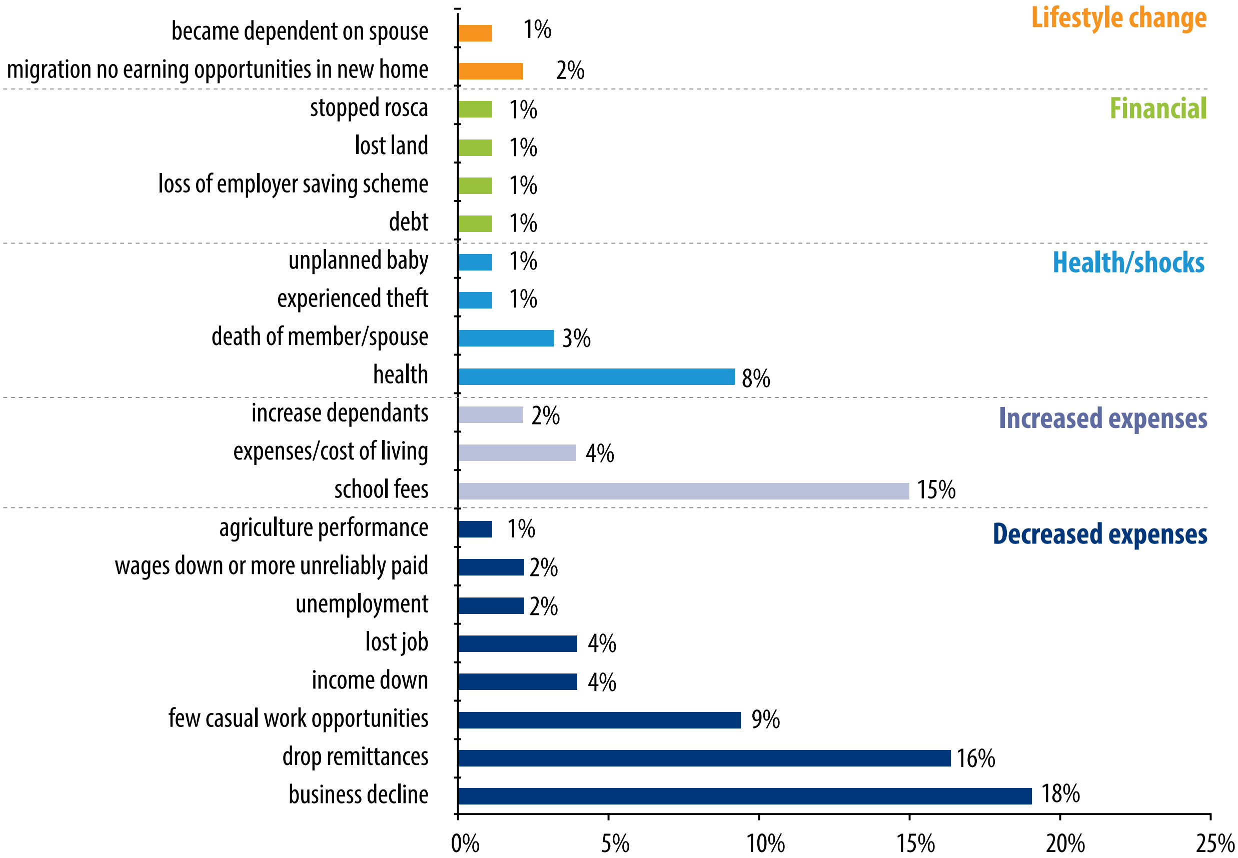
Figure 7: Coded respondent-reported primary drivers of improvements in HH who report being better off (%) (n=138)



Respondents point predominantly to increases in income to explain improvements in their economic well-being.

Looking at those who reported that their situation was worse off than before, again, we see the highest concentration of responses in the income category. But, 15% of those who reported worsening conditions said the reason was instead related to an expense—school fee payments—effectively diminishing the family's budget for other things. For these families, we would expect that income could go up or remain stable even as they continue to feel pinched. Their feeling of declining economic conditions may be temporary, assuming their children are able to use their education to improve the family's long-term conditions.

Figure 8: Coded respondent-reported primary drivers of worsening conditions among HH who report being worse off (%) (n=93)



Declining incomes and increased school fee burdens are the most commonly reported drivers of declining economic circumstances.

We also looked across households' characteristics during and after the Diaries and a range of intervening events to see if there were some statistical differences in means that help us flag possible relationships between choices and events and outcomes over this two year period. One of the strongest relationships we pick up here is between the real change in income in the household and the outcome variables of perceiving the economic situation has improved or deteriorated. Those doing better off both subjectively and objectively were also more likely to have larger stocks of physical assets at the end of the Diaries, to have expanded their businesses, and to report incomes above their own comfort threshold. Those with large income increases were more likely to increase their debt levels as well, which could indicate either that they are using loans to finance growth or that their higher incomes have created some new debt bearing capacity.

Increases in income appear mostly driven by self-employment. In fact, more of those who feel worse off had large shares of their Diaries income from agriculture. Those doing better off typically had a smaller share of income from agriculture to begin with. In the two years between our studies, agriculture just has not been a major source of upward mobility.

Some other relationships are less intuitive. A significant share of those who feel better off also had a child finish Form 4 (the last year of secondary school in Kenya). This reduction in expenses can make some feel better even if income measures do not increase substantially. Those with a more than 20% decline in monthly income were more likely than others to have had to fund the medical care for someone outside the household. This is a bit counterintuitive. One would expect that this kind of event would have a more significant effect on the expense side rather than the income side, such that one may "feel worse off" but not have a verifiable drop in income. But, perhaps these families diverted funds from business and asset investments to medical care, resulting in this real drop in income.

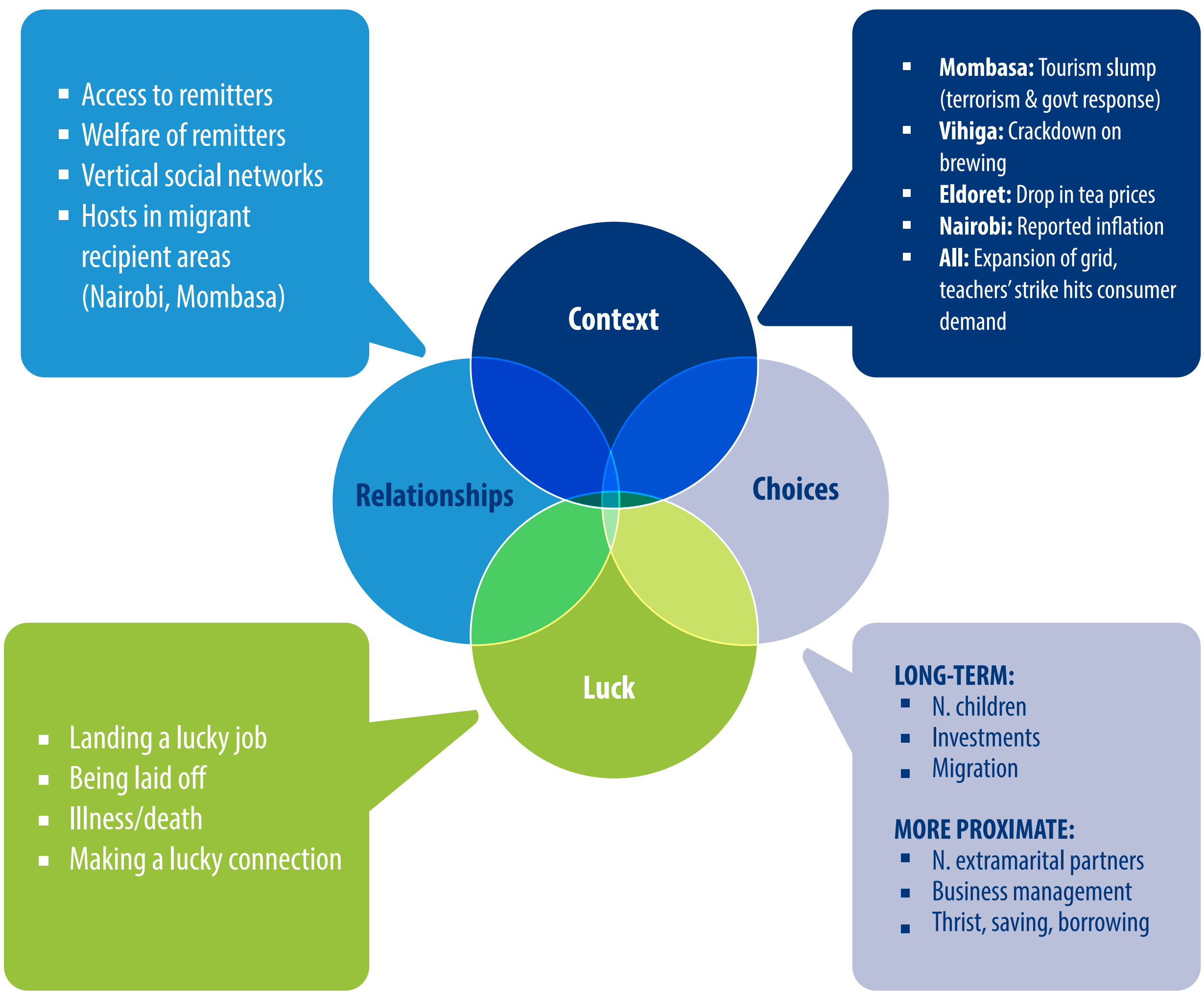
For many other variables, the direction of causality is uncertain. Improved or worsened conditions could be either cause or effect. For example, we have noticed that our respondents tend to make some expenditures—like paying dowry and buying assets—only when they feel they are in a comfortable situation. It appears that our better off respondents were more likely to experience these events because they could afford to take on the expense during this period. Our worse off respondents were less likely to buy a new asset, because they couldn't afford to, nor could they invest in expanding businesses. Likewise those who reported doing worse were more likely to experience hunger and go without medical care, more of a consequence of their deteriorating conditions than a cause.

Underlying drivers

A web of influences

The web of influences on households' well-being is complex. The qualitative component of Diaries lends itself to exploring the richness of those pathways. As we break down their stories, we heard four realms of influences that were shaping opportunities available and individuals' responses to them. As outlined in Figure 9, we saw that contextual factors having to do with the larger economy, government policies, and changing localized demand conditions were expanding opportunities for some and contracting them for others. Individuals' choices—financially and socially—also had a big impact on the living conditions of their families. The strength and diversity of economic and social relationships also featured prominently in our respondents' stories as did good and bad luck.

Figure 9: Variables interact to expand and contract opportunities and individuals' tendencies to respond to them.



Consider one example: Sarah, a widowed mother of eight who lives in Vihiga. Sarah left school at class seven when her parents could no longer afford to pay school fees. At 16, she found work as a housekeeper for two years and then married her husband when she was 18 years old. He was a soldier in the military and would come home to visit her in the rural areas just once per year on his annual leave. When he passed away in 2006, Sarah got by on earnings from her *posho* mill (maize mill) and small provisions shop along with a pension that declined as each child reached adulthood. Luckily, her husband had built a large, permanent house when he was working, so even though the family struggled to pay school fees, they never worried about housing.

During the Diaries Update, Sarah told us about how her eldest son was laid off from his job. He had worked in a semi-formal brewing company, which was forced to close due to the government crackdown on changaa, an important policy affecting the lives of respondents in Western Kenya. He received a severance package, which he chose to put towards building rental units on Sarah's land, opening a *kinyozi* (barber shop) next to her shop, and connecting the rentals, shop, and kinyozi all to the electricity grid. Sarah can now keep her posho mill and shop running until 8:30pm, increasing revenues. And, once the rentals are complete, she expects her son will share some of that new income.

Two of Sarah's daughters married and are not working, but four finished Form 4 with good grades, and she really wants to send them to college. Since she could only raise the money for one to continue her education, the other three are working as housekeepers in Nairobi. The other is now studying at a teacher training college, thanks to Sarah's good relationship with her son-in-law, a soldier in the Kenya Defense Force, who has agreed to help with her fees. Sarah views his assistance as a partial payment against the dowry he will eventually pay for marrying her daughter. Without such a strong relationship with a person with means, none of her daughters would have been able to study beyond secondary school. Sarah's youngest child is currently finishing secondary school. While the pension tapers off, her businesses are picking up and her expenses on school fees are also declining. She feels her situation overall is mostly the same as during the Diaries, but she is hopeful that with her children becoming independent, the future will be better.

Recurring qualitative themes

Sarah's story demonstrates the complexity of interacting factors in shaping a family's economic trajectory. But, of course, "It's complicated," is not a very satisfying answer to the question of what really matters for reducing poverty. Across the 281 in-depth interviews our team undertook, some common themes emerged in each of these areas suggesting some important areas of focus, only some of which have direct financial implications.

Let's start with **contextual issues**. All the issues outlined in the section "Kenya 2013-2015" impacted our respondents. Two areas in particular, though, stood out: electrification and the shift in tea prices. These two contextual factors had especially large impacts on respondents in specific communities.

Many of our respondents in an informal settlement in Mombasa were newly connected to the grid through the joint government-World Bank project. The cost of a connection fell from about KSh 50,000 during the Diaries to about KSh 8,000, (inclusive of bribes/informal payments, but excluding the costs of wiring the house). Many find this worth it. This has particularly benefited home owners in the area, even those without formal titles. Housing values increased as did rents chargeable to tenants in the area. Our respondents who owned land are building new rental units to augment their income, and they report that renters are now paying on time. Renters, however, are facing higher rates. One of our renter respondents was forced to move when she could not keep up with rent. She downgraded from a home that cost KSh 3000 per month to one without a power connection that cost only KSh 1500. Several of our respondents who were able to connect consider electricity the biggest change in their lives in the past two years. They are now building rental rooms and investing in televisions and digital decoders (to receive television programming).

In our most significant tea-producing community, a fall in tea prices has had a significant impact as well, but not perhaps in the way that one might expect. Those owning tea farms were mostly the better-off members of the community, most having other complementary sources of income as teachers, shop attendants, and masons. When their bonuses dropped, they certainly had less left over after paying back bank loans, but they were not for the most part devastated economically. Only one found himself deeply indebted and under serious financial strain. The pickers, however, were hit very hard. These are some of the lowest-paid workers with regular jobs. Their earnings were meager even in good years. They found their plantation bosses using them for fewer days, also trying to save costs. But, those employers were also angry that their pickers would accept casual jobs on other farms when they weren't being hired. Many pickers ended up moving farms and moving out of the research area to find more reliable work.

Relationships also matter a lot for low income families, because resources are shared within nuclear and extended families. We saw the impact of relationships rippling through our respondent households in two major forms: through choices around family size, and changes in remittance flows. The linkages between welfare outcomes and family size are well-documented in the development literature. Part of that is around choices that families make together and another part around access and usage of family planning services. But another—and a very important one—comes from a spouse's (in our study, mostly the male spouse) choice to take on a second spouse and children without the consent of his existing partner. Our female respondents complained not just of the betrayal of trust (which in many cases was expected), but instead of the siphoning of resources to care for mistresses, second wives, and their children.

In one heartbreaking case, a woman who had just delivered her sixth child saw her remittances from her husband working in Nairobi fall to just KSh 300 per month. Her in laws—hoping to force her to run away—had refused to subdivide the land to give her a plot to produce food. With six children and very little education or skills, she has nowhere to go. One day, she ran into a woman and a child at her in-laws' home and realized her husband had taken on another wife and child while her own children were not getting enough to eat. While a stark example, these incidents went all the way up our income ladder, even to a household where the husband and wife were doing very well and were highly cooperative. The wife in that family had just discovered that her husband had a one year old child with a businesswoman in the neighborhood. Her children would not starve, but she was unsure of how closely she and her husband would collaborate on their plans for the future. She had thought that they had decided together about their vision for the future, including the number of children they would have.

As discussed above, remittances were also quite important to trajectories, improving lives as they went up and worsening conditions when they declined. Many low income families are headed by individuals with little education and even when they start small businesses, they often quickly reach the limits of scale in their low income rural communities. As they get older, their ability to run businesses or hire out their own labour diminishes. And yet, many of them continue to raise children—their grandchildren left behind by children working in towns, deceased (often from HIV) or by daughters who married other men who refuse to let the child of another man grow up in their homes. In the Kenya DHS, 9% (unweighted) of Kenyan children were being raised by their grandparents; 33% of household heads 55 and up were raising grandchildren. The welfare of Kenya's rural poor goes up and down with the welfare of urban remitters. When a child enters the workforce for the first time, it is a double boon for the family, decreasing the dependency ratio at home, relieving parents of the financial stress of education costs, and initiating new backwards remittance flows.

But the reverse is also true. One of our respondents, Rita, is an elderly woman in rural Western Kenya who cared for five grandchildren during the study. Only two of her four children kept in regular touch. During the Diaries, she relied primarily on remittances, and supplemented that with casual work and farming when her arthritis allowed. But, she went hungry when the remittances were not flowing. In the Update, she told us that one of her main remitters was hospitalized for a year with meningitis. He had a KSh 1 million hospital bill to pay and could no longer afford to send her money. The other stopped when he had his leg amputated and also had to quit working himself. She is struggling to come up with her basic needs, and meanwhile the maternal relatives of her grandchildren are demanding two cows for dowry payments or they will reclaim the children. The children are scared, saying the maternal relatives had been abusive. Luckily, Rita had been registered to begin receiving a new cash transfer targeting the elderly. Here, the state is stepping in much like her relatives used to, ensuring a transfer of basic subsistence level income.

When it comes to **luck**, we heard both good and bad stories. Clearly, there are some significant shifts in fortune beyond respondents' control. Health shocks and accidents stand out most starkly. Health shocks often come with huge cash outflows (which are discussed in a later section) while also interfering with adults' ability to keep up with livelihood activities. They are also emotionally taxing, asking individuals to make extremely difficult tradeoffs, like Sandra. Sandra was making use of the government's free ante-natal care to have regular checkups on her pregnancy. Late in the pregnancy, she became anemic and was sent to a referral hospital. She was told she needed a blood transfusion to carry her baby to term. It would cost KSh 50,000. She and her husband didn't have the cash on hand. Her husband didn't feel like there was a clear case for going to extraordinary measures to get it. Instead, Sandra went home and miscarried at 7 months. She had to be hospitalized after the miscarriage, with the bill coming to KSh 45,000. They had to sell their only cow and withdraw all of their savings to clear the bill. Her husband stayed home from work for a month caring for his wife as she recovered physically and emotionally.

Luck was also on the side of some respondents, opening up new opportunities in unexpected places. One young woman, Leah, finished Form 4, but didn't do particularly well. Her mother couldn't afford to clear the KSh 20,000 balance at the school, so she still hasn't collected her final results. Leah's first bit of luck was landing an internship that paid Ksh 6000 per month. She was also able to pick up occasional jobs doing some modeling work. By the time the internship ended, she was offered a full time job at the modeling agency, where she now makes about KSh 75,000 per month. Her life and that of her mother have now been transformed. Leah's helping her mother slowly pay off the arrears she owes to Kenya Power for years of unpaid electricity bills. Once the power was reconnected, her mother was able to get a tenant for her extra room, increasing her personal income. The young woman herself moved from the slums of Dandora into the middle class neighborhood of Kileleshwa, in Nairobi's "leafy suburbs."

While Leah's story is very happy, we also see that merit doesn't always play the role we might think that it should in shaping the promise of young people. More than a few bright students were moved from good/expensive schools to poor/cheap ones due to family finances. Not all of those offered admission to universities were able to seize those opportunities. And, one of our most transformative stories, that of a respondent's child securing a job as a soldier in the Kenya Defense Force, was bought with a substantial bribe, rather than the young person's qualifications. What is the role of finance in a world where so much of your future is left to chance?

As important as luck may be, we also see a few areas where individuals' **choices** also make a very big difference. Not everyone is a born entrepreneur, and we see many choices that respondents' make about how to manage their business that are questionable. Not all hustle; not all take the same pains to keep business capital in motion. For example, Nancy, a successful changaa brewer, took a loan for her husband, Steven, to open and run a shop. They also used to take stock for home consumption, getting better deals on basic goods for themselves. Steven—with access to goods and cash—courted many women in the area, giving them free goods and spending business revenue on them. Nancy says he would win them over with free sanitary pads. The shop eventually collapsed, and Steven never made a single loan payment. Nancy is still paying it off on a negotiated plan with her microfinance institution, with all of the payments coming from her own brewing business. Steven lacked the motivation and the discipline to run a successful business.

A few of our respondents -- all three widowed women -- made the choice to move from their urban homes, where they faced extreme difficulties meeting their basic needs, back to rural homes where they are starting over with closer support of family, lower costs of living, and access to farm land to produce at least some of their needs directly. None of them are doing exceptionally well, but all of them are doing better and tell us they feel more secure, less close to the edge of survival. They say it is easier to be poor in rural areas than in urban ones.

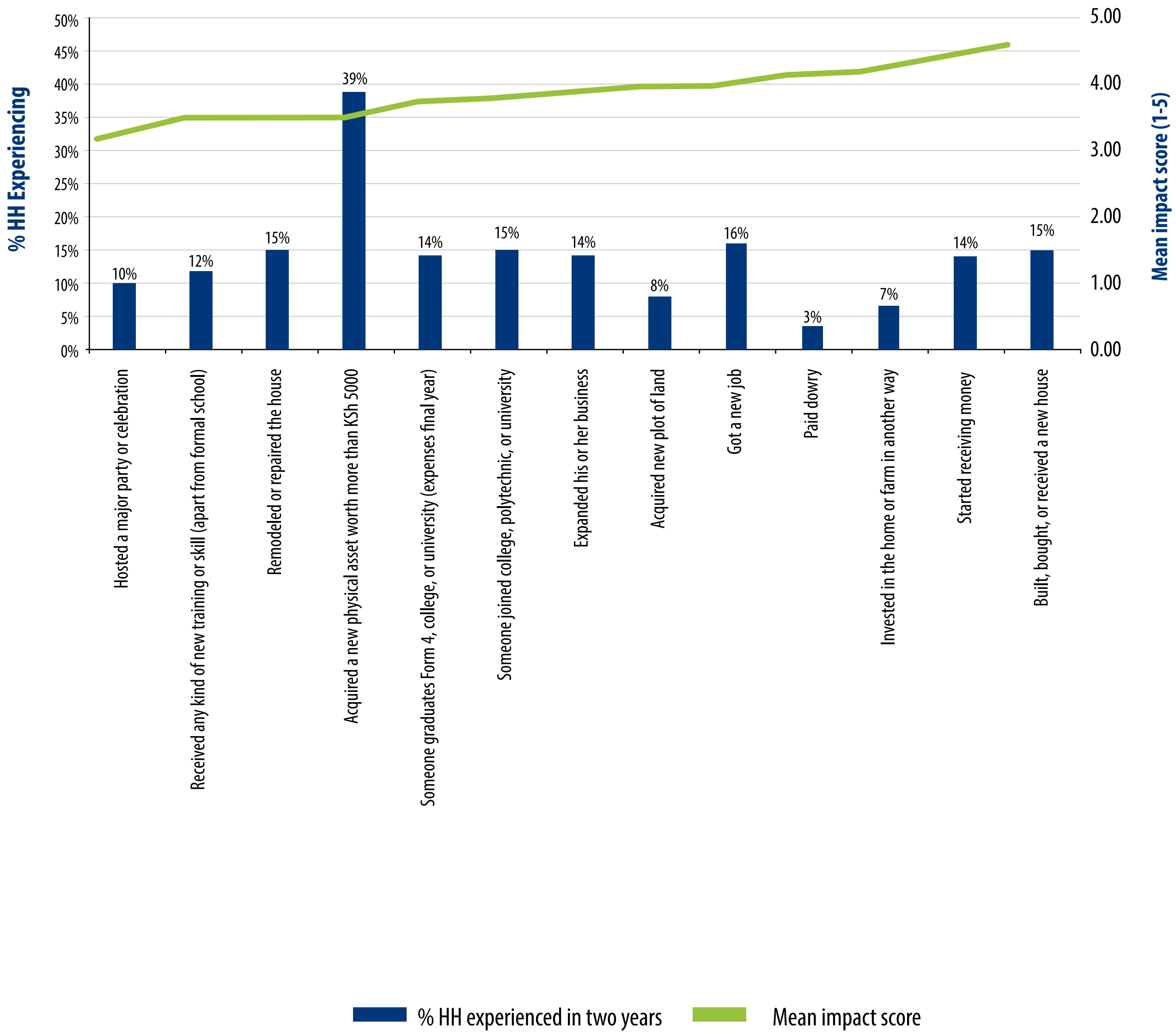
Apart from some of the behaviors like Steven's, exhibiting a lack of self-control and discipline, we do not see a lot of just clearly "bad" financial choices being made. We do not often see someone who is negligent about saving or who makes clearly unwise investment choices.

Only about 21% of respondents in our financial health module worry they have problems with overspending; 92% report shopping around before any major purchase; and 75% are quite confident in their own ability to fulfill their long term financial goals. Under difficult circumstances, most of our respondents are doing everything they can to put themselves and their families in a position to have a better future. Perhaps that helps explain why 82% of our respondents expect that their economic situation in five years will be better off than today.

Echoes in quantifiable events

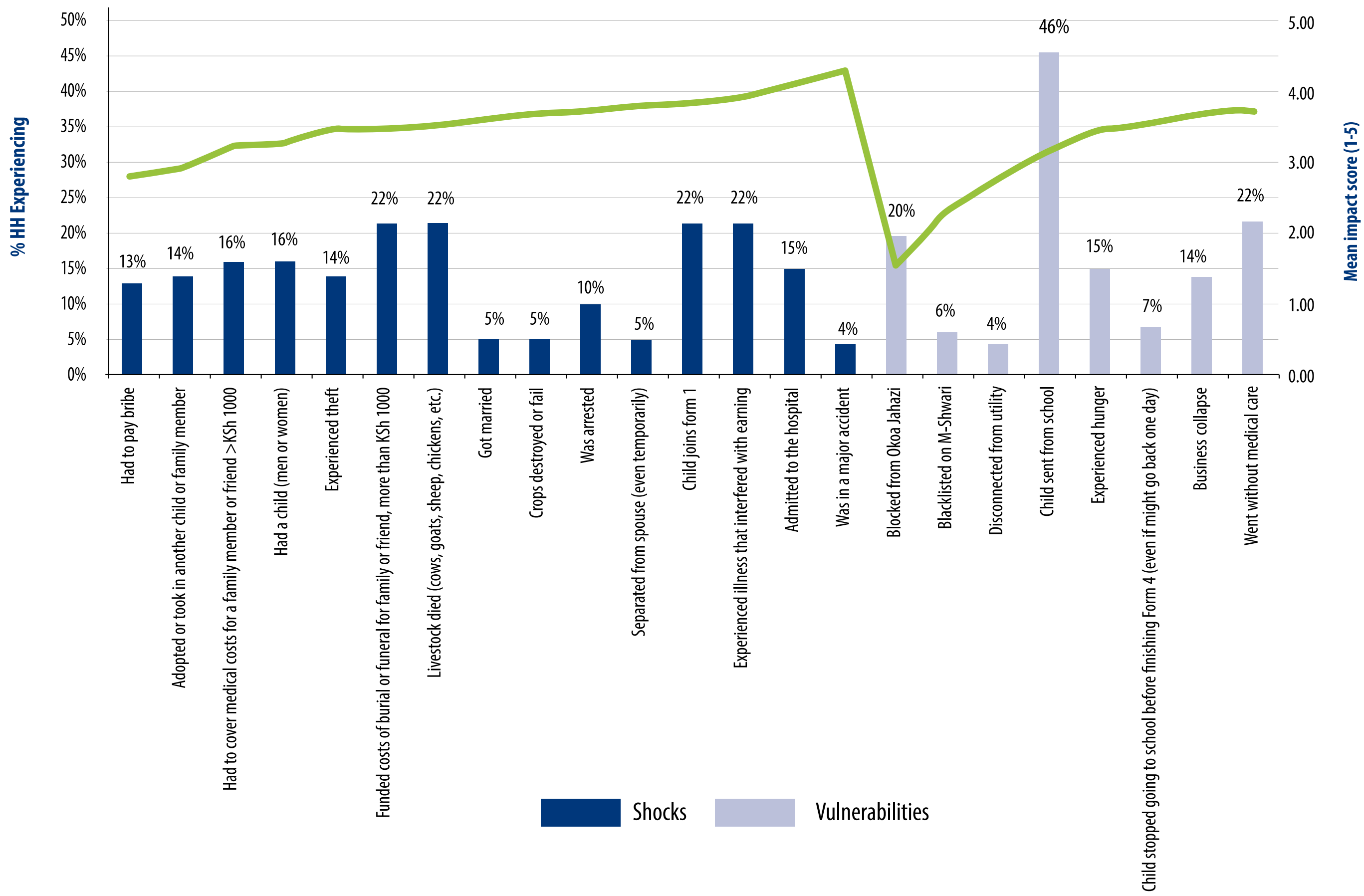
We are able to complement these qualitative insights with more quantifiable indicators as well. We asked every household about the incidence of events that marked moments of vulnerability, important shocks, big expenses, and opportunities. For each, we also asked that those who experienced the event tell us how much it affected their lives, from 1 meaning there was no impact to 5 signifying a "huge" impact. Figure 10 and Figure 11 show the incidence and impact score for each event clustered by type. Here we see, when it comes to opportunities, some of the highest impacts come from new jobs, new remittance sources, and investments in the farm and—especially—in housing. Though business investments appear statistically to have an important influence on welfare outcomes, we see that the average impact score assigned by respondents is moderate. The highest impact shocks are all related to health: experiencing an illness that interferes with earning, having a household member admitted to hospital, and being in a major accident. Similarly, the highest impact of a vulnerability event is going without healthcare when needed. Collapse of businesses and children dropping out of school early—both of which affect household livelihoods—follow close behind. (*Table 3* in the annex provides greater detail on the incidence, impact, and cost of each of these events.)

Figure 10: Incidence & impact of opportunity experiences



Achievements like being able to pay dowry and invest in the home and farm are perceived to be high impact, though they do not immediately affect earnings.

Figure 11: Incidence & impact of shocks and vulnerabilities



Incidence & impact scores from 1=No impact to 5=Huge impact of key shocks and vulnerabilities

IMPLICATIONS FOR FINANCE

Financial services can be helpful for low income families when they help them cope with shocks, smooth liquidity, and take advantage of opportunities. Financial services today are helpful, if not transformative. And, perhaps, given the many unrelated factors that shape their life trajectories, we shouldn't expect them to be. Still, as we dissect the life experiences of our respondents, we do begin to see some areas of focus where high-quality and well-designed financial services could perhaps achieve greater impact:

Enterprise

Clearly earnings play a major role in helping families improve their living conditions. In Kenya, individuals and individual finance can do little to affect wider labour market dynamics, but it can support the enterprise activities of men and women. What exactly they need varies at different stages in the growth of their businesses, which we explore in more detail in a subsequent focus note.

In general, it appears to be some kind of combination of the right kinds of credit and connections—to both buyers and suppliers. At the very lowest level, we see many very small trading businesses that start with very little capital and simply trade and accumulate more capital expanding the same product line(s) until they hit a market bottleneck. There are only so many bananas you can sell to neighbors in a rural area in a day. Expanding requires diversifying the product line or reaching a new, larger market, potentially by relocating to a market center. Next level businesses trading in multiple goods in a larger market then hit an asset bottleneck where expansion requires a larger scale and less incremental kind of investment, like a posho mill, permanent structure, or motorbike. Here, the financing needs are different. But even those businesses will soon reach the limits of growth in their markets. Very, very few of these businesses will ever graduate into an SME with formal employees, multiple locations, and potentially any kind of specialization. And even within this group of micro businesses, financial needs for growth are quite diverse and, mostly, very small scale.

In the immediate term in Kenya, it will be these enterprises that improve the lives of low income Kenyans. Getting the right tools to the right small entrepreneurs is a potentially very high impact area of work.

Youth education & opportunity

This round of interviews also highlighted the importance—and the difficulty—of ensuring that young people complete secondary and higher education and move into livelihoods that were more prosperous than those of their parents' generation. Financing for secondary and higher education is a major obstacle, but not the only one. Our respondents in the Update talk about how difficult it is to ensure a smooth transition to adulthood when there are so many other distractions and temptations for young people along the way. Having lived in environments of scarcity for so long where their own education creates even further drain on family resources, low-skilled employment—getting money in their pockets for the very first time—often lures young people away from school, potentially sacrificing a lifetime of higher earnings and reducing parents' returns on their educational investments.

Financial services that relieve parents' pressure on paying secondary school fees and that better target merit-based assistance can help ensure that more students, and especially the most promising ones, fulfill their potential and enable intergenerational social mobility. Fintech solutions that combine education financing and connections to employment, training, and other opportunities can also help bridge the opportunity gap between Kenya's rich and poor, leaving less to chance.

Healthcare

Health shocks were an important source of financial strain for Diaries households, and the effects were wide-ranging. Foregone care and prolonged illnesses kept respondents away from work, impacting earnings. Out of pocket expenses kept others from getting the care they needed or took away from investments that might have otherwise gone to high-return livelihood activities. Our respondents also had to pay for non-household members' medical care, particularly when they are responsible for the welfare of close family members who are relatively worse off. While such supportive social networks are a societal strength, these kinds of sharing norms can inhibit upward mobility for those in the network who bear these burdens.

Our paper, *Struggling to Thrive*, explores health financing issues and possible solutions in great depth. The Update only reinforces the importance of tackling this momentous challenge with a wide set of tools, among which insurance may play a relatively small role.

Remittances & safety nets

For the poorest, remittances and safety nets already play a huge role in preventing backsliding and extreme vulnerability. The financial infrastructure that supports these payments could be further strengthened. And, more service providers should be imagining how social network financing and multi-payer accounts can figure into their strategies to reach low income people. The poorest on their own cannot afford many of the investments that improve families' well-being, like school fees, grid and solar connections, quality housing, agricultural inputs, and health insurance. But all of these things become more feasible with the help of family and friends—and donors and governments.

Infrastructure

Expanding infrastructure and other contextual changes in Kenya have had a big impact on our respondents. Here, financial institutions can help to enable these kinds of investments and ensure that low income populations are able to take advantage of the opportunities that these kinds of changes introduce.

For example, a direct financing option for new grid connections could have enabled even lower income households to register for new connections while also—through direct electronic payments to Kenya Power—could have reduced the corruption premium charged for such services.

Consumption smoothing tools.

Low income groups still struggle to ensure they can avoid hunger, get the outpatient care they need and cope with small shocks. Thirty-three percent of our respondents told us that coming up with KSh 5000 in an emergency would be very difficult or impossible. The financial sector in Kenya with its many new, low cost deposit (basic bank accounts, M-PESA) and credit facilities (M-Shwari, KCB M-PESA, EZ Loans) has gone a long way to addressing those needs. These kinds of solutions can be expanded and refined to make them more useful in the lives of low income people.

CONCLUSION

This analysis suggests we should be cautiously optimistic that lower-income people are participating in the macro growth trends in the country. But, the mixed fortunes of our respondents show that this is hardly universal. Individual households are subject to significant setbacks from shocks that could potentially be alleviated. It is possible that improvements in financial sector development could help accelerate positive trends through facilitating investment in business growth and financing education; and could help avoid people falling into poverty from health shocks.

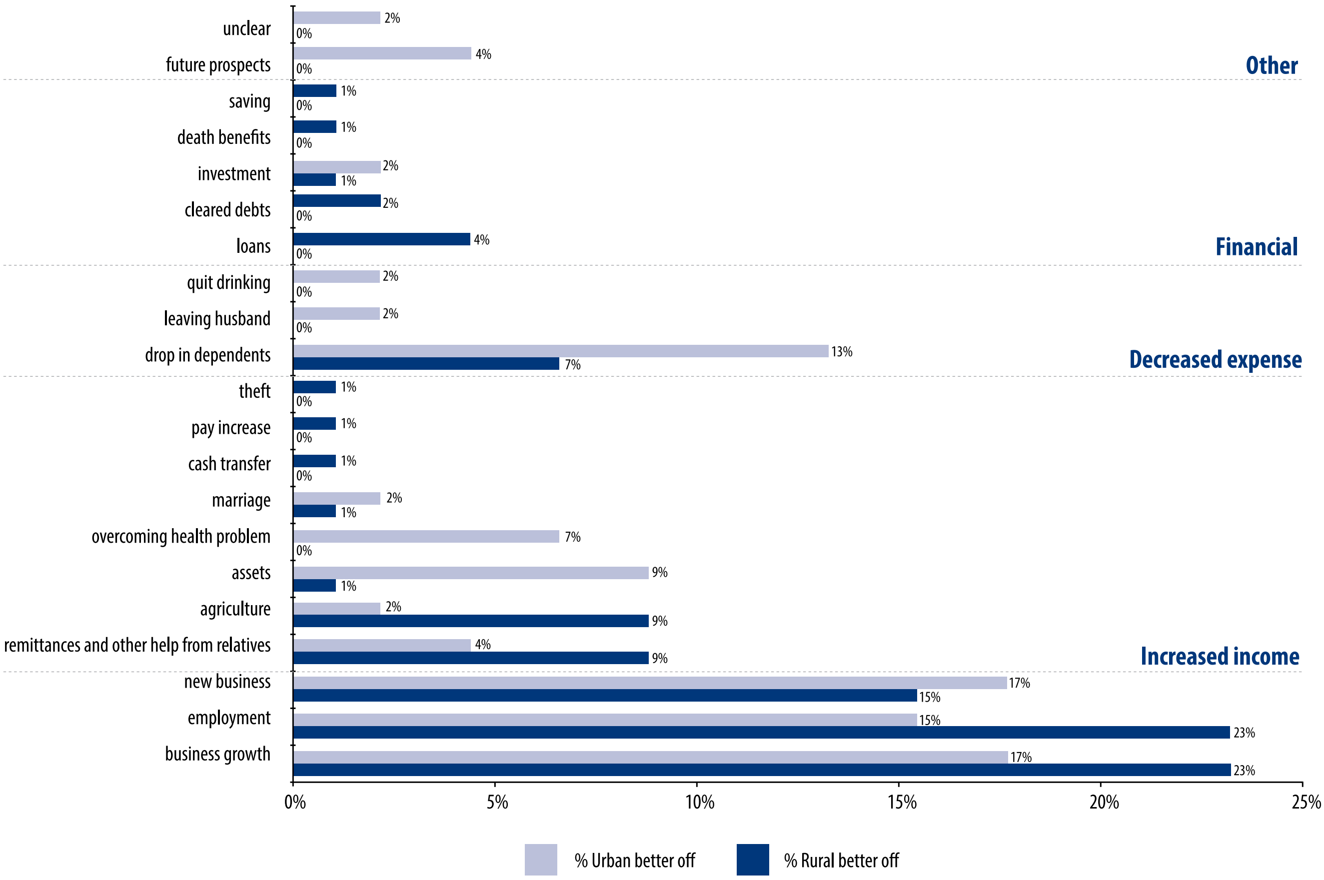
ANNEX: SUPPLEMENTARY TABLES & CHARTS

Some Update data does not compare very well with Diaries data. Here we summarize key issues around comparability in the two studies.

Table 2: Summary of comparability of data from the Diaries and Update

Good for comparisons	Not as good for comparisons
Balances in devices • Can compare a snapshot of balances at the end of Diaries vs. day of Update. **Major Events/Happenings** • These are typically "big" things that respondents remember.	**Goings on (vulnerable moments)** • Respondents seemed to forget a lot of the smaller things, like going without medical care, when the issue was small in retrospect. • Update ***underestimates*** vulnerable moments. **Resources Received (remittances & gifts)** • Numbers of remitters dropped off a lot in the Update. We almost certainly missed many one time/infrequent senders. • Update ***underestimates*** the scale of Resources Received. **Income** • In recall, we estimate income by recording income frequency and approximate value per payment. On things like casual income and self-employment—which for many make up key income sources—we believe many slightly overestimate the frequency of earnings. • Update likely ***overestimates*** income for many households.

Figure 12: Coded respondent-reported drivers of improvements (%) by rural and urban area (n=138)



Rural and urban differences in self-reported drivers of economic changes

Table 3: Incidence, perceived impact, and cost by event type (excludes very low incidence events)

Event type	Incident	% HH 2 yrs	% Reporting impact as "big" or "huge"	Mean impact score (1-5)	Mean total cost (expense + loss) (KSh)	Median total expense (expense + loss) (KSh)
opportunity	Hosted a major party or celebration	10%	52%	3.21	21,800	15,000
opportunity	Received any kind of new training or skill 9apart from formal school)	12%	53%	3.44	4,243	-
opportunity	Remodeled or repaired the house	15%	49%	3.44	27,051	11,000
opportunity	Acquired a new physical asset worth more than KSh 5000	39%	43%	3.46	26,531	11,300
opportunity	Someone graduates Form 4, college, or university (expenses final year)	14%	68%	3.83	35,378	22,500
opportunity	Someone joined college, polytechnic, or university	15%	64%	3.83	46,667	33,500
opportunity	Expanded his or her business	14%	64%	3.92	38,771	10,000
opportunity	Acquired new plot of land	8%	68%	4.00	200,641	170,000
opportunity	Gotten a new job	16%	73%	4.02	727	-
opportunity	Paid dowry	3%	75%	4.13	24,875	26,500
opportunity	Invested in the home or farm in another way	7%	85%	4.20	65,424	7,500
opportunity	Started receiving money from a new friend or family member outside the HH or started receiving MORE from someone	14%	83%	4.30	200	-
opportunity	Built, bought, or received a new house	15%	85%	4.51	111,903	22,400
shock	Had to pay bribe	13%	39%	3.22		
shock	Adopted or took in another child or family member	14%	56%	3.31	914	-
shock	Had to cover medical costs for a family member or friend >KSh 1000	16%	59%	3.55	10,545	3,650
shock	Had a child (men or women)	16%	58%	3.60	8,246	1,500
shock	Experienced theft	14%	58%	3.74	4,889	2,450

Event type	Incident	% HH 2 yrs	% Reporting impact as "big" or "huge"	Mean impact Score (1-5)	Mean total cost (expense + loss) (KSh)	Median total expense (expense + loss) (KSh)
shock	Funded costs of burial or funeral for family or friend, more than KSh 1000	22%	67%	3.75	22,221	5,000
shock	Livestock died (cows, goats, sheep, chickens, etc.)	22%	65%	3.79	22,506	5,040
shock	Got married	5%	71%	3.86	9,293	-
shock	Crops destroyed or fail	5%	79%	3.93	16,070	13,250
shock	Was arrested*	10%	48%	3.93		
shock	Separated from spouse (even temporarily)	5%	77%	4.00	8,923	1,500
shock	Child joins form 1	22%	75%	4.03	40,436	20,000
shock	Experienced illness that interfered with earning	22%	77%	4.10		
shock	Admitted to the hospital	15%	83%	4.24	38,630	4,500
shock	Was in a major accident	4%	80%	4.40	36,070	9,500
vulnerability	Blocked from Okoa Jahazi (mobile credit advance)	20%	13%	2.20		
vulnerability	Blacklisted on M-Shwari*	6%	41%	2.82	2,525	500
vulnerability	Disconnected from utility*	4%	45%	3.18	2,600	750
vulnerability	Child sent from school*	46%	50%	3.48	4,973	1,500
vulnerability	Experienced hunger*	15%	58%	3.72	132	100
vulnerability	Child stopped going to school before finishing Form 4 (even if might go back one day)	7%	68%	3.79	2,368	-
vulnerability	Business Collapse	14%	71%	3.92		
vulnerability	Went without medical care*	22%	69%	3.97	4,166	1,000

*Estimated cost of avoiding the situation.

Table 4: Relationships between conditions and events and outcomes reported via simple means test.

Strong differences (consistently >99% confidence)	Feels better off	More than 50% increase in income	Income drop >20%	Feels worse off
Increases in income (per capita, HH, adjusted & gross)	+	+	-	-
Someone graduates form 4	+	-	+	-
Initial physical assets in Diaries	+	+	not sig.	not sig.
HH expands business	+	+	not sig.	-
HH living at or above comfort level	+	+	-	-
Paid medical expense for others	not sig.	-	+	not sig.
Experienced hunger	-	not sig.	not sig.	+
Went without medical	+	not sig.	not sig.	+
Weaker Differences (90-95% confidence)				
Share of income from agriculture	-	-	not sig.	+
Share of income from non-employment	not sig.	-	+	not sig.
Share of income from rent	-	not sig.	+	not sig.
Share of income from self-employment	not sig.	+	not sig.	not sig.
Paid dowry	+	not sig.	not sig.	not sig.
Experienced arrest	not sig.	+	-	not sig.
Increased liabilities	not sig.	+	not sig.	not sig.
Acquired title	+	not sig.	not sig.	not sig.
Acquired new physical asset	+	+	not sig.	-

\+ Indicates positive correlation
\- Indicates negative correlation

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