# ELABORATING ON THE ABSTRACT: GROUP MEANING-MAKING IN A COLOMBIAN MICROSAVINGS PROGRAM

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#### ABSTRACT

Access to formal financial products like savings and checking accounts constitutes a hallmark feature of economic development. Across the globe, governments and other organizations work to promote 'financial inclusion' among lower-income citizens. Seeking to understand why individuals embrace or resist formal financial services, scholars have focused on institutional, cultural, and material explanations, but have paid less attention to the role of organizations and small groups. In this study, we argue that such factors are crucial to understanding the development of financial preferences. We investigate a government-sponsored microsavings program in Colombia and find that participants became less interested in banking services over the course of the program, even as they gained access to appropriate accounts and their savings increased. Turning to qualitative data to understand this curious finding, we show that organizational efforts to disseminate abstract information about banking triggered a process of information 'elaboration' among group members, leading many to develop financial preferences at odds with those promoted by the government. This paper integrates insights from economic sociology, organizational theory, and microsociology to advance theories of financial preference. In doing so, it reveals how organizational efforts to compress information, followed by group efforts to personalize and expand it, can shape individual preferences and potentially undermine organizational goals.

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Financial institutions are a ubiquitous feature of modern economic life. As sociologists have long shown, the transition to formal banking constitutes a fundamental shift that typifies contemporary economic activity (Carruthers and Ariovich 2010; Weber 1950). Although formal finance is already deeply embedded in the lives of most adults in economically-advanced countries (Keister 2002), many banking services have only recently become available to lower-income citizens in developing countries (Collins et al. 2009). The movement towards 'financial inclusion' – the incorporation of poor consumers into the financial sector – has become a priority for governments, banks, and international institutions across the globe (Cull, Demirgüç-Kunt, and Morduch 2013).

Yet research shows that individuals display a range of responses when offered formal financial products. Many researchers have found that individuals readily embrace savings and credit products from formal financial institutions (e.g., Calder 1999; Carruthers and Ariovich 2010; Collins et al. 2009), with citizens even organizing political movements to gain access to certain products (Krippner 2017; Seabrooke 2006). Nevertheless, others have found that individuals show low interest in formal products, or outright refuse to use them (e.g., Caskey 1994; Langley 2008; Maurer 2015). These divergent findings beg the question: why do individuals sometimes embrace—but at other times resist—formal financial products?

Research from economic sociology and development economics offers important insights that aid in answering this question. Economic sociologists emphasize that individuals' interest in formal financial products is shaped by their trust in financial institutions (Fridman 2017; Guseva 2008; Polillo 2011) as well as by cultural values that promote or disparage the use of such products (Fourcade and Healy 2007; Zelizer 1979). For

their part, development economists argue that individuals' material conditions and the accessibility of financial services influence demand for formal products (Demirguc-Kunt, Klapper, and Singer 2017; Dupas et al. 2018).

Yet in focusing on institutional, cultural, and material factors, scholars have paid less attention to how organizations and groups shape engagement with formal finance, and there are good reasons to suspect that these factors play an important role. First, in the age of 'financial inclusion,' many organizations actively recruit lower-income citizens into the financial sector. Governments, financial institutions, and NGOs in both developing countries and more advanced economies work to integrate 'unbanked' citizens into the formal financial sector (Cull et al. 2013; Wherry, Seefeldt, and Alvarez 2019). Given that organizations are at the forefront of financial inclusion, it is reasonable to suspect that organizational practices will influence how individuals perceive financial products. Second, research in economic sociology shows that individuals filter and develop economic preferences through interactions with others, often in the context of small groups (Weber 1978; Wherry 2012). Since interpersonal interactions can add colorful, emotive dimensions to decision-making processes, they may influence individuals' preferences for financial products. But how?

We explore this question by studying a national, government-led microsavings program in Colombia. First, we analyze national survey data and find a curious trend: despite the program's mandate to increase financial inclusion, participants tended to *lose* interest<sup>1</sup> in formal products over the course of the program. This case is particularly

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<sup>&</sup>lt;sup>1</sup> The survey captures members' self-reported interest in formal financial products. The question (translated into English) reads, "Would you be interested in having a financial product (savings/credit/insurance, other) with a financial institution?"

enlightening because existing theoretical approaches cannot fully explain program participants' shifting interest in financial products. Although sociological perspectives can anticipate overall interest levels, they cannot account for the sudden drop in interest that we observe. Similarly, research from development economics anticipates that participants' interest in formal finance would increase—rather than decrease—as they saved more and gained access to accessible financial products through the program.

To better understand the factors shaping interest in formal finance, we turn to interviews and ethnographic observations, which form the heart of our analysis. We draw on interviews with 105 individuals and ethnographic observations of 28 savings group meetings, spanning two years and three Colombian cities. We show how the countervailing forces of abstract information dissemination at the organizational level and collective knowledge production at the group level shape individual interest in formal financial products. We term this process 'elaborating on the abstract.'

We demonstrate that, like many organizations seeking to disseminate information at scale to diverse audiences, the Colombian government shared abstract information about formal finance that was timeless, placeless, and without context. Upon receiving this information, group members worked collectively to elaborate on it, making it concrete and applicable in the context of their own lives. Members not only shared misinformation, they also worked collectively to construct meaning about financial services. We find that three key elaboration mechanisms in the savings groups fostered negative perceptions of formal banking: 1) sharing personal experiences with banks (which tended to be negative), 2) repeating second-hand stories and misinformation that 'muddied the waters' and made it difficult to differentiate fact from fiction, and 3) coloring in neutral facts with negative

emotional and moral valence. As a result of these processes, members often developed or solidified a view of banks as institutions that create rather than ameliorate economic risk; we find suggestive support for this tendency in the survey data. Nevertheless, we also find that individuals can work against the tendency to anchor on and amplify negative information by 'playing defense' against negative claims, and by actively championing the use of formal finance.

This study makes important contributions to economic, organizational, and development sociology. First, it reveals how the combined effects of organizational processes and group-level meaning making can structure individual financial preferences. In doing so, this research complements and extends perspectives in economic sociology that have traditionally privileged institutional and cultural explanations. More broadly, this study identifies a dynamic process of information flows that may help explain unexpected preferences and outcomes in a variety of contexts. Our research outlines the process by which information moves from organizations to groups, and then circulates within those groups. We describe this process as one characterized by *compression*—in which organizations first reduce information to its basic, abstract form—and then expansion, in which groups elaborate on and transform abstract information, often in ways that clash with organizational goals. In the Discussion, we propose that this process might help scholars understand curious preferences in other domains, like public health and economic development. We further consider under what conditions group efforts to elaborate on abstract information may generate positive—rather than negative—impressions of the topics at hand.

#### DEMAND FOR FORMAL FINANCIAL PRODUCTS

When examining the conditions under which individuals embrace or reject formal financial products, sociologists tend to focus on two key factors, while development economists focus on a third. Sociologists view financial preferences as influenced primarily by the level of trust that individuals have in the financial sector, the state, and the economy. They also see demand for finance as shaped by cultural and moral value systems that push individuals towards or away from formal products. For their part, development economists see demand as patterned by individuals' material conditions as well as the cost and accessibility of financial services. We outline these perspectives below, and then propose why attention to organizational and group-based processes might offer new and important insights.

### Institutional Trust

Economic sociologists have argued that individual demand for formal financial products can hinge on their level of trust in major institutions like the financial sector or the state. When individuals lack confidence in these institutions, or view the economy as unstable, they tend to be less inclined to use formal financial services.

Scholars have identified these trends most acutely following major political or macroeconomic disruptions or transitions. For example, Fridman (2017) observes that, following Argentina's economic collapses, many individuals preferred to save money under mattresses rather than entrusting funds to banks. Similarly, Guseva (2008) finds that Russians had lower levels of trust in the financial sector immediately following the transition from socialism to capitalism and initially hesitated to engage with banks.

Even in the absence of major economic disruptions, scholars find that trust in institutions is an important ingredient for formal financial engagement. In Ukraine, Coupe (2011) finds that individuals who expressed low trust in banks were more likely to keep their savings in cash. And in the United States, researchers have shown that those with lower institutional trust migrate towards informal financial services, such as payday loans, check-cashing outlets, or rotating credit associations (Biggart 2001; Caskey 1994; Vélez-Ibañez 1983).

On the whole, this perspective emphasizes that engagement with formal finance must be undergirded by a belief in the stability, reliability, and trustworthiness of the economy and its supporting institutions. As Polillo (2011) writes, it is not only bankers who must overcome uncertainty when evaluating potential customers; the centrality of trust "cuts both ways" (p. 444) as consumers must also have confidence in financial institutions before choosing to engage with them.

## Cultural Beliefs

Many sociologists view economic activity as unfolding within broader moral and cultural projects (Fourcade and Healy 2007). While not exclusive to the financial sector, this perspective suggests that individuals' engagement with formal financial products should depend on alignment between those products and contemporary beliefs about what constitutes moral, appropriate, and self-affirming behavior in the marketplace (Graeber 2014; Zavisca 2012). This view anticipates that, as prevailing views about economic activity change—and as groups or organizations lobby to shift them—individuals will change their inclination towards financial products.

Indeed, scholars have found that individuals are increasingly willing to adopt financial products as their use aligns with cultural beliefs. For example, as advertisers encouraged Americans away from an ethos of thrift and towards one of consumerism in the post-WWII years, individuals came to see bank loans as an appropriate means of financing non-essential purchases (Calder 1999; Carruthers and Ariovich 2010). Similarly, individuals came to embrace life insurance once they began to view it as a morally-appropriate, identity-affirming means of honoring children and family as sacred (Zelizer 1979). And consumers have made demands on government to facilitate access to formal credit based on cultural beliefs about how the economy "should" work (Seabrooke 2006, 2007). Overall, this perspective suggests that individuals' willingness to engage with formal financial products varies with the alignment or discordance between those products and individuals' cultural, religious, and moral values.

#### Material Conditions and Accessibility

In seeking to understand demand for formal products, development economists tend to emphasize individuals' material conditions and the accessibility of financial services. These researchers focus on the world's 1.7 billion 'unbanked' adults, virtually all of whom live in the global South (Demirgüç-Kunt et al. 2018; Pande et al. 2012). To examine take-up and formal sector engagement, they often experimentally manipulate characteristics like the cost of financial products or the information that consumers receive (e.g. Banerjee and Duflo 2011; Dupas et al. 2018; Karlan, Ratan, and Zinman 2014).

From this literature, three findings related to take-up and usage of formal banking products stand out. First, demand for formal financial services is responsive to cost.

Globally, 26% of unbanked adults cite the high cost of accounts as a reason why they do not have one (Demirgüç-Kunt et al. 2018), and in Colombia, the site of our study, 67% of unbanked adults reported cost as a barrier (World Bank 2017). Correspondingly, interventions that waive or reduce the cost of opening or using accounts have been shown to increase uptake (Dupas et al. 2012; Knowles 2018; Prina 2015) and usage (Schaner 2017). Second, demand for formal services is related to potential clients' financial resources. In the global South, richer households are more likely to save money in a bank than poorer households, and two-thirds of unbanked respondents cited insufficient resources – separately from the cost of financial services – as a reason why they did not have an account (Demirgüç-Kunt et al. 2018). Even when accounts are free, individuals are more likely to use them as their income or wealth increases (Dupas and Robinson 2013a; Kast and Pomeranz 2014). Third, indirect and nonfinancial costs affect demand for financial services. The distance to financial institutions – and the accompanying transportation costs, lost labor, and inconvenience – can be an important barrier. Correspondingly, making banking services more geographically accessible can increase usage (Ashraf, Karlan, and Yin 2006; Burgess and Pande 2005), and mobile banking accounts—which reduce or eliminate the need to visit bank branches—mitigate indirect costs by bringing financial services to clients' fingertips (Dupas and Robinson 2013a; Knowles 2018). Overall, this literature suggests that individuals should become more favorably inclined towards formal finance as their income or savings increase and as it becomes easier for them to access financial services.

#### INVESTIGATING ORGANIZATIONAL AND GROUP PROCESSES

Institutional trust, cultural beliefs, and material conditions undoubtedly shape individual demand for formal financial products. Nevertheless, we anticipate that two

additional forces may also influence financial preferences. Importantly, attention to organizational and group processes may help us understand aspects of financial preference that existing perspectives cannot.

First, the empirical realities of the financial inclusion movement suggest that organizations play a key role in shaping demand for formal finance. Across both developed and developing countries, government organizations, NGOs, banks, and international institutions are engaged in a concerted effort to fold 'unbanked' citizens into the formal financial sector (Cull et al. 2013). Given the organizational nature of this movement, we suspect that organizational strategies to communicate with potential users may influence their financial preferences.

Research in organizational sociology offers important insights into how this might unfold. Organizational theorists argue that disseminating information at scale requires condensing and simplifying information, reducing complex ideas into basic components that are devoid of contingencies specific to any place, time, or group of people (Boisot 2007; March and Simon 1958). By reducing information to its least common denominator and stripping it of contextual specifics, organizations can share it more readily across time, space, and diverse audiences (Scott and Davis 2007). However, this efficiency comes at a cost: "Knowledge flows faster and more extensively within a population of agents if it is more codified and abstract. However rapid diffusability is only achieved at the expense of contextual richness" (Boisot 2007:11). These findings encourage us to attend closely to how organizational efforts at information dissemination across diverse audiences affect the development of financial preferences.

Second, existing research suggests that individuals' demand for goods and services is shaped by interactions with others, often in the context of small groups. Economic sociologists show that small group dynamics can bolster or deflate demand for consumer goods (Wherry 2012) and that individuals are more likely to adopt products used by others in their social networks (DiMaggio and Louch 1998). Scholars argue that product usage is a social act, as "commodity goods become building blocks in the construction of personal identity, or are used as symbols of communication with other human beings" (Calder 1999:7). Additionally, classical social theory suggests that interactions introduce an emotive element to all social action, including economic decisions (Weber 1978). Such powerful, emotional content has the potential to sway interest towards or away from the financial sector. This work motivates us to consider *how* group interactions might shape financial preferences.

On this point, research from microsociology offers relevant insights to guide an investigation into how groups respond to information disseminated at scale.

Microsociologists have highlighted the power of groups to expand upon and transform information from official channels that they experience as ambiguous or 'incomplete.'

Shibutani (1966) proposed that individuals "caught together in an ambiguous situation attempt to construct a meaningful interpretation of it by pooling their intellectual resources.

It might be regarded as a form of collective problem-solving" (Shibutani 1966:17).

Microsociologists contend that knowledge constructed in groups is not necessarily inaccurate or unfounded, but reflects the perspectives and beliefs of those working to craft meaning in the face of uncertainty (Baldwin 2005; Miller 2005). Because information culled

from fellow community members is less formalized, it introduces a wider range of expression, emotion, and spontaneity to the knowledge production process.

Inspired by these findings, we consider how the nexus of officially-sourced information and collective knowledge production in groups may shape individuals' interest in formal finance. To do so, we examine a particularly illuminating case: microsavings groups in Colombia. Our case has the potential to generate new insights because it contains a curious finding related to financial preference that cannot be readily explained by existing theories, and because it revolves around organizational and small group processes. We turn now to the case.

### SAVINGS GROUPS IN COLOMBIA

Our study examines a national microsavings program in Colombia. In line with global enthusiasm for promoting financial access among the poor (Demirgüç-Kunt et al. 2018), the Colombian ministry of financial inclusion, *Banca de las Oportunidades* (hereafter: the Ministry), designed a national microsavings program designed to increase savings accumulation and banking access among poor citizens. Over 46,000 Colombians across 15 provinces participated in the program, which ran for just over a year in 2016-2017 (IED 2017). Government officials had two primary objectives for the microsavings program. First, they aimed to encourage poor citizens to save money. Second, they aimed to inspire and facilitate deeper engagement with the formal financial sector (Banca de las Oportunidades n.d.). Fewer than half of all Colombians have bank accounts, and the poor are especially likely not to use formal financial services (Demirgüç-Kunt et al. 2018). Only 3% of 'unbanked' Colombians report that they do not need bank accounts; instead, they

frequently report that they have insufficient funds (67%) and/or that accounts are too expensive (59%) (World Bank 2017), barriers that the microsavings program was designed to overcome.

## Features of the Microsavings Program

Group facilitators recruited program participants from public housing projects designed for families who live in poverty and/or have been displaced by Colombia's long-standing internal conflict. The housing projects were relatively new (at most three years old when the savings groups were formed), so residents generally did not have well-established relationships with their neighbors. To participate in the program, residents had to be registered with the government ministry for low-income citizens (*Red Unidos*), thus ensuring that all participants came from Colombia's lowest economic stratum. Residents were under no obligation to participate and self-selected into the program.

Once formed, savings groups—each of which consisted of approximately 15 members—met every two weeks in a member's apartment with a government facilitator usually present. At each meeting, members saved small amounts of money and stored those funds in a government-issued wooden box. (Figure 1 displays a photo of a group circled around their savings box.) The member who hosted the group also stored the box, which was locked with keys possessed by three other members. Members could withdraw their savings before the program concluded only if they wished to withdraw from the group entirely. Groups had the option of lending their pooled savings to other members, and they contributed to a collective emergency fund at each meeting.

[Insert Figure 1 about here.]

Group facilitators provided information about the formal financial sector by delivering financial education lessons covering five key areas: savings, credit, microinsurance, alternative financial channels, and the financial system (IED 2017).<sup>2</sup>

Occasionally, representatives from local financial institutions—like microcredit providers—made presentations to inform group members about their offerings. Facilitators were not financial experts, but individuals from local communities who received training in financial topics and shared this information with their groups.

Additionally, facilitators encouraged participants to open mobile banking accounts, called *Ahorro a la Mano*, with Bancolombia, one of Colombia's largest retail banks.<sup>3</sup> The mobile accounts<sup>4</sup> were designed for low-income users and eliminated many of the transaction costs associated with traditional banks. They were free to open, had no maintenance fees, and allowed users to transfer money, pay bills, and review accounts at no cost. Users could deposit or withdraw funds from local Bancolombia outposts (often located in neighborhood grocery stores) or at Bancolombia ATMs at low or no cost,<sup>5</sup> thus eliminating the need to visit traditional bank branches. Facilitators were expected to meet

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<sup>&</sup>lt;sup>2</sup> The Ministry oversaw the microsavings program and was ultimately accountable for its success. Officials contracted out certain aspects of the program—like hiring facilitators and tracking their progress—to *Inciativas Empresariales de Desarollo*, a Colombian NGO.

<sup>&</sup>lt;sup>3</sup> Details about Bancolombia's *Ahorro a la Mano* mobile accounts are available in Spanish at https://www.grupobancolombia.com/wps/portal/personas/productos-servicios/cuentas/ahorro/transaccional/ahorro-a-la-mano.

<sup>&</sup>lt;sup>4</sup> Owning a cell phone was not necessary, but certainly made the account more useful. Cellular usage is high among the poor in Colombia; 63% of low-income Colombians own a cellular phone and 89% have access to one they can use (Galperin and Mariscal 2007). Although participants had to use cellular data to establish accounts initially, BanColombia provided free cellular data for users once the account was created.

<sup>&</sup>lt;sup>5</sup> Withdrawals were free from Bancolombia ATMs and cost \$1,500 COP (approximately \$0.50 USD) at local outposts. The first 50 deposits at local outposts were free and deposits cost \$6,100 COP (approximately \$6 USD) at a BanColombia branch. These costs were significantly lower than those charged by other Colombian banks for similar accounts. For example, a similar savings account at *Banco de Bogotá* carries an opening fee of \$31.84 USD (Banco de Bogotá 2018), a monthly maintenance fee of \$3.01, ATM withdrawal fees of \$0.45-\$1.43, transfer fees of \$1.59 (Banco de Bogota 2015). Similarly, a savings account at *Banco Davivienda* carries no opening fee but has a monthly maintenance fee of \$1.89, ATM withdrawal fees of at least \$1.78, deposit fees of \$2.67, and transfer fees of \$2.39 (Banco Davivienda 2018).

monthly targets for opening new accounts and earned account-based commissions. Group members received information about and access to these low-cost mobile bank accounts, but were not required to open or use them as a condition of the program.

Institutional Context: Trust in Banks and the Government

Prior literature demonstrates that trust in financial institutions patterns individuals' financial preferences (Fridman 2017; Guseva 2008). As such, it is important to consider whether Colombia's unique history and institutional context translates into low levels of trust in the government or the financial sector. One might naturally be concerned that Colombia's long-standing internal conflict would shape participants' views of the government, which was the source of the financial inclusion messaging, or of the financial sector they were being encouraged to engage with. Indeed, the conflict and associated insecurity has influenced how Colombians view some institutions, such as weakening trust in the criminal justice system and muting support for democratic institutions (Blanco and Ruiz 2013).

Yet compared to other nations, Colombia's unique history does not appear to have translated into unusually low levels of confidence in the government as a whole or the financial sector. According to the World Values Survey, thirty-nine percent of Colombians express "a great deal" or "quite a lot" of confidence in the government, which places them in the middle of the regional distribution (ranging from 5% in Haiti to 59% in Uruguay) and somewhat higher than the United States, at 33% (World Values Survey n.d.). Relative to

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<sup>&</sup>lt;sup>6</sup> Question wording: "I am going to name a number of organizations. For each one, could you tell me how much confidence you have in them: is it a great deal of confidence, quite a lot of confidence, not very much confidence or none at all?" Other Latin American countries for which data are available are Argentina (32%)

other nations, Colombians also display a reasonably high level of trust in banks. Fifty-one percent of Colombians report that they have "a great deal" or "quite a lot" of confidence in banks, a figure substantially higher than in the United States (40%) and similar or higher than every other Latin American country for which data are available<sup>7</sup>.

Participants in the savings groups we study do not substantially differ from these overall trends: when the program began, 46% of respondents reported that they trusted financial institutions, and 42% reported than they trusted the government. Citizens moderate support for financial institutions may be influenced by the historic popularity of Colombia's agricultural banks like *Caja Agaria*. While no longer supported by the state, such financial bodies have been labeled among the "most loved" Colombian institutions (El Tiempo 1996), potentially contributing to the relatively favorable view that citizens have of the financial sector.

Although Colombians are not regional outliers in their levels of trust in the state or the financial sector, they nevertheless do not have extremely high confidence in these institutions. We view these moderate levels of trust as a backdrop against which savings group members receive and process information from the government about formal finance. In the Discussion, we return to consider how group members' trust in the information

have a great deal or quite a lot of confidence in the government), Brazil (41%), Chile (34%), Ecuador (50%), Haiti (5%), Mexico (39%), Peru (22%), Trinidad and Tobago (35%), and Uruguay (59%).

<sup>&</sup>lt;sup>7</sup> Question wording: "I am going to name a number of organizations. For each one, could you tell me how much confidence you have in them: is it a great deal of confidence, quite a lot of confidence, not very much confidence or none at all?" Other Latin American countries for which data are available are Argentina (32% have a great deal or quite a lot of confidence in banks), Brazil (50%), Chile (35%), Ecuador (48%), Haiti (35%), Mexico (46%), Peru (39%), Trinidad and Tobago (49%), and Uruguay (51%).

<sup>&</sup>lt;sup>8</sup> Question wording: "How much do you trust banks or financial institutions? / ¿Qué tanto confia usted en los bancos o instituciones financieras?" Thirty percent of respondents reported that they "possibly" trust banks, and 25% reported that they did not trust banks.

<sup>&</sup>lt;sup>9</sup> Question wording: "How much do you trust the government? / ¿Qué tanto confia usted en el gobierno?" Twenty-nine percent of respondents reported that they "possibly" trust the government, and 29% reported that they did not trust the government.

source, as well as their pre-existing disposition towards the institutions associated with the products and practices promoted, might affect group-level responses.

### METHODS: SURVEY DATA, INTERVIEWS, AND FIELD OBSERVATIONS

We draw on multiple data sources to understand how organizational and group processes influence individual demand for formal finance. We treat each data source surveys, interviews, and ethnographic observations—as having the potential to illuminate unique social processes, while acknowledging that each has limitations. We work to triangulate across data sources (Kadushin et al. 2008), braiding findings together such that the strengths of each data source complement the weaknesses of the others (Brewer and Hunter 1989; Sieber 1973). Specifically, we use national survey data to gain a bird's-eye view of how members' interest in formal finance changed over time. These data are a starting point that reveal important shifts in central tendencies, but cannot explain the processes undergirding change. We then turn to qualitative data to understand how and why participants' interest in the financial sector shifted. We rely primarily on interviews, as these data contain members' own accounts of their savings group experiences and impressions of the financial sector. We use ethnographic observations to contextualize these accounts within group processes and practices. In concert, these data provide a richer and more complete understanding of participants' shifting interest in formal finance than any individual data source could offer in isolation.

**Survey Data.** We use survey data to measure trends in participants' interest in financial products at the outset and conclusion of the savings program. Officials at the Ministry commissioned a stratified sample of savings group participants and instructed

surveyors to select one respondent at random from each group. Respondents answered the same questions at the outset and conclusion of the program, allowing for analyses of within-individual change. Officials collected complete surveys from 3,006 participants at baseline (of 3,200 total savings groups) and 2,770 at endline. Surveyors report that the loss of participants at endline was due to death, relocation, or absence from the group on the day of the survey. The loss of participants at endline is unlikely to be driven significantly by dropouts, as groups had low attrition rates (4%). We include more details about the survey instrument and variables in Appendix A.

Interviews and Ethnographic Observations. We use qualitative data to examine the social processes contributing to participants' shifting interest in formal finance. We draw on interviews with 105 savings group participants and staff, as well as ethnographic observations of 28 group meetings conducted between June 2016 and July 2018. Interviews served as a platform for members to discuss group experiences and reflect on their views of the financial sector, thus providing the clearest insights into participants' views of banking.

Our qualitative data collection strategy aimed to capitalize on the national scope of the program. To that end, we selected three geographically, economically, and culturally diverse sites: Barranquilla, a medium-sized city on the Caribbean coast; Bogotá, the nation's capital and largest city, located in the center of the country; and Pasto, a small Andean city in the south-west. In selecting these sites, we adopted a "sampling for range" approach (Small 2009), seeking economic and cultural diversity across sites, as we anticipated these factors might influence participants' savings and group engagement.

Our interviews and ethnographic observations offer complementary insights (Small 2011) into organizational processes and group dynamics. Interviews were conducted in

Spanish and ranged from 15 to 90 minutes, with a median length of 42 minutes. All interviews were recorded and transcribed, with the exception of a few interviewees who preferred not to be recorded. Complementing the interviews and contextualizing individual accounts, ethnographic observations offered insights into group practices and procedures. These observations helped us understand how the groups functioned, how members interacted, and how facilitators presented information.

We staggered three waves of data collection over time and space in an effort to capture shifting experiences and perspectives. The first wave occurred in June-July 2016. The first author gained access to the savings groups while conducting field research in Barranquilla on microenterprises. Some interviewees for that project had recently begun participating in the microsavings program and invited her to attend a meeting. She then began conducting regular observations at savings group meetings and inviting group participants to interview. These early-program interviews were useful in establishing members' motivations for participating, their relationships to other group members, and facilitators' views of the savings program. At this point, interviewees also discussed their informal saving strategies and plans to use formal financial products at the program's conclusion. During this wave, the author conducted 27 interviews with participants and two interviews with program staff.

The second wave of data collection occurred one year later (May-July 2017) in Bogotá and Pasto, when a research assistant conducted interviews with the more focused goal of understanding how participants viewed the formal financial sector and how the savings groups affected those impressions. She recruited interviewees by providing

information about the study at savings group meetings, ultimately interviewing 32 participants and seven staff members.

The third wave occurred in June-July 2018—about nine months after the program concluded—when both authors interviewed participants and staff in Bogotá and Pasto. We conducted interviews with the specific goal of investigating the curious drop in formal sector interest demonstrated in the survey data, and asked targeted interview questions with this finding in mind. To recruit interviewees, we asked program facilitators to contact former members and invite them to participate. As a result, interviewees were more likely to have been active participants with positive relationships to facilitators. We interviewed 36 participants and three facilitators in the final wave.<sup>10</sup>

One of the key strengths of multiple-wave interviews is the capacity to incorporate emergent insights and puzzles. As researchers learn about their setting—and as the setting itself changes—they can amend and tailor questions. Unlike standardized panel surveys in which questions are fixed, multiple-wave interviews are valuable for their dynamism, allowing researchers to apply an increasingly sharper lens to the same issue over time. In our setting, we began with an interest in participants' formal and informal financial practices; although our core questions remained consistent, we gradually refined the inquiry to probe participants' declining interest in formal finance. Our continual focus on financial practices, preferences, and group activity allows us to draw usefully from interviews across three waves, even as our line of questioning became subtler and more refined over time.

**Analysis and Theorizing.** Our theorizing process involved developing a deep analytic familiarity with our data, identifying unexpected patterns, and working to

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<sup>&</sup>lt;sup>10</sup> A few staff members and participants were interviewed more than once over the years; as a result, the total count of interviewees is lower than the sum of the counts by year.

understand those patterns based on the existing literature and our own insights (Swedberg 2014). We adopted an abductive approach, engaging in "a recursive process of double-fitting data and theories" (Timmermans and Tavory 2012:179). For example, consistent with previous research (e.g., Fridman 2017; Guseva 2008), we initially suspected that the decline in average financial interest found in the survey data might stem from macroeconomic shocks unrelated to the savings program. Yet an analysis of consumer perceptions showed that confidence in the Colombian economy and its financial institutions remained nearly fixed during the program, making this explanation unlikely. In Appendix B, we detail this and other possible explanations that we considered closely. Ultimately, we found that no single explanation could fully account for the trends observed, encouraging us to dig deeper into our qualitative data to uncover new mechanisms driving financial preference.

To that end, we identified financially-relevant themes in the qualitative data and defined a preliminary coding scheme (Eisenhardt 1989; Spradley 1979). With the help of a research assistant, we applied initial codes to all transcripts and field notes using Dedoose, a qualitative analysis software. We then reviewed the data, identified and grouped emergent themes, and wrote memos to develop fledgling ideas (Corbin and Strauss 2008).

Where possible, we also examined whether trends unearthed in the qualitative data aligned with the survey data. For instance, we found through qualitative analyses that group discussions often encouraged participants to develop views of banks as unpredictable, capricious institutions. We reasoned that such conversations were likely to produce an outsized, negative effect on formal financial interest among participants facing the greatest economic precarity. We tested this possibility using survey data, and found results consistent with our qualitative analysis. (We present these findings in Appendix C.)

Throughout data analysis and theory development, we read and discussed literature, returned to the data, and cycled back to existing research. We were particularly influenced by research on financialization, economic development, networks, rumor, and information dissemination. We repeated this process—reviewing the literature, refining the coding structure, re-coding the data, writing memos, and comparing our findings against existing literature—until we had elaborated the key processes. Now, we turn to the results of that analysis. We begin by presenting the results of the survey data, and then present the qualitative results, which constitute the heart of our analysis.

## MORE SAVING, LESS INTEREST IN BANKS

The microsavings program appeared to have the right ingredients to encourage demand for formal banking, according to expectations from existing research. It was designed to help participants accumulate savings—thereby increasing their need for banking services—and provided them with access to low-cost, easy-to-use accounts. Nevertheless, survey data from the microsavings program show that participants' attitudes towards formal finance shifted in an unexpected direction: their average interest in financial products declined even as they saved more and gained access to banking services. For ease of interpretation, we present these findings here as descriptive statistics and show that the effects hold under more stringent analyses in Appendix A.

Survey data show that program participants generally succeeded in saving money. At the program's outset, respondents reported median monthly savings of \$3.15 per month. At its conclusion, they reported median monthly savings of \$9.44, a 300% increase (see Figure 2). Although the absolute value of this increase may appear small, it reflects a meaningful

shift in participants' economic portfolios. An individual who lives at the poverty line in Colombia earns \$106 per month (DANE 2015). For such an individual, this savings increase corresponds to a 6% bump in monthly 'income'; over one year, this monthly savings accumulates to an amount sufficient to pay for a refrigerator, a month of school fees and other educational expenses, or nearly a month's worth of groceries for a family of four (Departamento Administrativo Nacional de Estadística 2018).

# [Insert Figure 2 about here.]

Yet even as participants accumulated savings, they expressed lower average demand for formal financial products, as measured by self-reported interest. Responding to the question, "Would you be interested in having a financial product (savings/credit/insurance, other) with a financial institution?" 73.6% of respondents said "yes" at the outset of the program. By the conclusion, that number fell to 64.9%, a drop of nearly ten percentage points that is significant at p < .001.

This survey question captures attitudes towards the formal financial sector, a common outcome in studies of financial education and literacy (Carpena et al. 2011, 2017; Cole, Sampson, and Zia 2011). We expect that the drop in financial sector interest parallels a decreased willingness to use financial products, given previous research demonstrating strong correlations between financial attitudes and behaviors (Hayhoe, Leach, and Turner 1999; Howcroft, Hamilton, and Hewer 2002; Lwiza and Nwankwo 2002). An ideal analysis would pair our survey data with third-party records of financial behaviors (e.g., bank account ownership, number of monthly withdraws, etc.) to measure usage directly, which was not possible in our case. We hope that future researchers can work with financial

institutions to measure both financial attitudes and product usage, thereby linking perceptions with adoption patterns (e.g., Goldberg and Stein 2018).

In Appendix A, we further investigate participants' drop in financial interest using logistic regression and linear probability models. There, we also present summary statistics and information about control variables. We find that the significant loss of interest remains robust even when controlling for the amount participants saved, demographic characteristics, geographic factors, and when including individual fixed effects. Under these more stringent models, participants' estimated level of financial interest declines between the outset and conclusion of the program. (See Table A3 in Appendix A for the full models.)

Upon first reviewing these findings, we considered whether existing theories could parsimoniously explain the observed trends. In particular, we wondered: Was the drop in interest a result of macroeconomic shocks? Did members have unpleasant experiences at bank branches? Was the overall decline in interest driven only by members who failed to save money? Was the loss in interest the result of substitution effects, such that members found the groups so enjoyable that they no longer needed formal finance? We considered each of these possibilities closely, but found that none could fully explain the trends, prompting us to seek insights in the qualitative data. We provide more information about these alternative accounts in Appendix B.<sup>11</sup>

These findings show that, although participants generally succeeded in saving money, they also tended to lose interest in formal financial products. Existing research in

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<sup>&</sup>lt;sup>11</sup> Naturally, thoughtful readers will generate additional explanations. Any complex social change is likely to have multiple sources of causality, particularly in the context of economic development (Ang 2016), and this is certainly the case for a national program like this one. Rather than generating the *only* explanation, our aim is to offer an explanation that is well-supported by our data, contributes to explaining this surprising empirical finding, and allows us to generate broader theoretical insights.

economic sociology might anticipate participants' moderate levels of financial interest, but it cannot account for the within-program *change* in interest that we observe. Moreover, research in development economics would anticipate that participants would become *more* interested—rather than less—in formal products since the program increased participants' savings and lowered barriers to access by providing mobile banking tools and information about formal finance. What other factors, then, might influence individuals' demand for formal financial services? To answer this question, we turn to qualitative data from the microsavings groups.

#### ELABORATING ON THE ABSTRACT

We argue that the process of 'elaborating on the abstract'—the interplay of organizational efforts to disseminate abstract information at scale and lively, group-based acts of meaning creation—contributed to the drop in formal financial sector interest. First, we describe the Ministry's efforts to achieve its financial inclusion goal by providing information that officials hoped would encourage participants to engage with banks.

Because of the program's size, they condensed information into simple, abstract formats, making it easy to transmit across people and space, but also stripping it of time, place, and context. We then show how this abstract information prompted 'elaboration' within the groups, as members worked collectively to contextualize information within their own circumstances, and come to conclusions about the nature and value of formal banking.

We find that elaboration prompted a loss of interest in the financial sector through three mechanisms: 1) sharing negative personal experiences related to banking; 2) 'muddying the waters' of official information about financial products with second-hand stories, rumors, and misinformation presented as facts; and 3) 'coloring in' neutral information by attaching a negative valence to it. However, we also found that two additional—though rare—mechanisms counteracted these negative tendencies, creating space for positive interpretations of banking. These mechanisms included 'playing defense' by directly challenging misinformation, and 'championing finance' by emphasizing positive experiences and supporting group members in their first contact with new banking tools.

## **Abstraction: Disseminating Information at Scale**

The Ministry aimed to encourage financial inclusion, in part, by providing financial education and information in the savings groups. As regional coordinator Camila explained, "The principal objective [of the program] is to educate people financially. They were given [training] modules so they would understand a little more about what a financial life is [...] You become someone who has an account, who can access products and be a part of the country's development [...] and this will support them financially."<sup>12</sup>

The Ministry faced an initial challenge as it pursued this goal: how to provide information about formal finance to over 40,000 people? Seeking to make financial information applicable across the country's diverse regions and populations, the Ministry provided information in an abstract form; it was devoid of place, time, or context and was simplified to the least common denominator. This strategy coincides with common organizational efforts to disseminate information at scale by reducing complex ideas into basic components that lack place- or group-specific contingencies (Boisot 2007; March and Simon 1958).

<sup>12</sup> All quotes were translated from Spanish to English by the authors, and all names are pseudonyms.

The Ministry trained group facilitators to provide standardized financial education modules, which facilitators re-created in group meetings. Training modules covered themes of savings, credit, microinsurance, alternative financial channels, and the financial system. Facilitators met for training in person with regional program coordinators or over Skype with the Ministry's operating partner. Facilitators received some supporting materials, such as slide decks, via email. As facilitator Sandra explained, the Ministry anticipated that the financial modules would increase members' awareness and receptivity of banking products: "The idea is that a [group member] has prior knowledge before the product is offered. Before [we introduced] the savings accounts [for example], there was a training module with the group [...] so that they would know what was coming."

In their savings groups, facilitators disseminated this abstract information by discussing the financial education content and distributing related materials. For example, facilitators distributed pamphlets containing instructions for setting up mobile banking accounts. Figure 3 provides an example of a pamphlet distributed at group meetings, which describes the mobile *Ahorro a la Mano* account and provides set-up instructions. The information in this pamphlet is highly abstract: it includes a standardized list of the account's advantages and the steps to be followed, without specifics tied to time, place, or context. It does not make a pitch tailored to its audience, which it might, for instance, by describing the account's popularity among similar populations or by comparing it to other financial tools commonly used by the poor in a particular region.

[Insert Figure 3 about here.]

Acknowledging the Benefits of Banking

Many respondents absorbed the Ministry's abstract information and could readily identify advantages associated with banks. Indeed, participants affirmed that banks provide access to larger loans for small businesses, as well as opportunities to develop credit histories. They acknowledged that banks keep funds physically secure, compared to a private cache at home or in the groups' wooden boxes.

Group member Fernanda, for example, was keenly aware that banks keep money safe during calamities. She explained that an earthquake struck her region a few months prior, causing substantial damage, and used this example to highlight the security that banks provide: "Even though they take fees from us, [...] wherever you go, and whatever comes your way, and wherever it comes from, the money is there." But despite asserting the superiority of banks – "Not to undermine the [microsavings] program, but it is much better to save in a bank, it is much more secure" – Fernanda did not have a bank account and expressed no interest in opening one. Other respondents noted that saving money in banks encourages accumulation by making the funds more difficult to access.

As this example and others in our data suggest, participants were not blind to the benefits of financial products as outlined in government messaging. Indeed, research from other development programs has documented that participants often value information from official sources, even if they find it lacks personal relevance (e.g., Rutenberg and Watkins 1997). Nonetheless, like Fernanda, many savings group members found that the advantages of formal banks were insufficient motivation to engage with financial products. The following section explores the collective knowledge production processes that unfolded in response to the Ministry's abstract information about formal banking.

# Elaboration: Collective Knowledge Production and Anchoring on the Negative

Facilitators often found that the abstract information provided by the Ministry, like pamphlets and financial education modules, functioned as catalysts for further conversation, rather than ends in themselves. One facilitator, Carmen, recalled the Ministry's instructions to have group members 'act out' financial transactions, and the difficulties she encountered with this prescribed style:

[The Ministry] wanted us to do skits! They wanted us to act as if we were interacting with the participants, as if we were really in a bank. For example, when we were discussing credit bureaus, they wanted one person to be the bank, another one to be the bureau and the participants to be the clients. But no, we managed to do it with only two groups. With the rest, it became too hard so we did it like a workshop instead. We discussed it with them and asked them about how much they knew about the services that banks offered.

As this quote describes, the Ministry's abstract information (in this case, skit instructions and power point slides) served as a launch point for groups to discuss and raise questions about the financial sector.

To make sense of information shared by the Ministry, participants engaged in a collective process of 'elaboration,' contextualizing and concretizing information in light of their own knowledge, perceptions, and experiences. Rather than simply accommodating abstract material, they treated it as a springboard into more personally-relevant conversations about the financial sector.

As groups engaged in processes of elaboration, they tended to prioritize cautionary tales and apocryphal misinformation over neutral or official facts. This tendency to prioritize negative, memorable information is not unusual. Research on small group dynamics demonstrates that groups in a variety of settings tend to anchor on negative themes rather

than positive ones (Childress and Friedkin 2012; Friedkin and Johnsen 2011), as members often experience negative themes as more interesting, evocative, and memorable.

Groups fostered negatively-tinged discussions through three key mechanisms: sharing personal experiences related to banking; 'muddying the waters' by sharing rumors and fuzzy information presented as facts; and 'coloring in' neutral information by attaching a negative valence. The resulting discussions often emphasized banks as risky institutions that charge outsized and unexpected fees, deplete funds, and fine without warning. Through these discussions, many participants developed a sense that, although banks could be useful in some circumstances, they ultimately created more risk than they mitigated and were inappropriate for the precarious financial lives of the poor. Nevertheless, in some cases, we found alternative elaboration mechanisms that encouraged more positive views of formal finance, which we outline in a later section.

#### Sharing Personal Experiences

The most common way that participants translated abstract information about banking into concrete terms was by sharing their own experiences. Carmen, a group facilitator, described the lively discussions that tended to follow official information about the financial sector:

They were taught about bank accounts, about credit reports and loans, and then they did talk – people did talk about their experiences, especially at those times. Yes, in those moments people said, 'No, I don't agree because I lost money in the bank. I was saving and when I went to check, I had less than what I had saved. I knew I had a certain amount of money and the total was less.' People talked about good experiences, as well [...]. Maybe more the negative ones.

For example, group member Vanessa described how the introduction of abstract information prompted her fellow members to share their experiences with banks. "In the

group we just talked, and it was nice how we told each other things. When there was that talk [about loans by a local provider], then people commented and chatted – this and that happened to me." She further detailed two members' particularly salient responses:

It was Don Jesús, the gentleman who lived here, he had some problems with the bank. They repossessed something, I don't know what it was. He talked to us about that experience, that everything looks good there [with the loans], but then at the moment of truth — so that we would not make that mistake. He had already gone through that. And another gentleman also told us that he had a farm, that he had gotten a loan for cattle and all that, and then the bank auctioned it off [when he defaulted].

In response to a presentation about bank loans, Vanessa and other members of her group entered into a discussion about the financial sector grounded in their own lived experiences. Although Vanessa could not recount the details of each story, she recalled the overall impression that they conveyed: banks are risky institutions. Even when "everything looks good" at first, bankers may repossess collateral later. Her group members shared these experiences as a warning, "so that we would not make [the same] mistake."

Another respondent, Maricel, described a conversation in her group after a program administrator presented information about the financial sector:

One day she explained all of that to us, and we kind of had a debate, about everything that had happened to us. Yes, for some it had been useful, for others not. Some think banks are fantastic, others don't. So, we shared the things we have lived with regard to banks.

After receiving initial information, Maricel's group worked collectively to flesh out impressions of the formal sector with more personally-relevant information. This discussion about "the things we have lived with regard to banks" reflects a group-based process of collective knowledge production in response to abstract information about the formal sector. Maricel recounted that members shared a range of clashing positive and negative perspectives: "For me, to save [banks are a] no, to borrow a yes. Some others said no, that

they are good for saving." Nevertheless, they landed upon the conclusion that, despite their advantages, banks did not meet their needs. Maricel explained, "What I would say, and we all came to this conclusion, that it is very tough – as poor households, the economic situation doesn't allow for saving in a bank." Importantly, for participants like Maricel, the savings groups provided a novel forum for such discussions:

Interviewer: And before the savings groups, had you ever had an experience like this where you had like a debate about banks?

Maricel: It was the first time. Before the savings groups, no, not at all.

These examples provide a window into how experience-sharing in the savings groups, catalyzed by abstract information, could shape participants' perceptions about formal finance. As members shared "the things they had lived," the groups acted as informational prisms, collecting and concentrating members' tales of formal banks. Although participants may have heard other such accounts previously from family or close friends, the savings groups served to consolidate and amplify those perspectives, as members were exposed to a vibrant chorus of personal experiences from a wider range of similar others. As group member Gloria noted, such experience-sharing influenced members' perceptions:

Many times, people let themselves get carried away by what people say. [...] I mean, many people discourage their neighbors: 'Look, this happened to me, you shouldn't go [to a bank].' Without knowing if it's true or not. So, I would say that more than anything, [loss of interest in banks is] because of that.

## Muddying the Waters with Fuzzy Information

Another way that groups elaborated on abstract information was by sharing vague second-hand experiences, rumors, and 'fuzzy' information presented as facts. This process muddied the waters of official narratives about formal finance, making it difficult to distinguish facts from potentially-apocryphal accounts.

Unlike first-hand experiences, stories told about a third party or based on what 'people say' often lacked concrete and verifiable details; nonetheless, these accounts carried a powerful, negative valence. For example, Yolanda explained how she learned about fraudulent banking practices from her brother-in-law: "There was a bank fraud, I don't know what bank it was. And a lot of people had saved there, and they said they lost that money, I don't know what happened." Yolanda's understanding of her brother-in-law's experience had important gaps; it lacks details about the fraud and why account-holders lost money, and the event occurred a decade ago. Nonetheless, it raised a red flag about banks being potentially fraudulent, and "[t]hat left me with distrust."

Yolanda continued by recounting additional (mis)information about banks: "And another thing, they say that if someone is saving, and maybe something happens to the person who is saving, that money won't be turned over to anyone – no one can claim it, even family members... I have heard people say that." Yolanda does not know anyone who has experienced this kind of savings loss, and it is not in fact true that a deceased person's savings cannot be recovered. Nevertheless, 'people say' this as fact, and Yolanda repeats it in the same way when explaining her mistrust in banks.

Such accounts are likely to sway group members' perceptions of formal finance, as they did for Miralda. She recounted a friend's prior experience with banks, which echoed other stories she heard and discouraged her from saving in a bank.

A friend told me that once she had saved in a bank, I don't know how much, but she had saved. Then they charged her more interest, and the money went away with the interest. When she went to reclaim [her savings], there was nothing left of the money. [...] So, you listen to people like that, and say 'No – why am I going to save what little I have if they're going to take it away?' They take away a lot of [your money through] interest and everything, and you are left with nothing. [...] There have been people who have told me that they don't give back everything, that you go back to withdraw [your money] and they say

that it's all gone, that the interest didn't leave any money. You know, people who have been saving say that about banks.

Miralda's story represents two perceptions of banks common among respondents: that bank fees (she uses the term "interest") are so high and unpredictable that savers can find their accounts unexpectedly empty, and that low-income users feel these risks acutely. As with Yolanda's story, the details are fuzzy, but the implications are clear: banks are untrustworthy, and savers might lose their money by entrusting it to them.

Of course, we cannot verify whether all participants' experiences and anecdotes are accurate or apocryphal. However, their accuracy is less important than their content, tenor, and emotional valence. Indeed, research shows that our opinions are often shaped less by objective realities than by what we *feel* to be urgent and true. Microsociologists show that small groups discussions are heavily swayed by lively, emotional contributions—and less by fact-checking (Baldwin 2005; Shibutani 1966; Turner 1993). In a similar vein, Hochschild (2016) describes how American voters are less swayed in their political opinions by objective facts than by impressions and information aligned with 'deep stories' about fairness and proper social organization. Further, Leslie (2019) shows that even well-educated investors overlook crucial facts and construct 'lay ignorance' in support of their preferred interpretations of financial activity. Such research demonstrates that information and accounts need not be completely accurate in order to structure opinions and inclinations.

### 'Coloring in' Information

A final mechanism of elaboration relates to 'coloring in' factual information by adding an interpretive or emotional valence without changing details or accuracy. For example, former facilitator Eva described her group members' reactions to a tax established

by the Colombian government, known as "4x1000" (*Cuatro por Mil*, or 'Four per Thousand'), which taxes withdrawals at a rate of four pesos per thousand (0.4%); one account per person is exempt from this tax. Eva explained that group members seemed aware of the tax, but that "there are people who panic about the 4x1000," and reframe it as theft. She explained, "There are people who say that they are not interested in bank accounts, because [banks] steal so much." Group members did not dispute or misunderstand the amount of the tax, but they 'colored' it negatively, recasting it as a robbery.

Standard account fees could also be reframed as theft, as in the case of group member Maria Teresa, who explained,

[Saving at home] is more secure, because at the bank they also rob you. [...] At the bank, they robbed me once. I won a lottery of 380,000 pesos [\$120 US] and I was pregnant. I went to save money to buy things for when my child would be born. And later I went to withdraw it, and they told me that [the account] was empty and the money was gone.

Although Maria Teresa deposited her windfall in the bank, it appears as if account fees slowly chipped away at her funds until they disappeared. Maria Teresa did not expect this outcome—either because the bank did not communicate its terms clearly or because she misunderstood them. However, she does not limit herself to these facts in recounting her experience; instead, she interprets and recasts the account fees as robbery. Stories like this lay bare a common perception that the potential loss of one's hard-earned savings to an opaque institution is an unacceptable risk as well as an offense, and that banks can *create* economic uncertainty for users, rather than reducing it.

Group members' tendency to cloak information in emotional or moral valence parallels acts of meaning-making that sociologists have documented in a variety of contexts. For example, Aldrich (1999) describes how organizational actors interpret facts and memos

from employers through emotive narratives about work. In this way, "knowledge thus becomes thoroughly intertwined not only with interpretations of what [the information] means, but also with how members feel about it" (Aldrich 1999:149). By coloring in information with moral and emotive valence, savings group members—like actors in other contexts—imbue information with personalized meanings that influence the tenor of group discussions.

## Economic Precarity

When discussing formal finance, group members often shared impressions of banks that emphasized their risks, surprise costs, and unpredictability. Based on this observation, we anticipated that members' experiences of economic precarity might moderate their change in financial product interest—a testable hypothesis in our survey data. Specifically, members whose economic situation is more insecure should be more attentive to and influenced by collectively-elaborated descriptions of banks as risky and unpredictable, and thus lose the most interest in financial products. By comparison, we expect that members with more stable economic situations will lose comparatively less interest because they are better equipped to weather surprise fees or shifting interest rates, and thus should be less influenced by discussions about the perceived risks of banking. We returned to the survey data to test this expectation and found results consistent with our hypothesis: participants who experienced the highest levels of financial precarity also experienced the steepest drop in formal financial interest. We detail these statistical trends, which are consistent with our qualitative analysis, in Appendix C.

# **Counteracting Negative Impressions: Playing Defense and Championing Formal Finance**

The results above highlight how processes of elaboration encouraged negative views of formal finance. Nevertheless, group discussions were not uniformly negative; it was possible – though very rare in our data – for groups to encourage positive impressions of banking. We identified two key mechanisms associated with favorable financial discussions:

1) someone 'playing defense' and directly counteracting cautionary tales or misinformation, and 2) someone 'championing' formal finance by taking a leadership role in convincing others of its value and accompanying them in their initial contact with it.

# Playing Defense

One pathway by which negative conversations about banking could be counteracted was through the presence of someone 'playing defense.' This tactic involved correcting false or negatively-valanced information, and then reorienting the conversation in a more positive direction.

The act of playing defense was epitomized in the following exchange. Mirna, a group member, requested a loan from the savings group because, as she claimed, "no bank gives loans." In response, Camila, a program administrator who happened to be present at the meeting, immediately counteracted this statement with more accurate information: "Well, some banks... We are working with *Banco Agrario* so that they will come ... and tell you about their products." Yet Mirna remained skeptical: "But it's only for people from the countryside, right?" Camila persisted in explaining, "They have new products for people with microenterprises or businesses." This piqued Mirna's interest and appeared to assuage

her skepticism. She asked Camila about the loan interest rates and even went on to describe her small business to see if it would qualify.

This exchange is noteworthy for its direct and interactive nature. Camila, the program administrator, responds immediately to Mirna's dismissive statement about banking with information that not only counters her claim that banks do not give loans (to people like her), but offers additional information portraying banks as eager to engage with low-income clients. When Mirna expresses further skepticism, Camila counters it with additional facts about the availability of *Banco Agrario* products. Indeed, Camila's readiness to calmly but firmly counter Mirna's charges appears to have been successful in shifting the tenor of the conversation in a finance-positive direction.

Another situation recounted by a respondent suggests that group members, and not only program staff, could effectively play defense. Margarita recalled that during the course of the program, one of her fellow group members had gone to the bank to withdraw her savings, but the bank denied that she had an account at all. Margarita contrasted this negative experience with what she knew from her own family members, several of whom had longstanding accounts and spoke well of them. She concluded that her group member's experience must have been an aberration: "I say this from my own experience... because my father has savings [in a bank], my mother as well. My family has had them, so it seemed very strange to me [that a bank would deny that a customer had an account]." She encouraged her fellow group member to follow up with the bank; once she did so, her account was identified and her savings restored. In this case, it appears as if the bank made a serious error. Margarita's intervention encouraged her fellow member not to write off banks entirely, but to rectify the situation and continue engaging with formal finance. If and when

the group member recounts this experience to others, her story will not end with a calamity that cast banks in an unflattering light. Instead, as a result of Margarita's defensive move, the group member is more likely to view and portray banks as generally reliable organizations that occasionally make fixable mistakes.

# Championing Formal Finance

A second way that individuals could create space for more positive impressions of banking was by acting as 'champions' of formal finance. This strategy involved taking a leadership role in highlighting the positive aspects of formal banking and showing others how to use formal accounts. For example, group member Juana embodied this role and described how she encouraged fellow members to engage with formal financial tools:

There were neighbors who didn't know about credit cards, or they didn't know how to save, or they didn't know things, for instance, like that they can ask for a loan if they have good credit history. They didn't know about it. So, we used a [mobile banking] account called [Ahorro] a la Mano [...] and they learned how to use the account with their cell phones. I already had it because I was also being sent money, but my neighbors really learned a lot.... When we talked about Ahorro a la Mano, well, everyone wasn't sure about it, so I had to teach them how to use it.

Juana's group facilitator confirmed that her fellow members appeared to become favorably disposed to formal banking, and that Juana played an important role in encouraging them to develop that view.

Juana's experience suggests several factors that may have contributed to this positive dynamic. First, her favorable view of banking is grounded in experience. She already had a mobile banking account, used it to receive money, and (presumably) found that the funds arrived in full, did not disappear, and were accessible. Juana's positive impressions of the financial sector were likely more convincing to other members because she could

demonstrate concrete successes. Second, Juana encouraged her fellow group members through both talk and action. She not only describes the functioning of the financial sector, she manually teaches them how to set up and use mobile accounts on their phones. Such efforts ensured that Juana's group members experimented with financial services and could evaluate those services for themselves (rather than relying on others' anecdotes). Finally, because Juana is socially similar to her group members, her exhortations likely carried more weight than that of (paid) facilitators. While members may discount facilitators' efforts to promote formal finance, they are more likely to attend to experiences and information shared by a structural equivalent. Indeed, this finding is consistent with studies of innovation diffusion demonstrating that individuals more readily adopt novel products when endorsed by high-status community members (Rogers 2003). This example suggest that the emergence of negative impressions of unfamiliar services and products is not inevitable, even in groups where confusion and misinformation run high.

### **DISCUSSION AND CONCLUSION**

Classic and contemporary sociologists recognize the use of formal financial products as a hallmark of economic development (Carruthers and Ariovich 2010; Weber 1950). In line with this view, researchers have shown how governments, NGOs, and financial institutions across the globe seek to promote 'financial inclusion' by encouraging lower-income citizens to participate in the formal financial sector (Demirguc-Kunt et al. 2017; Wherry et al. 2019). Explaining the range of responses to these and other efforts to encourage financial engagement, scholars have privileged the role of institutions (Fridman 2017; Guseva 2008; Polillo 2011), culture (Fourcade and Healy 2007; Zelizer 1979), and

material conditions (Dupas and Robinson 2013b) as key explanatory factors. While these approaches provide useful insights, we argue that they overlook the important role of organizations and small groups in shaping individual preferences for formal finance.

In this study, we demonstrate how organizational and small group dynamics interact in unexpected ways to pattern financial preferences. We draw on qualitative and quantitative data from a national microsavings program in Colombia, which we take as a particularly useful case for exploring such dynamics. We first demonstrate that program participants showed a surprising drop in interest in formal financial products between the program's outset and conclusion. Then, we investigate the mechanisms underlying this trend – which we term 'elaborating on the abstract.' We find that government officials compressed complex information about formal finance into simplified, abstract information that could be widely disseminated across diverse audiences of savings group participants, and which then unexpectedly served as a springboard for small group discussions about banking. Group members actively elaborated on information from the government, effectively putting meat on the bones of skeletal, abstract facts. Members shared their own experiences about banking, offered 'fuzzy' information about the formal sector, and 'colored in' financial facts with emotional and moral valence. In our setting, these elaboration practices encouraged members to develop or solidify negative views of banks as capricious institutions that create risk, rather than minimize it. Yet we also show that, on rare occasions, members worked against the tendency to anchor on negative interpretations by repeatedly deflecting inaccurate information and by acting as champions for formal finance.

Overall, these findings reveal how organizational and small group dynamics interact to shape individual preferences. In what follows, we further develop the theoretical process of elaborating on the abstract, and consider how it may fuel preferences in other domains, such as public health and development programming. Then, we reflect on the broader conditions under which lead small groups might elaborate to arrive at *positive* impressions of abstract information, rather than the primarily negative outcomes we observed in our setting.

# **Information Flows: Compression and Expansion**

Although our empirical setting focuses on the development of financial preferences, the theoretical mechanism we outline has the potential to generalize to a variety of settings. Our mechanism reveals how information flows from large organizations to small groups, and then circulates within those groups. This process can be conceptualized as one of compression followed by expansion. In the first stage, organizations reduce complex information into abstract components—compressing information down to the least common denominator—thereby facilitating dissemination across physical space and diverse audiences. In the second stage, small groups expand upon this information through elaboration; they enliven it, give it color, add new heft and dimensions. Through this process of collective knowledge production, groups can shift the information's meaning and interpretation away from the intentions of the disseminating organization, leading to unexpected outcomes like those observed in our setting. Of course, not all information that organizations disseminate is valuable; nevertheless, it is important to understand how organizational and group processes may intersect to alter the meaning of information that organizations share. To this end, we outline two such examples below.

#### Vaccine Resistance

The process of elaborating on abstract information may prove generative in other contexts where individuals arrive at preferences that, at first glance, appear paradoxical. For example, scholars and policymakers have puzzled at the ideological positions held by parents who opt not to vaccinate their children (Bramadat et al. 2017). Vaccinations significantly reduce or eliminate the risk of contracting debilitating diseases and provide herd immunity once a population-level threshold is met. Despite these advantages, an increasing number of parents opt not to vaccinate their children. In explaining this surprising outcome, researchers have proposed that vaccine resistance stems from the influence of celebrities who peddle misinformation (Caulfield 2016) or from "backlash effects" (Nyhan et al. 2014; Nyhan and Reifler 2010), whereby individuals maintain or become more committed to irrational positions after receiving factual information.

While these mechanisms undoubtedly contribute to anti-vaccination trends, we propose that elaborating on abstraction may also play a role. Organizations like the Center for Disease Control and Prevention (CDC) must disseminate information about vaccines to large, diverse audiences. A review of CDC vaccination materials suggests that most is highly abstract, consisting of descriptions of diseases, vaccinations schedules, and associated risks (e.g., CDC 2019). Like many abstract materials, the CDC's fact sheets are devoid of group- and place-based specifics, making them appropriate for widescale dissemination, but also ripe for elaboration.

We anticipate that parents may engage with one another to interpret abstract information about vaccinations. These collective efforts may lead parents to perceive vaccinations as interventions that *create* rather than ameliorate health risks—much as

savings group members came to view banks as institutions that create financial risk rather than reduce it. Although our study highlighted the role of co-located groups, we think it likely that online forums could serve a similar function, potentially amplifying the negative tenor of the discussion and the speed at which personal anecdotes and 'fuzzy information' spread. Indeed, research on online discussion forums suggests that discussions develop a negative valence more readily in online settings (Chen and Lurie 2013; Galpin and Trenz 2019). In this way, the theoretical process we describe in this study—of information compression followed by group-level elaboration—may help to illuminate to the puzzling persistence of beliefs like vaccine resistance.

# Development Programming

The mechanisms outlined in this study also have implications for development sociologists, as they may shed light on why development programs often generate unexpected outcomes – in finance and beyond. Most directly, our research offers a potential explanation for why financial inclusion programs have often struggled with low levels of take-up (Dupas et al. 2018; Karlan et al. 2014; Kast and Pomeranz 2014; Knowles 2018). Programs using small groups may be affected by processes similar to those documented in this study, and even in programs that take a more individualized approach, participants may still collaborate with friends and family to expand upon abstract information about financial products in ways that are less visible, but nonetheless influential.

However, the implications of these findings extend beyond financial inclusion. For example, community-based HIV interventions have positive effects on certain health outcomes, but null or negative effects on others (Salam et al. 2014), and some maternal

health programs have been shown to lead women to exit the formal health system, even when incentivized by cash transfers (Smith-Oka 2009). We suspect that when groups elaborate on the abstract, they may contribute to these unexpected results. Many development programs deliver content and resources via small groups. When faced with abstract information about health, education, or economic opportunities, participants are likely to work together to construct knowledge that may conflict with abstract information issued by development organizations. By attending to the intersection of organizational practices and group-level knowledge production, development sociologists may better understand why development programs sometimes go awry.

# Spiraling Upward? Positive Trends and Opportunities for Future Research

In our setting, small groups tended to elaborate on abstract information in ways that emphasized negative features of banking and thus ran counter to the Ministry's aims.

Although we identified two mechanisms by which this overall negative tendency could be counteracted – playing defense and championing formal finance – the overall tenor of discussions was overwhelmingly negative. The tendency for group discussions to skew negative is consistent with a large body of social psychological research. There, scholars have shown that groups tend to anchor on negative themes rather than positive ones (Childress and Friedkin 2012; Friedkin and Johnsen 2011), that individuals overvalue the reliability and importance of information with a negative valence (Rozin and Royzman 2001), and that individuals are more likely to use negative information in decision making (Baumeister et al. 2001; Vaish, Grossmann, and Woodward 2008). Further, in groups where participants' starting attitudes are negative, those attitudes tend to become increasingly

negative through group discussion (Friedkin and Johnsen 2011). This body of work suggests that groups tend to 'spiral downward' in conversation, as if negativity were a gravitational force in group discussion.

Given the substantial body of evidence establishing that "bad is stronger than good" in group discussions (Baumeister et al. 2001), it would take a powerful set of alternative forces and conditions for group discussions to 'spiral upward' in more positive directions. In this concluding section, we consider: When might small groups develop positive rather than negative impressions as they elaborate on the abstract? We view these extensions as exciting areas for future research.

We propose two intersecting conditions that we expect would shape the tendency of group discussions to sway positive. <sup>13</sup> First, we anticipate that members' trust in the disseminating organization affects group meaning-making processes. Such trust will likely be a confluence of members' confidence in the specific disseminating organization, the institutions with which the organization is associated, and the individual representative who delivers the information. We expect that group members will be more likely to elaborate on abstract information in positive ways when they are highly trusting in and supportive of the disseminating organization. For example, while we have shown that levels of trust in banks and the government in Colombia are not low or unusual relative to other countries in the region, there are certainly other institutions that Colombians trust more unequivocally, like humanitarian organizations, universities, and the Catholic Church (World Values Survey

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<sup>&</sup>lt;sup>13</sup> In theorizing these conditions, we take the perspective of the disseminating organization, assuming that it aims to foster favorable group discussions of products or ideas. Of course, organizations might promote ideas or practices that conflict with members' best interests. In this section, we are agnostic about the social welfare outcomes associated with idea dissemination, and instead focus on the conditions under which favorable conversation might emerge.

n.d.). We expect that groups would engage with information coming from these sources more positively than they did with information coming from the government, towards which they display more tepid feelings.

Second, we anticipate that members' prior dispositions towards the product or idea being promoted will influence group elaboration. We expect that groups will engage in more positive elaboration when most members enter the groups with strong, positive dispositions towards the product or idea that the organization promotes. Under these conditions, individuals might join groups *because* they are enthusiastic about the topic. For example, favorable elaboration is likely to unfold among consumer brand communities (Wherry 2012)—groups of individuals who gather to discuss brands they strongly support—or self-help groups in which members are already committed to the underlying ideology (e.g., Fridman 2017). We anticipate that such groups would elaborate in favorable ways on abstract information about products or ideas they already support, leading to positive meaning-making processes and favorable resulting attitudes.

Because our data do not allow us to investigate these conditions systematically, we hope that future researchers investigate how these intersecting axes of variation influence group meaning-making in different contexts. Conceptually, we envision these factors as intersecting vertical and horizontal axes, with a group's location on the resulting grid influencing how they might elaborate on abstract information. To that end, we expect that such investigations will be most fruitful in the off-diagonal conditions: How do groups engage with abstract information when they are enthusiastic about the promoted products or ideas, but mistrust the disseminating organization? Similarly, how might groups elaborate on the abstract when they enthusiastically support the organization, but disdain the ideas or

products it promotes? Investigating such contextual factors will lend depth to our understanding of how small groups elaborate on abstract information disseminated at scale.

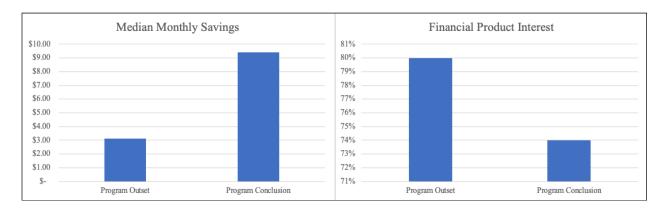
In conclusion, this study reveals how organizational and group-level processes interact to shape financial preference. Using multiple methods to investigate a national microsavings program in Colombia, we show how the organizational tendency to disseminate abstract information to diverse audiences creates opportunities for small groups to elaborate on that information, shaping attitudes and interpretations in ways that may run counter to the organization's aims. We propose that the process of 'elaborating on the abstract' has important implications beyond financial preference, and can be applied across a variety of contexts to help explain attitudes and behaviors that may, at first glance, appear paradoxical. We hope that scholars pick up the theoretical baton where we have left off, continuing to examine how factors like institutional confidence, organizational trust, and product predispositions influence how groups create personally-relevant meanings from abstract information.

Figure 1. Photo of Microsavings Group with Wooden Savings Box



Note.—Photo from El Pais (https://www.elpais.com.co/economia/cajas-de-ahorro-que-prometen-cumplir-suenos-a-familias-colombianas.html, accessed 4/11/2019).

**Figure 2.** Median Monthly Savings (USD) and Affirmed Interest in Formal Sector Financial Products (%) at Program Outset and Conclusion



**Figure 3.** Front and Back of Instructional Pamphlet for Setting Up *Ahorro a la Mano* Mobile Banking Account



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# **APPENDIX A.** SURVEY INSTRUMENT, SUMMARY STATISTICS, AND MODELS PREDICTING FINANCIAL INTEREST

Officials at the Ministry commissioned a stratified sample of savings group participants and instructed surveyors to select one respondent at random from each group. In order to measure within-individual change, participants were surveyed at the outset and conclusion of the program. Officials collected complete surveys from 3,006 participants at baseline (of 3,200 total savings groups). At endline, they collected 2,770 complete surveys from the set of baseline participants. Surveyors report that the loss of participants at endline was due to death, relocation, or absence from the group on the day of the survey.

Our two key variables of interest are interest in financial products and the amount saved. Surveyors captured interest in financial products with the question, "Would you be interested in having a financial product (savings/credit/insurance, other) with a financial institution?" In Spanish, this question reads, "¿Estaría usted interesado en tener algún producto financiero (de ahorro/crédito/seguros, otros) con alguna entidad financiera?" Surveyors coded answers as "yes," "no," or "I don't know/No response." Table A1 displays the number of observations at baseline and endline associated with each response. Because few respondents answered "I don't know/no response"—and because we are particularly interested in affirmative responses—we constructed a binary variable that measures whether respondents answered yes or no/I don't know/no response. The results are consistent in direction and significance when we use a three-tiered categorical measure of interest.

Our second key variable captures participants' self-reported savings. Surveyors asked respondents, "What is the average amount you have saved each month (during the past six months)?" In Spanish, this question reads, "¿Cuál ha sido el monto promedio ahorrado mensual (durante los últimos 6 meses)?" Participants responded with a value in Colombian pesos (COP). Table A1 presents the median peso value at baseline and endline, as well as the US dollar conversion as of January 1, 2016.

**Table A1.** Response Frequency for Financial Interest and Median Values for Monthly Savings

		Baseline	Endline	
	Yes	2039	1798	
	No	562	887	
Financial Interest	I don't know/No response	169	85	
	TOTAL	2770	2770	
Median Savings	COP	\$10,000	\$30,000	
wiculan Savings	USD	\$3.15	\$9.44	

Table A2. Summary Statistics for Dependent and Independent Variables

	Mean	SD	1	2	3	4	5	6	7	8	9	10
1. Financial interest	0.69	0.46	1.00									
2. Survey wave (endline = 1)	0.50	0.50	-0.09	1.00								
3. Savings (ln)	7.55	5.01	0.12	0.26	1.00							
4. Gender (female = 1)	0.83	0.37	-0.03	0.00	0.05	1.00						
5. Age	41.40	12.32	-0.06	0.02	-0.04	-0.13	1.00					
6. Household size	3.95	1.69	0.02	-0.01	-0.01	0.07	-0.09	1.00				
7. Secondary education	0.52	0.50	0.05	-0.04	0.07	0.07	-0.40	0.04	1.00			
8. Trusts government	0.39	0.49	0.11	-0.07	0.02	0.02	0.03	-0.02	-0.03	1.00		
9. Trusts neighbors	0.30	0.46	0.07	0.00	0.03	-0.02	0.01	-0.04	-0.02	0.25	1.00	
10. Trusts banks	0.43	0.50	0.14	-0.05	0.04	0.00	0.02	-0.02	-0.01	0.53	0.24	1.00
11. Community groups (#)	1.24	1.33	0.06	0.00	0.07	0.00	0.05	0.04	0.04	0.06	0.08	0.07

*Note.*—N = 5540 observations from 2770 individuals.

The summary statistics reveal a few noteworthy trends. Across combined baseline and endline observations, 69% of participants affirmed their interest in the formal financial sector. Respondents were overwhelmingly female (83%), averaged 41.4 years old, and had an average household size of approximately four members. Just over half of respondents had a secondary degree (52%). The survey also measured participants' trust in the government, neighbors, and banks. For ease of interpretation, we coded these responses as binary (1 = yes; 0 = possibly or no). Our models are robust to including categorical measures with three-tiered responses. Across combined baseline and endline surveys, approximately 40% of respondents affirmed that they trusted the government, 30% affirmed that they trusted their neighbors, and 43% affirmed that they trusted banks. Finally, the survey also captures the number of community groups (other than the savings groups) to which respondents belong. On average, survey participants belonged to an additional 1.24 community groups.

In Table A3, we present logistic regression and linear probability models predicting positive expressions of interest in formal financial products. Models 1 and 2 are logistic regressions with standard errors clustered by individual. Model 1 predicts interest including the control variables only, and model 2 introduces our key predictor variable, *survey wave* (baseline = 0, endline = 1). The *survey wave* coefficient measures the difference in financial interest expressed at the outset and conclusion of the program. The negative, significant coefficient ( $\beta$  = -0.61, p <.001) indicates that survey participants' interest in formal financial products declined between baseline and endline. Notably, this significant reduction accounts for the amount of money participants saved, along with a range of individual, group, and regional characteristics that might affect financial interest.

In Models 3 and 4 we introduce individual fixed effects and predict financial interest using a linear probability model. We use linear probability rather than logistic regression to avoid dropping observations from individuals who do not experience change in the dependent variable and to aid interpretability of the results (Hellevik 2009). In these models, coefficients reflect within-person changes. Model 3 includes controls only and model 4 introduces the key independent variable. In model 4, we find a negative, significant effect of survey wave ( $\beta$  = -0.12, p <.001). This coefficient indicates that individuals experienced a significant decline in financial sector interest between baseline and endline. This effect is noteworthy because it accounts for unobservable, time-invariant individual characteristics—as well as savings and trust measures—that might influence financial sector interest. All models are robust to including ordinal rather than binary measures of financial interest and trust.

Overall, these models demonstrate the consistency and reliability of the descriptive trends we presented in the main text: participants expressed significantly *less* interest in formal finance at the end of the microsavings program than at the beginning. This decline remains even when we account for participants' self-reported savings and a range of individual, group, and regional characteristics, as well as when we include individual fixed effects. The significant decline in financial sector interest—even after accounting for a range of explanatory variables—suggests that additional factors contribute to the drop in financial interest. We take these results as motivation for our qualitative investigation.

**Table A3.** Logistic Regression and Linear Probability Models Predicting Interest in Formal Financial Products

	Model 1	Model 2	Model 3	Model 4
	Logit	Logit	Linear Prob	Linear Prob
Survey wave (endline = 1)		-0.61***		-0.12***
		(0.06)		(0.01)
Savings (ln)	0.05***	0.07***	0.01***	0.01***
	(0.01)	(0.01)	(0.00)	(0.00)
Gender (female = 1)	-0.27**	-0.27**		
	(0.09)	(0.09)		
Age	-0.01**	-0.01*		
	(0.00)	(0.00)		
Household size	0.02	0.02		
	(0.02)	(0.02)		
Completed secondary education	0.16*	0.14		
	(0.07)	(0.07)		
Trusts government	0.09	0.05	0.05*	0.04
	(0.08)	(0.08)	(0.02)	(0.02)
Trusts neighbors	0.17*	0.17*	0.06**	0.06**
	(0.07)	(0.08)	(0.02)	(0.02)
Trusts banks	0.44***	0.43***	0.04*	0.04
	(0.08)	(0.08)	(0.02)	(0.02)
Community groups (#)	0.05	0.05		
	(0.03)	(0.03)		
Individual FE	No	No	Yes	Yes
N	5540	5540	5540	5540

*Note.*—Models 1 and 2 include regional (department) fixed effects. Standard errors are in parentheses. \*\*\* p < .001, \*\* p < .01, \* p < .05

# **APPENDIX B.** CONSIDERATION OF OTHER POTENTIAL CONTRIBUTORS TO THE DECLINE IN FINANCIAL PRODUCT INTEREST

When we uncovered the surprising drop in financial product interest, our first intuition was to attempt to explain the result using parsimonious accounts based on existing theory. We considered four possible explanations, outlined below. Ultimately, we found that none of these explanations could fully account for the loss of interest, encouraging us to further examine the qualitative data and theorize the group-based mechanism described in the main text.

### **Macroeconomic Shocks**

First, we considered whether macroeconomic changes exogeneous to the program might have affected financial interest. Perhaps, we reasoned, participants were troubled by large-scale political or economic changes that made them wary of formal finance, regardless of the savings program. If macroeconomic shocks occurred concurrent with the program, then participants might perceive the formal sector as less secure and lose interest in its services (e.g., Fridman 2017; Guseva 2008). Yet surveys show that confidence in the Colombian economy remained nearly fixed during the microsavings program. In July 2016 (the closest proximate cut point to the beginning of the program), 78.3% of respondents expressed high or very high confidence in the stability of the financial system. In July 2017, this figure was 79.2% (Santamaría and Mariño 2018). These data suggest that, on the whole, Colombians did not lose confidence in financial sector during the savings program.

# Lack of Saving

We then wondered: Does the decline in interest come from non-savers only? We reasoned that participants who were unsuccessful at accumulating savings during the program may have concluded that they had no use for formal finance. We turned to the survey data to examine this question. Contrary to our suspicion, we found that the drop in interest comes from across the saving spectrum. Although respondents who saved more money expressed more interest in the formal sector than respondents who saved less, even the most successful savers lost interest in formal financial services by the end of the program. Among the top 25% of savers, for example, interest fell from 77% to 73% (p < .10), contributing to the overall decline. Thus, the loss in interest is not exclusive to a small set of non-savers, but occurred even among the program's star savers.

# **Unpleasant Experiences at Banks**

Next, we wondered whether members lost interest because they had off-putting experiences with financial institutions during the program. Previous research has found that low-income users often feel intimidated or uncomfortable at banks, and impolite or unwelcoming interactions with bank employees can turn them off to formal banking (Berry 2005; Blank 2008). In our context, it is possible that group members might have been inspired to visit financial institutions to access formal products, had distasteful experiences, and lost interest based on those experiences.

To consider this possibility, we turned to the qualitative data. There, we found that a handful of respondents did report negative experiences with financial institutions. For example, some participants applied for loans with microfinance providers and never heard

back. Tatiana explained, "[After that happens] your interest drops, you're demoralized that things didn't turn out [like you wanted]." Nevertheless, after extensively probing respondents' experiences with financial institutions in interviews, we found that —unlike Tatiana—the vast majority had *not* visited banks during the savings program. Of course, all participants were exposed to the *Ahorro a la Mano* mobile banking accounts. Yet these accounts—by design—do not require users to visit brick-and-mortar branch offices, so using them is unlikely to have prompted distasteful interpersonal experiences at banks. While many participants reported that they opened mobile accounts and then left them dormant, no one reported being put-off by them.

# **Substitution Effects**

Finally, we considered whether the savings groups became substitutes for banks. If members thought that savings groups and banks served the same purpose, and they preferred the groups, then they might have lost interest in banks. Were the savings groups so successful in meeting the program's saving goal that they undermined its financial inclusion goal?

We turned to the qualitative data to investigate this possibility. Initially, we found that a few respondents reported seeing the groups as substitutes for banks. For instance, Flor stated, "If you can get together with several people, you can save without the need for other things [like banks]." For some participants like Flor, substitution effects may indeed have contributed to a loss of interest in formal financial institutions.

Nevertheless, we found that this view of savings groups as substitutes for banks was much less common than we expected, and that most of our respondents viewed banks and savings groups as *complements*. Even as they bemoaned certain aspects of formal banking, participants could nevertheless readily list the advantages banks offered that savings groups could not (e.g., developing credit scores, offering greater security, keeping funds away from self and others, etc.).

Further, upon conducting interviews nine months after the program concluded, we were surprised to find that almost none of our interviewees reported that their groups continued meeting. If members felt strongly that the savings groups met their financial needs, we would expect more groups to continue meeting, even without a government facilitator. Indeed, the Ministry hoped the groups would continue independently and let members keep supporting materials (e.g., wooden savings boxes, cloth bags for collecting funds, notebooks for record-keeping). The fact that hardly any groups continued meeting without the formal program supports further fueled our view that substitution effects were unlikely to completely explain the loss in financial interest we observed.

# **Multiple Causality**

Having carefully considered these explanations, we found that none satisfactorily accounted for the decline in financial product interest, fueling our curiosity and encouraging us to dig deeper into the qualitative data. Of course, thoughtful and creative readers will propose additional processes that may have contributed to the drop in formal financial interest. In a program spanning an entire country and nearly 50,000 people, this change is certainly not attributable to any single factor to the exclusion of all others. Just as we would not expect a single variable to account for 100% of the variance in an econometric model, we would not expect a single process to explain, exclusively, a major social change such as

the one we observe (e.g., Ang 2016; Uzzi 1999). We view the group-based mechanism we propose as an important and powerful force that contributed to the decline in formal sector interest, and the one that is best supported by our data. Moreover, we find this mechanism valuable for the theoretical insights it offers to economic sociology, organizational sociology, and the sociology of development.

### APPENDIX C: ANALYSIS OF ECONOMIC PRECARITY

When discussing formal finance, group members often shared impressions of banks that emphasized their risks, surprise costs, and unpredictability. Based on this observation, we expect that members' experiences of economic precarity will moderate their change in financial product interest. Specifically, we anticipate that members whose economic situation is more insecure will be more attentive to and influenced by descriptions of banks as risky and unpredictable, and will thus lose the most interest in financial products. By comparison, we expect that members with more stable economic situations will lose comparatively less interest because they are better equipped to weather surprise fees or shifting interest rates, and thus should be less influenced by discussions about the perceived risks of banking. We return to the survey data to test whether this expectation is borne out.

We examine the moderating influence of economic precarity, as measured by a scale of zero to three economic emergencies reported in the past six months, on changes in financial product interest. (See Appendix A for details on the survey.) The survey measures economic precarity by asking respondents to indicate how many out of three possible economic emergencies they experienced in the past six months. The question reads: "In the past six months, have you encountered any of the following situations? 1) Difficulty paying public service fees, 2) Difficulty paying rent/administration fees, 3) Difficulty covering basic household necessities (food, transportation, clothing, etc.)." The Spanish original reads: "¿En los últimos 6 meses, enfrentó alguna de las siguientes situaciones? 1) Dificultad para pagar los servicios públicos, 2) Dificultad para pagar el arriendo/administración, 3) Dificultad para cubrir las necesidades básicas del hogar (alimento, transporte, vestuario, etc.). "We use respondents' answers to construct a measure of precarity ranging from low (no emergencies) to high (three emergencies). On average, participants have experienced 0.85 emergencies (median = 1 emergency). We use logistic regression to estimate the likelihood that respondents will respond affirmatively to the same question analyzed earlier in this paper, "Would you be interested in having a financial product (savings/credit/insurance, other) with a financial institution?"

We present the results in Table C. Model 1 includes the control variables only (see Appendix A for summary statistics) and model 2 introduces the key independent variables, survey wave (baseline = 0, endline = 1) and economic precarity. In model 2, the negative, significant coefficient for survey wave ( $\beta$ = -0.61, p<.001) suggests that respondents' interest declined between baseline and endline. The non-significant main effect of economic precarity suggests that precarity on its own does not significantly predict interest in formal financial products.

Model 3 contains our key coefficient of interest: the negative, significant interaction between *survey wave* and *economic precarity* ( $\beta$ = -0.31, p <.001). Because interaction coefficients in non-linear models can be misleading (Ai and Norton 2003; Norton, Wang, and Ai 2004), we generate predicted values of financial interest at baseline and endline across levels of precarity, holding controls constant at their means (see Figure C).

Table C. Logistic Regression Predicting Interest in Formal Financial Products

	Model 1	Model 2	Model 3
Survey wave (endline = 1)		-0.61***	-0.34***
		(0.06)	(0.09)
Economic precarity		-0.07	0.09
		(0.04)	(0.06)
Survey wave * Economic precarity			-0.31***
1 2			(0.08)
Savings (ln)	0.05***	0.07***	0.07***
	(0.01)	(0.01)	(0.01)
Gender (female = 1)	-0.27**	-0.27**	-0.27**
,	(0.09)	(0.10)	(0.10)
Age	-0.01**	-0.01*	-0.01**
	(0.00)	(0.00)	(0.00)
Household size	0.02	0.02	0.02
	(0.02)	(0.02)	(0.02)
Completed secondary education	0.16*	0.13	0.13
1	(0.07)	(0.07)	(0.07)
Trusts government	0.09	0.05	0.04
	(0.08)	(0.08)	(0.08)
Trusts neighbors	0.17*	0.17*	0.17*
	(0.07)	(0.08)	(0.08)
Trusts banks	0.44***	0.43***	0.43***
	(0.08)	(0.08)	(0.08)
Community groups (#)	0.05	0.05	0.05
	(0.03)	(0.03)	(0.03)
N	5540	5540	5540

Note.—Standard errors are in parentheses and are clustered by 2770 individuals. Models include regional (department) fixed effects. \*\*\* p < .001, \*\* p < .05

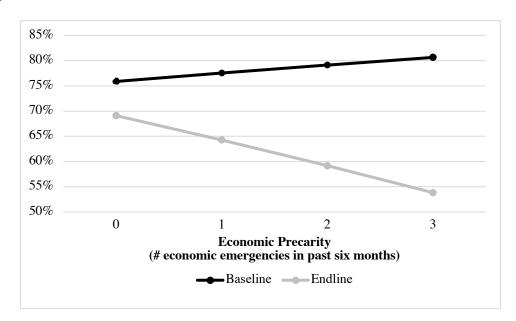


Figure C. Predicted Probabilities of Affirmed Interest in Formal Financial Products

*Note.*—The predicted probabilities of financial interest are significantly different at each level of precarity.

The results confirm our expectation: members who experience the most precarity saw the greatest decline in formal sector interest, from 80.6% at baseline to 53.9% at endline. Correspondingly, the predicted drop is smallest among those who experience the least precarity, from 75.9% to 69.1% (though this drop is nevertheless statistically significant). Importantly, these models account for the amount that respondents saved, so the effects do not simply reflect a lack of saving among those in precarious conditions.

Consistent with expectations, these results show that group members whose economic lives are most unstable lost the most interest in the formal financial sector. Those whose financial lives are already marked by instability would be particularly sensitive and responsive to the group meaning-making efforts described in our qualitative findings that emphasized the financial sector as risky and capricious, as they would be least capable of absorbing the economic shocks associated with surprise fees, shifting interest rates, or disappearing funds.