

Portfolios of Atlanta's Poor

An Overview of CEAR Signature Research Project

by

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Poverty and financial volatility

The popular image of the economic life-cycle in America is that through education, savings and upward job mobility it is possible to achieve financial security and success. This image has been challenged by several important studies, many of which were based on the Panel Study of Income Dynamics (PSID) at the University of Michigan. Instead the picture emerging is one of substantial instability in income that has been increasing over time. Dynan, Elmendorf, and Sichel (2012) report a 30% increase in *year-to-year* income volatility between 1971 and 2008, with half of the households experiencing income changes of at least 25%, and a third of those who experienced income losses failing to regain those losses ten years later. Morduch and Scheider (2017) document that there is additional, important volatility *within* a year for many households, even those that appear to have the right ingredients for stable finances, a secure job, education, a solid marriage, and good health, struggle to meet bill payments at many times during the years. Many suffer from episodes of illiquidity even in the absence of insolvency.

Thus, the problem that needs to be solved is how to decrease the vulnerability due to financial volatility while also increasing incomes and opportunities. Previous studies demonstrate that even households with seemingly reasonable financial circumstances and opportunities are vulnerable to financial risk in such a way that they can get trapped in a poverty cycle. Dealing with illiquidity takes scarce time, creates anxiety, and adds financial costs through penalties, service disconnections and delayed important purchases. These are all factors that exacerbate poverty. These traps imply that households continuously have to decide which bill payments to prioritize. Often the cost of affecting their circumstances in a meaningful way is insurmountable. We are far from a complete understanding of the vulnerability of these households, and of the characteristics of these poverty traps. Because the number of external factors and behavioral characteristics that influence a household's financial success is large and their interactions complex, a full understanding requires data to be collected at the household level over an extended time period and with a high degree of frequency. This is the purpose of the research program Portfolios of Atlanta's Poor (PAP).

The findings of PAP can inform both development of savings- and credit products, and insurance products, since they are all related to financial volatility. It is generally thought that poor households are more inclined to be unbanked, i.e. to not have any formal financial assets or bank accounts, and to be underinsured. There are many circumstances in poverty that may explain such phenomena. The calculations that are necessary for understanding the cost and benefits of various ways to deal with such illiquidity can be overwhelming. The complexity of insurance products leads to many buyers focusing solely on price, resulting in households being underinsured even when they have insurance. While households can self-protect to some extent through relying on credit, it is cheaper to build up savings, but either way is only good protection against smaller losses since poor households are unlikely to be able to save large amounts. Insurance, while it may be more expensive than savings, does protect against larger losses. On the other hand, bank accounts are more liquid, allowing quicker access than are insurance payouts.

This situation opens up important opportunities for financial and insurance companies. By offering products that are better integrated across various types of insurances, and between insurance and other financial strategies, and that are provided with transparent and accessible guidance regarding optimal protection strategies, uptake in the working poor community should increase.

PAP can provide data on detailed financial pictures for the participating households. By following the same household on a weekly or bi-weekly basis for 6 months to a year, it is possible to both see how income and expense volatility are dealt with through savings, credit or insurance and to identify important opportunities. By offering the participants various products it is possible to test which ones will generate the best uptake and the best welfare improvements. Purchase decisions can be related to improvements in the households' ability to avoid costly illiquidity outcomes.

Aim of Portfolios of Atlanta's Poor

PAP was initiated by the Center for the Economic Analysis of Risk at Georgia State University with the purpose of collecting rich micro level data for a specific population: the working poor in Atlanta. The data collection effort complements those done in previous studies by allowing a structured, quantitative analysis of the relationships between various characteristics and behaviors of the participating households, but on a less heterogeneous population and on a high frequency basis. By collecting and analyzing health, income, expense, equity and liability data over a period of time from the same households it is possible to construct a picture of the constraints and opportunities that are facing these households, and to devise novel solutions, both private and public, to increase their financial security and growth. Complementing these data collection efforts, the research program also involves an unanticipated income shock that can be used to look at causal behavioral factors behind vulnerability.

Data collection

The data collected is based on structured, detailed one-on-one interviews guided by an accounting framework. A set of initial interviews are aimed at building a picture of the characteristics of the household: its size and composition, its economic activities, and its recent history of sources of income and pattern of expenses. We also characterize the *head* of the household, including risk taking behavior, time use patterns, health, and attitudes to risk and time delays. Following these initial interviews, weekly interviews track health and finances in detail, allowing us to map volatility over time. Participation in an unexpected paid task about halfway through the weekly interviews allows us to study how they react to a positive income shock, and which type of reactions increase future opportunities and reduce future volatility. By comparing financial choices before and after this unexpected income, and by relating such changes in their choices to the characteristics we collect in the early interviews, we can build a picture of successful strategies and of persistent constraints. The task itself will allow us to characterize the households based on their attitudes to risk and on their perception of various risks in their local communities.

The research group has already collected data from 109 households, but due to high attrition in this community we do not have all data for all households. Attrition is to be expected in a population that juggles many jobs, children, and health issues. From this sample, 45 respondents completed at least 16 diary interviews in addition to the initial interviews, and 24 respondents completed as many as 24 diary interviews. We plan to continue our basic data collection efforts during the next several years, and will form collaborations with institutions that are interested in testing various interventions in an effort to increase the ability of these households to create greater financial security and growth.

Who are our respondents?

We collaborate with several non-profit organizations in the Atlanta area to find potential participants to invite. So far we have interviewed 109 individuals who are all heads of households. Our pool of participants thus far is representative of a population that is eager to work, but that is trapped in a situation of poor access to employment due to travel distance, lack of education, responsibilities to care for family members, especially children, and precarious health conditions. Consistent with the studies mentioned earlier, this population faces a volatile financial situation, in addition to having low levels of resources. Only 10% of the respondents report not working at all in any of the interviews, and all are actively looking for employment. Despite their eagerness to work, about 80% of our respondents fall below the national poverty threshold for their household size. For those who are employed, average monthly earnings from work is \$962, but with income contributions from other family members, government sources and non-profit organizations, the monthly average increases to \$1,065. This is still a low average considering the household sizes, and reflects the fact that many households with children and only one bread winner fall well below the poverty threshold. We also see underemployment, since the average hours worked per month, 27 hours, is far below full-time employment and over 20% of our participants work 20 hours or less per week. The average hourly earnings among those who worked is \$10.90, thus above the minimum wage of \$7.25 but below what is considered a "living wage" of \$15.12 for a family of four, according to the Living

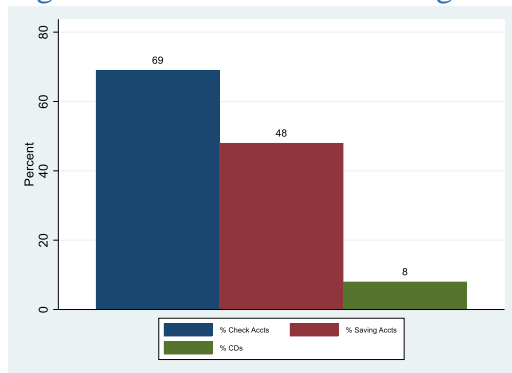
Wage Model developed by Amy K. Glasmeier at MIT (Nadeau (2016)). Our participants are thus poor, even though they are working.

Our participant pool is diverse in terms of many demographic characteristics, with the exception of ethnicity since they are, so far, entirely African-American. A bit over half of our participants are female, with an average age of 46. Our youngest participant is 26 and our oldest 73, so we have representation across a wide age range. We have representation across a range of educational experiences, with about 1/3 each responding “Never having graduated from high school”, “Having a high school diploma or a GED”, or “Having some education beyond high school”. In addition, about 42% of the participants have at least one parent who did not graduate from high school. We also have good variation in economic activities, with 31% of those who work being in blue collar jobs, 33% in retail, restaurant, housekeeping or janitorial services, but only 8% in health care and 6% in office and administration. Household size varies from those who live by themselves (18%), to a maximum of 9 and an average of 3.8; the number of children in the household averages 2.9 with a maximum of 8. While more than half of the respondents have no children, almost 20% have 3 or more children, and 2/3 of those are female headed. 1/3 of the households with children have no other adults than the respondent, and this translates to 26% of the children living in a single parent household. In our current sample 72% of the respondents rent their home, and only 14% own their home without a mortgage.

Are our respondents unbanked and uninsured?

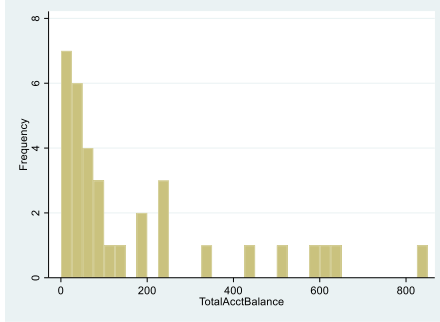
Bank accounts and savings. We confirm what is reported from other studies that there is a large portion of working poor who are unbanked. 35% of the respondents do not report having any type of bank account or financial asset. Checking accounts are the most popular ones, and 69% of the respondents have at least one. This is likely due to the fact that many employers and government agencies direct deposit into checking accounts, making this a necessity for many in this population. In addition to checking accounts, 48% of our respondents have at least one savings account, and 8% who have a CD account. Figure 1 shows the distribution of savings by type of account. Not reported in the figure are the two respondents who also save by lending money to friends and family. For many respondents the accounts hold very little money, however. 48% of all accounts have less than \$100 in balance. As a comparison, 36% of the respondents keep cash at home and the average amount is \$314. The average savings among those who do save are \$816, but this reflects some outliers with larger reported savings and the median is only \$71.5. Figure 2 shows the distribution of savings balances among those who save. Thus, even those respondents who have formal accounts do not have more than nominal balances. It is clear from this summary that our respondents are not in a position to protect themselves against unforeseen large losses using savings.

Figure 1: Conditional on Saving How Do the Respondents Save?



Percent of all respondents who save.

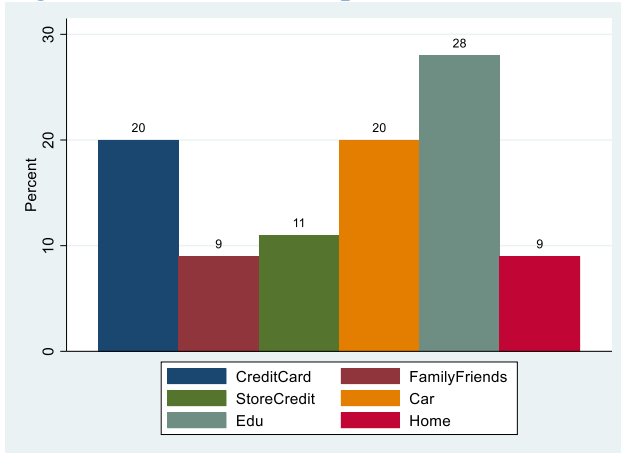
Figure 2: Distribution of Savings Balances



Distribution is truncated at \$0 and \$1,000.

Loans. An alternative way to protect against losses when having little savings is to use loans. However, loan balances may also indicate a lack of liquidity or savings when a purchase is desired, even in the absence of losses. Figure 3 shows the distribution of indebtedness by loan type. The most common short-term loan that our respondents use is credit card debt. 20% of respondents have some credit card debt, with an average slightly over \$1,900, a median of almost \$600, based on a range from \$15 to \$19,000. A secondary short-term credit source is family and friends with 9% reporting owing some money in this way, for an average of \$271. Store credit is also used, by 8% of the respondents, with an average balance of \$259. At the time of the interview nobody reported having a payday loan, only one person reported having pawned items, and four respondents reported having a bank overdraft balance. A considerable portion of the respondents have large loans due to car purchases, education or home ownership. 20% have a car loan with an average balance of \$9,270. 28% have an education loan, with an average balance of \$14,751 (median \$8,800). 9% have a home mortgage with an average of \$65,571. While our respondents have little income and almost no savings, they are clearly indebted. We find that the outstanding balance on short term loans (the sum of credit cards, loans from friends and family, and store credit) is increasing in income. We find no relationship between loans and savings balances, and long term loans like home, car and education are not related to income or savings.

Figure 3: Percent of Respondents with Each Type of Loan

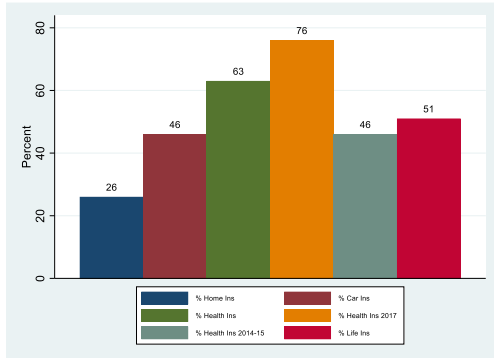


Percent of all respondent, not only those who are indebted.

Insurance. With little or no savings but plenty of indebtedness, our respondents are financially vulnerable, and unexpected losses can be disastrous, unless they carry insurance. 16% of the respondents report having no insurance at all. Figure 4 shows the proportion of respondents who report having each type of insurance that they report. A little less than a third have home or renters’ insurance with coverage ranging from \$1,000 to \$300,000. We do not see that the propensity to have a home insurance increases with the income of the respondent, and the relationship between savings and home insurance, while positive, is weak. Almost half of the respondents have car insurance. A surprisingly large portion have health insurance, but when breaking it down by interview cohort,

we see that the proportion is highest for the 2017 cohort that was interviewed after the major expansion in health insurance signups due to the Affordable Care Act. We also see a sizable portion of respondents who report having life insurance coverage. To sum up: while our respondents seem fairly well protected from health losses, they are poorly covered for losses to their homes.

Figure 4: Percent of Respondents with Each Type of Insurance



Home insurance includes renters' insurance. Percent of all respondents, not only those with insurance.

What behavior do we see?

Preliminary analysis of the existing data set shows us that health is a serious consideration for being able to work consistently: 38% state health as a reason for constrained work hours. We also find that financial volatility is correlated with Body Mass Index, a measure of obesity. Reports of unusual expenses, reported by 45% of the respondents, are dominated by utility bills. In addition, not fully paying utility bills sometimes serve as a way to get short-term credit. Figure 5 illustrates how net income varies across weeks during a 4 month period for one of our participants. Despite the fact that the major part of any income is used immediately to pay outstanding bills, so that expenses and income for the most part occur at the same time, there is still a great deal of variation in net income and it is frequently negative. We also find that the willingness to take on risk varies with household composition. One would expect risk aversion to increase with financial vulnerability, but we find that some measures of vulnerability, particularly when many children rely on a single provider, are associated with less risk aversion.

Figure 5: Week to Week Volatility in Net Income

for a sample participant with negative average net income



The break between weeks 11 and 14 was due to the participant failing to attend interviews. The vertical scale shows percentage of average monthly gross income.

Future goals

During the next several years, our goal is to increase the size of the data set to include up to 500 households that we follow for at least a year. Simultaneously we aim to introduce micro-finance and micro-insurance interventions to test their efficacy, and identify the circumstances and types of households for which they work.

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