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# TECHNICAL REPORT

# Distributing Noncontributory Pension Benefits by Debit Card in Mexico: A Pilot Test

Emma Aguila, Abril Borges, Ashley Pierson, Rosalba Robles, Jose Eduardo Del Torno, Beverly A. Weidmer



Sponsored by the Government of the State of Yucatan and the National Institute on Aging





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### Preface

In an effort to improve the quality of life for older adults, the government of the state of Yucatan and the RAND Corporation collaborated to design, implement, and evaluate a noncontributory pension program in the state of Yucatan, Mexico. Although the program initially distributed its monthly benefit in cash (or, for rural recipients, cash supplemented by a basket of basic foods), it later selected a small group of recipients to receive the pension through a debit card. This report describes the results of a pilot study of debit-card disbursal.

From March 2010 to February 2012, we conducted our pilot study in the city of Merida, the Yucatan state capital. The program paid monthly pensions of MXN \$550 (about US\$67 at 2011 purchasing power parity) through deposits to a bank account established for each beneficiary that is linked to a debit card. In this report, we describe how we conducted the pilot study and explore the results from several surveys of this pilot group. Our results indicated that debit-card pension disbursal is feasible for an elderly Mexican population and led us to expand the number of beneficiaries receiving the benefit through the debit-card method.

This report is one of a series of RAND reports describing the noncontributory pension program in Yucatan, its implementation, its evaluation, and related topics. For a detailed description of the larger project, see Aguila, Kapteyn, et al., forthcoming, and Aguila, Borges, et al., forthcoming.

This research was conducted by the RAND Center for Latin American Social Policy (CLASP) and made possible with funds from the government of the state of Yucatan; the National Institute on Aging (NIA) (through grants R01AG035008, P01AG022481, and R21AG033312); the RAND Center for the Study of Aging (with grant P30AG012815 from NIA); RAND Labor and Population; and CLASP. Three Mexican institutions are collaborating on the program: the National Institute for Statistics and Geography (Instituto Nacional de Estadística y Geografía), the Yucatan Cultural Institute (Instituto de Cultura de Yucatán), and the Yucatan State Population Council (Consejo Estatal de Población de Yucatán). The pension program is also supported by an international advisory board of experts affiliated with the Autonomous University of Yucatan (Universidad Autónoma de Yucatán), Center of Investigation and Advanced Studies of the National Polytechnic Institute (Centro de Investigación y de Estudios Avanzados del Instituto Politécnico Nacional) Merida Unit, University College London, Yale University, and the RAND Corporation.

RAND Labor and Population has built an international reputation for conducting objective, high-quality, empirical research to support and improve policies and organizations around the world. Its work focuses on children and families, demographic behavior, education and training, labor markets, social-welfare policy, immigration, international development, financial decisionmaking, and issues related to aging and retirement, with a common aim of understanding how policy and social and economic forces affect individual decisionmaking and human well-being.

CLASP, part of RAND Labor and Population, unites a distinguished collective of international researchers invested in addressing the most-pressing challenges and finding unique solutions that can contribute to a path of sustainable development for Latin Americans at home, in the United States, and around the world.

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Materials related to this survey project, including the list of appendix materials and the list of technical reports and research papers, are available at http://www.rand.org/labor/centers/ clasp/research/projects/social-security-program.html.

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Some governments have developed public policies for older populations as a response to a higher proportion of older people living in poverty than in the past. Noncontributory pension programs are one of these policies. In a noncontributory pension program, older adults receive a certain amount of money on a regular basis (often monthly). Government programs may distribute benefits to participants in cash or through an electronic payment card, such as a debit card, linked to a bank account. The potential advantages that electronic disbursement can have for both administrators and recipients have led many governments to switch from cash payments to debit-card disbursal.

The RAND Corporation has collaborated since 2007 with the government of Yucatan, Mexico, in a noncontributory pension program for adults age 70 and older. RAND and the state government have collaborated on the design, implementation, and evaluation of the program. The pension program began in rural areas but was expanded to urban areas, including Merida, the capital city of Yucatan. The pension pays MXN \$550 (about US\$67 at 2011 purchasing power parity) to urban recipients every month; rural recipients receive a monthly pension of MXN \$500 and a food basket valued at MXN \$50.

The implementation and evaluation of the program occurred simultaneously. Evaluation 1, the first evaluation of the program, started in the city of Valladolid in 2008. Evaluation 2 began in Merida in 2009. Both evaluations 1 and 2 distributed the pension payment in cash to older adult recipients. For evaluation 3 in Merida, we considered disbursing the pension through a debit card linked to a bank account. In order to test this method, we enrolled 179 randomly selected older adults in a pilot program in 2010, all of whom received the pension through debit-card disbursal, then tested the administration of benefits through the debit card and examined how older adults use the card. Upon enrollment in the program, each recipient was given a baseline survey and debit-card survey, and then program staff instructed the beneficiary on how to use the debit card. The pensions were disbursed through a local bank starting in July 2010.

In September, October, and November 2010, we conducted monthly follow-up surveys to assess the experience beneficiaries had using the debit cards. This follow-up survey consisted of 15 questions; for example, the survey asked respondents for information on who used the debit card and any difficulties with use. Informed by preliminary results from these surveys that showed that many older adults were comfortable using the debit card, we used the debit-card disbursal mechanism as the program was expanded to a new group of 1,015 adults in Merida.

A fourth follow-up survey was conducted with the pilot debit-card participants in February 2012. Most questions were similar to those in the three earlier follow-up surveys. Questions were added regarding use of funds, savings, and whether beneficiaries had to pay someone to help them withdraw funds. We also administered this survey to the participants added to the debit-card program after the launch of the pilot test (the expansion group). The survey was modified to also be applied to recipients who had received cash pension payments since 2009, asking about their savings and use of pension funds.

From the first three follow-up surveys, we found indications that many pilot-program participants initially expressed doubts about using the debit card but, over time, seemed to become more comfortable with this disbursal mechanism. Many pilot-program participants reported that family members helped them use the cards or had used the cards on their behalf. Some had problems using automated teller machines (ATMs) to withdraw their pensions, including not remembering how to use the machine and having problems with access. These issues remained in the fourth follow-up survey, showing that beneficiaries may need periodic training on how to use an ATM and that staff should regularly check to ensure that recipients know how to access their pensions. Although these issues could occur in other populations, the age of beneficiaries in this program may be linked to problems remembering how to use an ATM, perhaps due to lack of familiarity with technology or memory problems caused by aging.

Slightly more than half of pilot-program participants—56.5 percent—reported in the fourth follow-up survey that they preferred to receive their pensions through the debit-card disbursal mechanism. It appears that debit cards are seen as more convenient and as providing easier access to their money for many beneficiaries. However, for those who continue to prefer cash after having received their pensions through the debit-card method for more than a year, ATM use continues to be difficult, and access may be a problem.

The debit-card disbursal mechanism appeared to make the program simpler to administer than a cash-based disbursal program, and more than half of the beneficiaries in our pilot group preferred the debit-card method. However, many older adults rely on family members to help them with the debit cards; for those older adults who do not have dependable family members, this method of disbursal could create problems. There are beneficiaries who prefer to receive their pension payments in cash because of problems using ATMs, disabilities, or lack of literacy, all of which may be more common in an older population or those with low levels of education.

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## Abbreviations

AGEB	área geoestadística básica, or basic statistical area
ATM	automated teller machine
Bansefi	Banco del Ahorro Nacional y Servicios Financieros, or National Savings and Financial Services Bank
BFP	Bolsa Família program
BPC	Benefício de Prestação Continuada, or Social Assistance Pension
CCT	conditional cash transfer
CGAP	Consultative Group to Assist the Poor
CLASP	RAND Center for Latin American Social Policy
CONAPO	Consejo Nacional de Población, or National Population Council
DFID	Department for International Development
EBC	electronic benefit card
EBT	electronic benefit transfer
GAPVU	Gabinete de Apoio à População Vulnerável, or Office for Assistance to the Vulnerable Population
INEGI	Instituto Nacional de Estadística y Geografía, or National Institute for Statistics and Geography
NIA	National Institute on Aging
OECD	Organisation for Economic Co-operation and Development
PIN	personal identification number
PPP	purchasing power parity

The fact that populations are aging has led some governments to develop public policies that benefit older adults in poverty. Among these policies are noncontributory pension programs, in which older adults receive a certain amount of money on a regular basis (typically monthly). This noncontributory pension benefit can be distributed to participants in cash or through an electronic payment card, such as a debit card, linked to a bank account. Using debit-card disbursement can help governments streamline and reduce administrative costs for pension programs. Some populations, however, may not be familiar with bank services or may have disabilities or low levels of literacy and numeracy impeding their use of an electronic benefit system.

This report describes a pilot study of debit-card pension disbursal in the state of Yucatan, Mexico. The Reconocer program is a noncontributory pension program that was designed to provide beneficiaries in rural areas a cash payment of MXN \$500 per month (about US\$61 at 2011 purchasing power parity [PPP]) and a basic food basket.<sup>1</sup> In urban areas, beneficiaries do not receive the food basket but receive instead a total cash payment of MXN \$550 (about US\$67 at 2011 PPP). Altogether, the monthly benefit is equal to 31 percent of the monthly minimum wage in Yucatan (MXN \$1,772.40 in January 2012).

The pensions are distributed monthly at the town hall and are paid in cash or through a debit card. Cash is delivered at home to beneficiaries who cannot travel because of illness or physical difficulties. The benefit is lifelong and ceases upon the death of the beneficiary. The final monthly payment is disbursed to the beneficiary's family in the month in which the beneficiary passes away to help pay for funeral expenses. In this chapter, we provide some background on the pension program before turning to a review of the pilot test of the debit-card disbursal method in the remainder of the report.

Since 2007, the RAND Corporation has collaborated with the government of Yucatan, Mexico, in the design, implementation, and evaluation of a noncontributory pension program for adults age 70 or older. The pension program began in select rural localities but eventually moved to selected urban localities of at least 20,000 residents, including Merida, the capital city of the southern Mexican state of Yucatan (see Figure 1.1). The noncontributory pension program in urban areas is called Reconocer Urbano; this program began in the city of Vallado-lid in December 2008, where all older residents received the noncontributory pension.

<sup>&</sup>lt;sup>1</sup> The PPP exchange rate (which takes into account the amount of money needed to purchase goods and services in different countries) from Mexican pesos to U.S. dollars in 2011 is 8.18 (from Organisation for Economic Co-operation and Development [OECD], undated [a]). For more information, please see OECD, undated (b).





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The program has had concurrent implementation and evaluation. Evaluation 1 began in 2008 in Valladolid. In 2009, we implemented the program in Merida.

Evaluation 2 included a sample of 1,156 older adults who received their first pension payments in cash in December 2009 and continued to receive monthly benefits in cash as of June 2012. For evaluation 3, we considered disbursing the pension through a debit card linked to a bank account. In order to test this method, we enrolled 179 older adults in a pilot program so that we could test the administration of benefits through the debit card and examine how older adults used and perceived the debit card. As discussed in Chapter Two, debit-card disbursal can offer advantages for both administrative agencies and beneficiaries. We were unsure, however, whether these benefits would be realized among an older population in Yucatan.

In this report, we analyze the experience of adults enrolled in the pilot program of debitcard disbursement, using data collected through a baseline survey, a debit-card survey, and four follow-up surveys. We found that, over time, many beneficiaries in the pilot test were comfortable using the debit cards, leading us to expand the debit-card mechanism to the next group of beneficiaries. We incorporated a new group of 1,015 adults in the Reconocer Urbano program in the third evaluation, and they began receiving their pensions in December 2010 through the debit-card mechanism.

In the next chapter, we review the literature and prior research in this area. In Chapter Three, we describe the methodology used in the sample selection, the delivery mechanism for the pension program, and follow-up surveys for the pilot tests. In Chapter Four, we present descriptive statistics of the pilot-test participants and explore results from the surveys. In Chapter Five, we summarize our findings from the pilot test of the debit card–transfer mechanism. At the end of the report, we provide a list of English and Spanish appendixes that are available online. A large body of research examines the efficacy of social-welfare programs in alleviating poverty, as well as the costs and benefits for the agencies that implement these programs. Administering agencies use many types of structured payment methods to disburse pensions. These include direct cash payments and electronic payments to beneficiaries' bank accounts. Under electronic transfer, the government transfers funds directly to a financial institution, where the money is deposited into an individual bank account. The beneficiary can then use a debit card to withdraw funds at the bank or an automated teller machine (ATM) or to make purchases directly in stores. Governments are increasingly switching from direct cash-transfer programs to electronic disbursement of payments because of the potential advantages to both public agencies and recipients.

Among the administrative advantages of electronic payment methods are their lower transaction and delivery costs. Agencies do not have to have staff distribute the cash in person, and recipients may have shorter wait times and less distance to travel to receive their money. For example, since 2007, in Andhra Pradesh, India, the government has delivered payments using smart cards for two programs. With the use of the electronic payment method, the distance was reduced from a three-hour walk to a bank branch to a five-minute walk to the local village office, where payments were distributed after scanning the smart cards (Johnson, 2008). Overall, traditional payment methods can require up to a day in travel and waiting time for both staff and beneficiaries, with beneficiaries having to spend as much as 20 percent of their grant amount on transportation costs to collect the payment (Arora and Cummings, 2010; Johnson, 2008).

A debit-card mechanism can allow agencies to reach the same number of beneficiaries with fewer staff members. A common criticism of antipoverty programs is that a large proportion of their budgets never reaches the intended beneficiaries but is instead absorbed by administrative costs (Grosh, 1994). The UK Department for International Development (DFID) and the Consultative Group to Assist the Poor (CGAP) reportedly reduced administrative costs substantially by switching to electronic payments (Pickens, Porteous, and Rotman, 2009).

The Bolsa Família program (BFP) in Brazil offers some specific evidence of how much electronic payment can reduce administrative costs. BFP, which originated in October 2003 with the merger of four existing cash-transfer programs, was created as an effort to improve the efficiency and coverage of the social safety net (Lindert et al., 2007).<sup>1</sup> BFP is a conditional cash transfer (CCT) program that seeks to help reduce poverty and inequality and break the

<sup>&</sup>lt;sup>1</sup> The merged programs were the federal Bolsa Escola program, Bolsa Alimentação, Auxílio Gás, and Programa Cartão Alimentação.

intergenerational transmission of poverty by conditioning these transfers on beneficiary compliance with education and health requirements (e.g., school attendance, vaccines, and prenatal visits). BFP provides payments through electronic benefit cards (EBCs) to poor families. Disbursing the payment through EBCs issued by a state-owned financial institution helped cut BFP administrative costs from 14.7 percent to 2.6 percent of grant value disbursed (Lindert et al., 2007). Using EBCs can also improve targeting and avoid program overlap. If the same bank is used for various cash-transfer programs, then the bank can ensure that families do not incorrectly receive payments from multiple programs (Seira, 2010).

Brazil also has a noncontributory pension program for the elderly, the Social Assistance Pension (Benefício de Prestação Continuada, or BPC). This program was formally introduced in December 1993 and is independent of previous contributions to the social security system. The BPC consists of a minimum grant transferred directly from the federal government to persons at least 65 years of age who have family income less than a specified threshold, and to disabled persons who are not able to work (Kassouf and Oliveira, 2011). The government makes monthly BPC cash transfers through the regular banking system. Each beneficiary has a debit card to withdraw money from bank branches, which operate in post offices, lottery agencies, and commercial establishments, substantially increasing the number of access points for benefit receipt. The debit card provided by the program is frequently used as a proof of creditworthiness because beneficiaries receive a fixed income (Schwarzer and Querino, 2002).

South Africa has also used electronic payments to reduce its costs for providing pensions. In 2003, the government-owned Development Bank of Southern Africa established a publicprivate partnership with the private Absa Bank (formerly known as Amalgamated Banks of South Africa) to create low-cost bank accounts for beneficiaries to access their noncontributory pensions through use of debit cards (Bankable Frontier Associates, 2006). This allowed the South African Social Security Agency to reduce the costs of providing social transfers by about 60 percent (Pickens, Porteous, and Rotman, 2009).

The U.S. federal government has used an electronic benefit transfer (EBT) program to replace paper coupons for food (food stamps) with debit cards and personal identification numbers (PINs). Pilot programs began in 1984, and the program expanded to all states in 2004. Recipients, retailers, and banks that participated in the pilot programs preferred EBT to coupons (Humphrey, 1996). One survey found that 95 percent of all participants were very or somewhat satisfied with EBT. Seniors preferred EBT despite their unfamiliarity with banking cards and problems recalling PINs (Kirlin and Logan, 2002). U.S. Department of Agriculture estimates show that the use of EBT has reduced the rate of food-stamp trafficking from \$0.038 per dollar in 1993 to \$0.01 per dollar in 2002–2005 (Nilsen, 2007).

The federal government in Mexico has also used electronic payment for social-transfer programs and conducted evaluations of recipient satisfaction with it. The Oportunidades CCT program is the principal antipoverty program of the Mexican government, covering more than 5 million households, which represent one-fourth of the Mexican population. The program provides money through cash transfers to the beneficiary's bank account. No Oportunidades employee handles cash, which diminishes the opportunity for corruption and allows 97 percent of the program budget to be delivered to beneficiaries (Fletcher School and Bankable Frontier Associates, 2011).

A pilot program in which Oportunidades payments were issued transfers through pointof-sale terminals in 230 Diconsa stores demonstrated how electronic transfer can reduce both administrative and beneficiary costs.<sup>2</sup> Electronic transfer helped the government reduce transaction costs from MXN \$30.1 to MXN \$0.49 for beneficiaries who received their payments in National Savings and Financial Services Bank (Banco del Ahorro Nacional y Servicios Financieros, or Bansefi) accounts (Castellanos and Torán, 2011). Cash payments through Diconsa stores also reduced opportunity costs (such as that represented by time spent waiting in line for benefits) for those receiving their pension this way from MXN \$16.9 to MXN \$2.2. Furthermore, pilot-program participants expressed strong preference for electronic payment. A poll of 260 pilot-program beneficiaries found that 99 percent preferred the electronic payment method to the direct cash payment method (Castellanos and Torán, 2011).

Debit card-transfer programs can also help reduce fraud and corruption (as mentioned above for Oportunidades), such as may occur in direct cash-transfer programs when corrupt officials enter large numbers of "ghost beneficiaries" on beneficiary lists and pocket the transfers themselves. The ghost-beneficiary practice precipitated the collapse of the GAPVU (Gabinete de Apoio à População Vulnerável, or Office for Assistance to the Vulnerable Population) cash-transfer program in Mozambique in the 1990s and had been detected in South Africa's noncontributory pension scheme. PINs or fingerprints can reduce some fraud, particularly that resulting from payment to the wrong individual or multiple payments to the same individual (Pickens, Porteous, and Rotman, 2009; Devereux and Vincent, 2010).

Within Latin America, Jefes y Jefas de Hogar (Heads of Household), an Argentine socialsecurity program implemented in 2002, has used EBCs with some success to reduce corruption and increase participant satisfaction.<sup>3</sup> Before EBC implementation, 3.6 percent of participants reported bribing local officials to access their payments; after implementation, only 0.3 percent did so. Furthermore, one year after implementation, 87 percent of participants "judged the new system to be an improvement on the old method of dispensing cash via local officials" (Pickens, Porteous, and Rotman, 2009, p. 9; Duryea and Schargrodsky, 2007).

Debit card-transfer programs can also reduce economic inequality and promote personal savings by enhancing access to financial institutions (Beck, Demirgüç-Kunt, and Levine, 2004). In a small randomized study in Kenya, an average increase of about 40 percent in investment in small business and more than a 15-percent increase in food spending were identified in beneficiaries six months after they opened savings accounts (Dupas and Robinson, 2009; Pickens, Porteous, and Rotman, 2009). This suggests that the ability to make electronic transactions deepens monetary connections to the wider economy, which carries with it the possibility of more fully participating in the benefits of economic growth (Dupas and Robinson, 2009; World Bank, 2008).

There have been some noted shortcomings of electronic transfer payment methods, primarily for the beneficiaries. The most common is limited access to formal financial institutions. Many people living in rural areas do not have access to bank branches. For example, there are almost no bank branches in rural localities of Mexico where many Oportunidades beneficiaries live (Fletcher School and Bankable Frontier Associates, 2011). Furthermore, a World Bank study found that only 27 percent of adults in Mexico, and 12 percent of those in

<sup>&</sup>lt;sup>2</sup> Diconsa is a governmental enterprise that administers rural stores that provide staple goods in marginalized localities.

<sup>&</sup>lt;sup>3</sup> Jefes y Jefas de Hogar is a cash-transfer program to unemployed heads of households with dependents under the age of 18 or with disabled dependents of any age. The transfer is conditional on labor supply or training and provides a cash transfer (Argentine \$150 or US\$80 at 2010 PPP) in exchange for 20 hours per week of work. Program rules limit enrollment to one individual per household. For PPP data, please see United Nations, undated.

the poorest income quintile, have an account at a formal financial institution (Demirgüç-Kunt and Klapper, 2012). Ensuring that beneficiaries have access to financial institutions and services is crucial to the success of a debit card–transfer system. Lack of financial literacy among beneficiaries may also cause problems, particularly if recipients do not know how to use debit cards (Pickens, Porteous, and Rotman, 2009).

The above cases demonstrate the attractiveness and the challenges that debit card-transfer programs can have for both administrators and beneficiaries. Yet, at the time of our pilot study in 2010, no other programs in Yucatan had used a debit card-transfer mechanism. Accordingly, we wished to explore the potential benefits and problems of such a disbursal mechanism before wider implementation of debit-card transfers for the noncontributory pension program. In the next chapter, we discuss the pilot test we undertook to explore a debit card-transfer system for pension recipients in Yucatan.

As noted earlier, an initial group of Merida participants began receiving a cash pension in 2009. The cash pensions are distributed monthly at the town hall. Cash is delivered at home to beneficiaries who cannot travel because of illness or physical difficulties. For expansion of the program in 2010, after ensuring the viability of a debit-card system, we sought to disburse the pension through that mechanism.

Nearly all our debit-card pilot-test activities occurred in 2010. We began with listing participants in March, enrolled participants and conducted initial surveys of them in June and July, then conducted our first three follow-up surveys between September and November 2010. There were no activities related to the debit-card pilot test in 2011 (other than recipients continuing to receive the pensions). Our fourth follow-up survey was in early 2012. We analyzed the data from the surveys using both descriptive statistics and regression models. Table 3.1 shows a calendar of activities for the pilot program. This chapter describes our pilot-test processes.

### **Sample Selection**

The first locality with more than 20,000 inhabitants to receive pensions through Reconocer Urbano was Valladolid in 2008. The small number of eligible older adults (age 70 and older) in that city permitted the government to disburse the pensions in cash to all eligible while staying within budget. When the noncontributory pension program was expanded to Merida in 2009, the high number of older adults in the capital city (close to 40,000, according to the 2010 National Population Census [INEGI, undated]) meant that, given the program budget, only a subset of eligible adults would be able to receive the pension. We therefore devised a system to randomly select older adults for treatment (immediately eligible for the pension) and control (not immediately eligible for the pension) groups. To develop a random statistical design to select city blocks for the sample, we used information provided by the state offices of the National Population Council (Consejo Nacional de Población, or CONAPO) and Instituto Nacional de Estadística y Geografía, or National Institute for Statistics and Geography (INEGI) on the age distribution of the population by basic geostatistical area (área geoestadística básica, or AGEB).<sup>1</sup> Project staff then visited homes within these selected blocks to locate and

<sup>&</sup>lt;sup>1</sup> CONAPO is the Mexican government agency that researches population growth and movement. INEGI is an autonomous agency of the Mexican government that coordinates the national system of statistical information and conducts the decennial census, as well as various other population and economic surveys.

#### Table 3.1 Calendar of Activities for the Debit-Card Pilot

	Task Description		Jar	۱.		Fe	eb.		I	Иa	r.		Ap	or.		Ma	ay		J	un	e		Jul	у		Au	g.		S	ep			00	t.		N	ov.		D	)ec	
		1	2	3 4	1	2	3	4	1	2 3	3 4	1	2	3 4	1 1	2	3	4 1	1	2 3	4	1	2	3 4	1	2	3 4	4 ·	1 2	3	4	1	2	3 4	l 1	2	3	4	1 2	2 3	4
	Listing for pilot debit- card participants (March 8–11, 2010)																																								
	Enrollment, baseline and debit-card survey of pilot- program participants (June 1-July 15, 2010)																																								
2010	First follow-up survey application (September 1–15, 2010)																																								
	Second follow-up survey application (October 1–15, 2010)																																								
	Third follow-up survey application (November 22–26, 2010)																																								
2012	Fourth follow-up survey application (February 2–10, 2012)					·																																			

NOTE: There were no activities related to the debit-card pilot in 2011.

survey older adults. We then randomly selected age-eligible persons within each block to form the treatment and control groups.

To conduct the pilot test of debit-card disbursal, following the 2009 launch of the pension program in Merida, we randomly selected 62 blocks containing 200 older adults in March 2010 from the original statistical sample of the city. Project staff (a team of program field staff and a coordinator) visited the homes of these new beneficiaries in June 2010 to inform them that they had been randomly selected for the debit-card pilot program, explaining the program and enrolling those who agreed to participate. These selected older adults had not previously received a noncontributory pension in any form. From the initial list of 200 registered adults, 179 initially participated in the program, with 21 dropping for various reasons after initial registration but before final determination of eligibility to participate (see Table 3.2).

In addition to designing the statistical sample, we designed a registration and enrollment strategy and established the general rules of operation for the pilot test. Earlier, we had designed an electronic system of enrollment and administration of information for the first group of beneficiaries receiving cash pensions; we expanded and used this same system for debit-card recipients as well. We designed the electronic enrollment system to capture general information about beneficiaries, scan the documents required for enrollment (including birth certificate and proof of residence), store photographs taken during the enrollment to produce beneficiaries' identification cards, and produce an individualized bar code for each beneficiary (printed on each identification card). The system relies on its own software, designed to optimize the management of all information generated during the program, including enrollment and pension disbursement. Each member of the field team and his or her coordinator used a laptop computer to store information, later uploading data (through the Internet) to a

Category	Number of Persons
Initial registrants	200
Not age-eligible	3
Died before first pension disbursal	2
Refused to participate	2
Moved from area	1
Unable to contact further	13
Initial participants	179
Insufficient documentation to receive pension	20
Died after initial contact and before first disbursal	1
Initial debit-card pension recipients (and target population for first three follow-up surveys)	158
Died before fourth follow-up survey	19
Pilot-program participants at time of fourth follow-up survey	139

# Table 3.2 Initial Registrants, Participants, and Recipients in the Debit-Card Pilot Test

restricted-access server available only to project staff. Given the new method of disbursement, we created a separate operation manual for the pilot test to guide staff on the new procedures for enrolling beneficiaries into the pension program and training them on the use of the debit cards (see Appendixes A and B, published separately online).

### **Debit-Card Survey**

Once enrollment for the debit-card pilot test was complete, pension-program field staff visited the home of each beneficiary in July 2010 to administer both the baseline survey that had been given to all program recipients and a short, 11-question survey for debit-card recipients. The debit-card survey asked whether respondents had previous experience with any type of banking service, what doubts or concerns they had about using the debit cards, and what physical limitations they had in using a debit card or accessing an ATM. During this visit, field staff also trained the beneficiary in using the debit card through the manual on ATM use, an instructional handout that included step-by-step illustrations.

### **Delivery Mechanism**

To disburse the pension through a debit-card mechanism, we had to choose a banking institution partner. We ultimately chose Banco Mercantil del Norte (Mercantile Bank of the North) because it had a high number of ATMs, had the simplest administrative process, and did not require a separate contract for each beneficiary. This bank had at least 49 ATMs throughout the city of Merida. A single contract between the bank and the state government established the pension disbursal. This approach allowed the government to make monthly bank deposits into beneficiaries' accounts, from which recipients could draw funds using their debit cards at ATMs. The government updated the list of beneficiaries monthly, dropping those who had died or moved away because they were no longer eligible for the program. In this program, it is mandatory for beneficiaries to sign (on a monthly basis) a government list of beneficiaries in order to demonstrate proof of survival and of having received the cash transfer in their debitcard accounts. This takes place in government offices on specific dates and times of which beneficiaries have been previously informed. For beneficiaries with disabilities making them unable to go to the government offices, government officials would visit their households. These monthly checks found that, of the 179 older adults enrolled in the pilot test, 21 were ineligible to receive the initial debit-card pension disbursal. This left 158 beneficiaries for the pilot test, as Table 3.2 shows. We delivered debit cards to pilot-test beneficiaries at their homes and disbursed the first pensions to them in July 2010.

#### **Debit Follow-Up Surveys in 2010**

We conducted our first follow-up survey among the 158 debit-card beneficiaries in person at their homes in September 2010. The survey (available as part of the appendixes) had 15 questions and asked respondents for information on who used the debit cards, any difficulties with use, and overall satisfaction with the program. Open-ended questions provided a list of likely options, along with an option to record an "other" response. We trained the home visitors who conducted these surveys to categorize responses according to these options. Of the 158 beneficiaries contacted for the first follow-up survey, 152 responded and six refused to answer the survey, yielding a response rate of 96.2 percent.

We conducted a second follow-up survey in October 2010 and a third in November 2010 in order to track and record any difficulties beneficiaries experienced with the debit cards. The telephone coverage in the study is high, but, for beneficiaries who did not have phone lines, we conducted the surveys at their homes. For the October 2010 survey, 154 beneficiaries responded and four refused to do so (a response rate of 97.5 percent). The second follow-up survey was conducted by phone for 82.5 percent of the sample and at their homes for 17.5 percent. For the third follow-up survey in November 2010, 144 responded and 14 refused to do so (a response rate of 91.1 percent). In the third follow-up survey, 85.4 percent of the surveys were done by phone and 14.6 percent at their homes.

#### **Debit-Card Disbursal Expansion**

Our initial results, which we discuss in detail in the next chapter, indicated that most debitcard beneficiaries were reasonably satisfied with this mode of disbursal. In addition, program staff preferred debit-card disbursal because of the reduced opportunity for graft, its elimination of the need to handle large sums of cash (a security risk), and the significant decrease in administrative costs (for field staff to disburse cash pensions) it afforded. As a result, we decided to extend the use of the debit-card mechanism to include another 1,015 adults, randomly selected as earlier recipients were, who began to receive debit-card pension payments in December 2010. These 1,015 older adults had not previously received the noncontributory pension. For comparison purposes, we also selected a control group of people who did not receive the pension benefit in any form.

#### Fourth Follow-Up Survey

In February 2012, we conducted the fourth follow-up survey by phone to the pilot-program participants. Of the original 158 participants, 19 (12.0 percent) had died by the time of this survey, leaving only 139 (88.0 percent) eligible for this survey (Table 3.2). Of these 139, all participated in the fourth follow-up survey (a response rate of 100 percent). The fourth follow-up survey had questions that were similar to those on the first three follow-up surveys on difficulties with debit-card use and who used the card but added questions regarding savings, use of funds, and whether beneficiaries had to pay someone to help them withdraw funds.

We also applied this survey to the expansion group of debit-card beneficiaries and asked parallel questions, where applicable, to the first group of beneficiaries who, since 2009, had received their pension benefits in cash. In all, there were three groups of recipients surveyed in February 2012: (1) pilot-test debit-card recipients, who were receiving their fourth follow-up surveys, (2) additional debit-card recipients who began receiving their pension in December 2010 and answered a survey similar to the fourth follow-up survey given to pilot-program participants, and (3) recipients who had received cash pensions since 2009 and answered a survey similar to the fourth follow-up survey given to pilot-program participants. In the next chapter, we assess results of this survey and the earlier baseline and follow-up surveys given to pilot-test debit-card recipients (group 1 as noted above); we do not present results here from either the debit-card expansion group (2) or the cash group (3) because these two groups did not form part of the pilot test.

### Results

Altogether, pilot-program participants participated in six surveys: the baseline survey that has been administered to all pension participants, the initial debit-card survey, and four followup surveys. In this chapter, we present descriptive statistics from these surveys of the pilotprogram participants. Something similar to the fourth follow-up survey was administered to the subsequent group added to debit-card recipients, and some applicable questions were also asked of initial cash-pension recipients. However, we do not analyze those results in this report because those additional respondents do not form part of the pilot test. Rather, we focus on using results of surveys among the pilot-program participants to depict their experiences.

### **Descriptive Statistics**

Our baseline survey contained extensive questions on respondents' cognitive abilities, household situations, and health status, among other topics. We conducted this survey in Spanish between June 1, 2010, and July 15, 2010; all of the selected recipients spoke Spanish, so there was no need to conduct interviews in Maya for this pilot group. The baseline survey of the 179 initial participants was for a predominantly female group; we present descriptive statistics for men, women, and for all respondents (see Table 4.1). About half of all respondents (49.2 percent) reported being in consensual unions or married at the time of the survey, with more men (71.0 percent) reporting this than women (35.5 percent). Six in seven (86.6 percent) reported ever having children. About one in seven (12.3 percent) lived alone. Three in four (76.0 percent) reported being in poor or fair health. Respondent age varied from 70 to 103 and averaged about 79 years; women had a slightly higher average age (79.4) than men (77.9). Most were able to read and write in Spanish (77.7 percent), but fewer than one in six (14.5 percent) had education beyond primary school. More men than women had continued their education after primary school; women tend to have lower levels of education among older Mexicans. Proxies completed the survey for three respondents (1.7 percent).

### **Debit-Card Survey Results**

In addition to the baseline survey, after enrolling the 179 adults in the debit-card pilot of the pension program and training them in how to use the debit card, program staff conducted a short survey on debit cards and related topics (see Table 4.2). About one in eight (14.0 percent) had some type of bank account at the time, and a slightly smaller proportion (11.7 percent)

	-		
Variable	Male	Female	All
Male (%)			38.6
Married or consensual union (%)	71.0	35.5	49.2
Has children (%)	94.2	81.8	86.6
Lives alone (%)	11.6	12.7	12.3
Fair or poor health status (%)	78.3	74.6	76.0
Age (%)			
Missing	0.0	0.9	0.6
70–74 years	33.3	30.0	31.3
75–79 years	31.9	24.6	27.4
80-84 years	21.7	21.8	21.8
85–89 years	10.1	14.6	12.9
90+ years	2.9	8.2	6.2
Mean age (years)	77.9	79.4	78.8
Standard deviation	(5.5)	(6.9)	(6.4)
Read and write message in Spanish (%)	82.6	74.6	77.7
Education level (%)			
Missing	1.5	4.6	3.4
None	11.6	15.5	14.0
Primary	65.2	70.0	68.2
Middle or technical school	11.6	5.5	7.8
High school or above	10.2	4.6	6.7
Number of observations	69	110	179

Table 4.1 Descriptive Statistics of Debit-Card Pilot-Test Participants

NOTE: *Has children* refers to ever having children. There was one missing observation for age and six for education level. *Primary* education level refers to grades 1–6; *middle* refers to grades 7–9; and technical school is analogous to a trade school that is attended after primary school. *High school or above* includes grades 10–12, teacher school, professional education, and college and postgraduate education.

had credit or debit cards. About one in three (31.8 percent) reported using credit or debit cards at some point in the past. Nearly one in four (22.9 percent) reported having physical impairments, typically trouble walking or seeing, that would adversely affect their ability to use an ATM. Nearly half (48.0 percent) doubted that they knew how to use the card, and nearly one in three (31.3 percent) feared losing the cards (respondents could report more than one doubt).

Table 4.2
<b>Results of Debit-Card Survey Given After Program</b>
Enrollment (179 observations)

Variable	Respondents (%)
Have bank service	14.0
Have credit or debit card	11.7
Have used a credit or debit card	31.8
Physical impairment to using ATM	22.9
Doubts about using debit card	
Losing card	31.3
Someone else using it	3.4
Stolen	9.5
Don't know how to use	48.0
Would forget PIN	6.2

NOTE: *Have bank service* refers to having an account at a bank. Respondents could select more than one doubt about using the debit card.

#### **Debit-Card Follow-Up Surveys**

In each of the three follow-up surveys, we asked respondents to tell us who used their debit cards; most reported that another family member did (see Table 4.3). Nevertheless, the proportion of respondents who reported using the cards themselves increased in the second and third follow-up surveys. Less than 4 percent of respondents in each of the first three follow-up surveys reported that another person (not a family member) used the card; examples of such other persons include a godchild or friend.

There were some transitions in card use between surveys (results not shown). Specifically, between the first and second follow-up surveys, 18 persons who reported having family members use the cards in the first survey had used the cards themselves by the second followup. Nine respondents who used the cards themselves in the first survey reported that a family

who used Debit Card for Respondent, First Three Surveys (%)								
Survey	Beneficiary	Family Member	Other Person					
First follow-up (152 observations)	30.3	66.5	3.3					
Second follow-up (154 observations)	36.4	61.0	2.6					
Third follow-up (144 observations)	36.8	61.1	2.1					

Table 4.3 Who Used Debit Card for Respondent, First Three Surveys (%)

NOTE: The question asked was "Who uses the debit card?" The response options were "beneficiary," "family member," and "other person." We used a z-test to examine statistical significance between the three surveys and found that none of the differences was statistically significant.

member had used it on the second follow-up. In all, 11 beneficiaries who were not using the cards themselves in the first follow-up survey were doing so by the time of the third survey.

For the fourth follow-up survey in 2012, we again asked who used the card but had the respondent clarify whether the other person helped the older adult to use the card or whether the family member or other person had used the card on behalf of the older adult. Of the 139 respondents to this survey, 16.6 percent reported using the cards themselves alone, 15.8 percent reported that family members had helped them use the cards, 1.4 percent reported that other people (not family members) helped them use the cards, and 66.2 percent reported that family members had used the cards on their behalf. These numbers track roughly with the first three follow-up surveys: About one-third used the card themselves or with the help of another, and about two-thirds reported that a family member used the cards on their behalf.

Controlling for other characteristics (sex, marital status, children, health status, ability to read and write a message in Spanish, and having used a debit or credit card) in a logistic regression model, we find that older respondents were less likely to use the cards themselves in any of the first three follow-up surveys (statistically significant at the 1-percent level; see Table 4.4). Respondents in fair or poor health were less likely to use the cards themselves (statistically significant at the 10-percent level and controlling for other characteristics). Those who reported

Variables	First, Second, and Third Follow-Up Surveys (155 observations)	Fourth Follow- Up Survey (138 observations)
Male	0.940	2.998*
	(0.352)	(1.699)
Married	1.454	1.152
	(0.575)	(0.706)
Ever had children	1.080	0.356
	(0.667)	(0.304)
Fair or poor health	0.427*	0.341*
	(0.196)	(0.212)
Age	0.913***	0.843***
	(0.0289)	(0.0523)
Ability to read and write a	2.061	4.006
message in Spanish	(0.964)	(3.670)
Have used credit or debit card	2.608**	1.821
	(0.990)	(0.965)
Constant	673.3***	65,155**
	(1,677)	(294,859)

Table 4.4
Likelihood of Using Debit Cards Themselves, Odds Ratios

NOTE: Standard errors are in parentheses. The baseline category for fair or poor health is excellent, very good, or good health. Age is in years. \*\*\* = p < 0.01. \*\* = p < 0.05. \* = p < 0.10.

having used debit or credit cards in the past were more likely to use the cards themselves (statistically significant at the 5-percent level), again controlling for other characteristics. Other variables we analyzed (sex, marital status, health status, ability to read and write a message in Spanish, and ever having children) did not have a statistically significant effect on whether respondents personally used the debit cards at the time of the first three follow-up surveys. For the fourth follow-up survey, we examined the same variables also using a logistic regression model and found that men were more likely to report using the cards themselves (statistically significant at the 10-percent level) and that those in fair or poor health and older respondents were less likely to use the cards themselves (statistically significant to the 10- and 1-percent levels, respectively). The regression for follow-up surveys 1 through 3 is presented separately from that for follow-up survey 4 because the question differed.

We asked respondents who reported using the cards themselves whether they had difficulties. In the first follow-up, about one in four answering this question said that they did. In the second follow-up, about one in ten answering this question said that they did; in the third, none using the card themselves reported difficulties. We surmise that, after repeated use of the debit card, beneficiaries learned how to overcome their problems or perhaps sought the help of family members. Examining the data further, we find that only three of the 12 respondents who reported problems using the card themselves in the first survey switched to a family member in the second survey, further suggesting that learning how to use the card may have helped cut the number of reported problems.

Commonly reported problems included not having anyone to take them to the ATM (five of 17, or 29.4 percent), not remembering how to use the card (five of 17, or 29.4 percent), and forgetting the PIN associated with the account (four of 17, or 23.5 percent). One respondent reported visual problems.

Of the 47 older adults who reported using the cards themselves or with the help of family members on the fourth follow-up survey, only four reported having problems withdrawing money. Of these four, three reported that they had forgotten how to use the ATM, and one reported having lost the card.

We asked respondents who reported using the cards themselves on the first three followup surveys whether they felt comfortable using the cards and their reasons for feeling comfortable or uncomfortable. The proportion using the cards themselves who felt comfortable doing so increased from 76.1 percent in the first survey (35 of 46 who used the cards themselves) to more than 96.4 percent in the second and 96.2 percent in the third (54 of 56 and 51 of 53 respondents, respectively), showing a large gain in user comfort. Reasons for feeling comfortable using the card included easy access to money, being able to withdraw money whenever needed, feeling safer keeping money at the bank, and being able to use the card for store purchases.

Reasons given for discomfort with card use in the first follow-up survey included difficulties accessing or using an ATM, including not having anybody to help use it. By the second follow-up, only two respondents of 56 (3.6 percent) reported feeling uncomfortable using the card; both mentioned difficulty in access and use of the ATM and having no one to help with these issues. For the third follow-up, again only two of 53 respondents (3.8 percent) who used the card themselves reporting difficulties doing so, both of whom mentioned difficulty using the ATM. It seems that respondents became more comfortable using the cards over time, but a few who had serious problems with the card might have benefited from a review of how to use the ATM and debit card or assistance in accessing the ATM.

On the fourth follow-up, we asked respondents a slightly different question: How easy had it been over the past year to use the debit card? Of the 47 who reported using the cards themselves, 34.0 percent (16 respondents) said that the cards had been very easy to use, 25.5 percent (12 respondents) reported fairly easy use, and 14.9 percent (seven respondents) reported that the cards were more or less easy to use. Seventeen percent (eight respondents) reported that the cards were not particularly easy to use, and 8.5 percent (four respondents) said that using the cards was not at all easy.

We asked the respondents who answered "more or less easy," "not particularly easy," or "not at all easy" to give their reasons for their answers. Of these 19 respondents, 89.5 percent (17 respondents) reported difficulties using ATMs, 42.1 percent (eight respondents) had difficulties accessing ATMs, 15.8 percent (three respondents) did not like the cards, and 5.2 percent (one respondent) said that they needed but could not find someone to help them use ATMs.

Of those who, in the first three surveys, reported having family members use the cards for them, we asked why they did so. Commonly cited reasons included difficulty in using or accessing the ATMs and trusting another family member to do so for them. Less frequently cited reasons were disability, medical issues, or safety. No respondent reported a family member taking the card.

On the fourth follow-up, we again asked those who had family members use the cards on their behalf why they did so (respondents could give multiple responses to this question). Of the 92 respondents who had family members use the cards for them, 75 percent (69 respondents) said that it was because they did not know how to use an ATM or had difficulties doing so, 45.7 percent (42 respondents) said that it was because they had confidence in the family members, and 20.7 percent (19 respondents) had difficulties accessing ATMs. Twelve percent (11 respondents) reported that other family members manage their finances, 12.0 percent (11 respondents) said that they had become disabled since receiving the cards, and 2.2 percent (two respondents) feared for their safety in using the cards.

In most cases, the family member who assists or withdraws money for the beneficiary lives with the pension recipient. Some respondents may have many family members helping with their ATM use, with only some of these living in their households. In the fourth follow-up survey, for example, 70 percent of those who reported having family members use the cards for them (64 of 92 respondents) reported that the family members lived with them.

No more than five respondents in any of the first three follow-up surveys reported that someone other than a family member used their cards. Those who did allow other persons to use the card did so because they trusted those people, were disabled, had difficulty accessing ATMs, or did not know how or found it difficult to use ATMs.

Other persons helping respondents typically did not live with them, but a few did. Other persons helping respondents changed from survey to survey, which may indicate that this is used as a temporary solution if a family member is unable to help.

Most respondents on all four follow-up surveys reported that they kept the cards themselves (see Table 4.5), with other family members being the second most likely to hold the card. This may be a concern if family members are using the cards to withdraw funds without the beneficiaries' knowledge.

Survey	Beneficiary	Family Member	Other Person
First follow-up (152 observations)	61.2	38.2	0.7
Second follow-up (154 observations)	64.3	35.7	0.0
Third follow-up (144 observations)	71.5	27.1	1.4
Fourth follow-up (138 observations)	64.5	35.5	0.0

#### Table 4.5 Who Kept the Debit Card for Respondent, All Surveys (%)

NOTE: The question asked on the first three follow-up surveys was "Who keeps your debit card most of the time?" The question asked on the fourth follow-up was "Who keeps your debit card from the Reconocer program most of the time?" We examined the statistical significance over time between the first three surveys (we did not include the fourth survey because the question changed). None of the differences between surveys 1 and 2 and between 2 and 3 is statistically significant using a z-test. For surveys 1 and 3, the proportion of beneficiaries who kept the cards is statistically significant at the 10-percent level, and the proportion of family members keeping the cards is different at the 5-percent level. The difference for other people keeping the cards is not statistically significant.

We asked those who did not keep their own cards why they did not do so. Most said that it was safer for someone else to keep it; one in three said that the person who keeps it helps them access an ATM. Others cited problems with their memories or managing their money. No one claimed that the card was taken against his or her will; overall, there did not appear to be problems with family members taking money from the beneficiaries.

We asked all respondents on all follow-up surveys whether they preferred to continue receiving the pension through the debit cards. More than three in four respondents on the first follow-up survey reported preferring the debit card, as did more than nine in ten on the second and third follow-up surveys (see Table 4.6). We changed the wording of the question on the fourth follow-up survey because we were concerned that respondents may have interpreted the question to mean whether they wished to continue receiving the pension. When we asked respondents whether they would prefer to receive the pension in cash or through the debit card, we found that just over half preferred the debit card. Overall, after more than a year of use, it appears that many prefer the debit card, but some would like cash payment.

We examined the likelihood of preferring the debit card on the fourth follow-up survey using a logistic regression model and controlling for other characteristics (sex, marital status, children, health status, age, and previous use of a credit or debit card). Those able to read and write a message in Spanish were more likely to prefer the debit card (statistically significant at the 5-percent level). Those who reported at enrollment that they had used debit or credit cards in the past were more likely to prefer the debit-card disbursal mechanism (statistically significant at the 10-percent level). Other variables we analyzed (sex, marital status, ever having children, health status, and age) did not have a statistically significant effect on debit-card preference. We did not examine the likelihood of preferring the debit card on the first, second, and third follow-up surveys using a logistic regression model because few respondents reported not preferring this option; all respondents reported preferring debit card on at least one of the first three follow-up surveys.

We asked those preferring the debit card in the first three follow-up surveys (398 respondents) why they preferred it. Among cited reasons were ease of access (272 respondents, or 68.3 percent), ease of keeping money (88 respondents, or 22.1 percent), ease of use (56 respon-

Survey	Prefer Debit (%)	Number of Observations
First follow-up	77.0	152
Second follow-up	91.6	154
Third follow-up	97.9	144
Fourth follow-up	56.5	138

Table 4.6 Respondents Who Preferred to Receive Their Pensions Through Debit Cards

NOTE: The question on the first three follow-up surveys was "Would you prefer to continue receiving the pension through the debit card?" The question asked on the fourth follow-up was "Would you prefer to continue receiving the Reconocer pension through the Reconocer debit card or in cash?" We modified the question for the fourth follow-up because we thought that some respondents might have interpreted the earlier question as asking whether they would like to continue receiving any pension payment. We conducted statisticalsignificance tests (t-tests) to examine whether the changes in preferring debit were significant over time; we found that the differences between the first and second and between the first and third are statistically significant to the 1-percent level. The difference between the second and third follow-up surveys is statistically significant to the 5-percent level.

dents, or 14.1 percent), allowing saving (31 respondents, or 7.8 percent), or allowing family member to help withdraw money (25 respondents, or 6.9 percent).

We also asked those who did not prefer the debit-card method their reasons (50 respondents). These included that the respondent prefers to receive cash (29 respondents, or 58.0 percent), difficulty accessing the ATM (19 respondents, or 38.0 percent), or difficulty using the ATM (17 respondents, or 34.0 percent).

We asked respondents to the fourth follow-up survey their reasons for preferring the debit card in a slightly different question, as noted. Those preferring the debit card were most likely to cite ease of access to the money (69.3 percent); many also mentioned the ease in managing money (33.3 percent) and saving money (25.6 percent) (see Table 4.8). Those preferring cash were most likely to cite a general preference to deal in cash, difficulty in using an ATM, or difficulty in accessing an ATM (see Table 4.9).

Table 4.7
Likelihood of Preferring Debit Card,
Odds Ratios, Fourth Follow-Up Survey
(137 observations)

Variable	Fourth Follow-Up Survey
Male	1.360
	(0.529)
Married	1.239
	(0.496)
Ever had children	0.910
	(0.558)
Fair or poor health	0.499
	(0.237)
Age	1.005
	(0.0326)
Ability to read and write a	2.836**
message in Spanish	(1.346)
Have used credit or debit card	1.943*
	(0.775)
Constant	0.454
	(1.160)

NOTE: Standard errors are in parentheses. The baseline category for fair or poor health is excellent, very good, or good health. Age is in years. \*\*\* = p < 0.01. \*\* = p < 0.05. \* = p < 0.10.

#### Table 4.8 Why Respondents Prefer to Receive Pensions Through Debit Cards, Fourth Follow-Up Survey (78 observations)

Response	Number	Percentage
It is easier to save money	20	25.6
It is easier to manage money	26	33.3
I can pay with it directly at stores	2	2.6
It is easier to access the money	54	69.3
l can save	5	6.4
Other reason	9	11.5

NOTE: Respondents could give multiple responses; percentages do not add to 100.

Response	Number	Percentage	
Access to ATM is difficult	23	38.3	
Use of ATM is difficult	28	46.7	
I am afraid for security	6	10.0	
I feel that the machines are taking money	6	10.0	
l prefer cash	40	66.7	
I have problems with PINs	5	8.3	
Other	13	21.7	

Table 4.9 Why Respondents Prefer to Receive Pensions in Cash, Fourth Follow-Up Survey (60 observations)

NOTE: Respondents could give multiple responses; percentage does not add to 100.

This report has described the motivation for conducting a pilot program of debit-card disbursal for a noncontributory pension program in Mexico; how we collected information; and the results of a baseline survey, a debit-card survey, and four follow-up surveys completed by beneficiaries who took part in the pilot program. We found that many pilot-group participants had initial doubts about the debit card, but, over time, many became more comfortable with it. Most pilot-group participants relied on family members to help them use the cards (or to use the cards on their behalf). Reasons for doing so included problems in using ATMs, such as access to and forgetting how to use the machines. These persisted through all our surveys, indicating that beneficiaries may occasionally need refresher training on how to use ATMs and that program staff should periodically check to ensure that beneficiaries know how to use the machines. Some of these issues may be unique to the older population with whom we worked but could occur in other populations as well.

Older residents of Merida, Yucatan, have low levels of education but levels of education and literacy that are likely higher than those of other populations in rural Mexico or other less developed countries. This is noteworthy given that we found that those who are literate in Spanish (able to read and write a message) were more likely to use the cards themselves and more likely to prefer using the debit cards over receiving cash. Our results also indicate that those who were illiterate or preferred a different language (many in Yucatan are native Maya speakers) may face barriers to using the debit-card disbursal mechanism; a different type of training in ATM use may be needed for this population. The debit-card disbursal method may work for more beneficiaries in an urban area than in a rural area; in addition, urban areas typically have more banks and ATMs than rural areas have, making access to funds easier in urban areas.

Many participants in the pilot program (56.5 percent) reported in February 2012 that they preferred to receive their pensions through the debit-card mechanism. For many, it seems that debit cards were more convenient and provided easier access to their money. Nevertheless, for the large group who continue to prefer cash (even after having received their pensions through the debit-card method for more than a year), ATM use continues to be difficult, and access to ATMs may be a problem.

Overall, debit-card benefit disbursal was simpler to administer than cash disbursal, and the debit-card method was preferred by more than half of the pilot group. Nevertheless, in our older population, who had low levels of education, many preferred to receive the payment in cash because of problems using ATMs, disabilities, a decline in cognitive and motor skills, or lack of literacy. Many older adults rely on family members to help them with the debit cards; for those older adults who do not have a dependable family member, this method of disbursal could create problems.

### **List of Appendixes**

Appendixes for this technical report are available online: http://www.rand.org/labor/centers/ clasp/research/projects/social-security-program.html:

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