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Financial Inclusion Through the Bono de Desarrollo Humano in Ecuador

Exploring options and beneficiary readiness

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Introduction

Conditional Cash Transfer (CCT) programs have become in many countries the largest social program and the framework upon which a social protection network is being built. These programs have more than 24 million beneficiaries in the Latin America and the Caribbean region and have been subject to many types of evaluations showing them to be an effective means of increasing demand for health and education services. In Ecuador, the CCT program is the Bono de Desarrollo Humano. The Bono de Desarrollo Humano (BDH) program was created in 2003 by merging two previously existing programs, the Bono Solidario and the Beca Escolar(Ponce & Bedi, 2008). The creation of the program involved the creation of a targeting system for social programs (the SELBEN), the use of conditionalities and an impact evaluation of the program. The BDH is one of the largest programs in the region in relative terms; the number of beneficiaries is approximately 1.6 million.[4] Beneficiaries of the program include families in the poorest two quintiles of the population, and the elderly and disabled. At the time of its inception the program provided US$15 monthly to families, and the cash transfer is subject to the following health and education conditionalities: (i) *Health:* Four preventive health controls for children younger than one year, two preventive annual controls for children between one and six years of age; (ii) *Education:* Class attendance (at least 85%) for children between 6 and 16 years of age. There are no conditionalities for the elderly and disabled. [5] In 2009, the cash transfer was increased to US$35 for all beneficiaries.

One of the problems that the BDH had since its creation was the enforcement of conditionalities, however recent efforts are being made in order to improve enforcement. Also; a new census is being implemented in order to update information in SELBEN. [6]

The objectives of the program as stated in the BDH`s webpage are:

- To guarantee households a minimum level of consumption to
- To incorporate specific conditionalities oriented towards the investment in education and health to enable:

[4] Program's website at http://www.pps.gov.ec/PPS/PPS/Inicio.aspx
[5] Source: Presentation "Social Protection Program Ecuador" by David Alomia Viver (January 2008).
[6] Ibidem, slide 14.

    - Contributing towards lowering levels of chronic malnutrition and preventable diseases for children under 5 years of age; and,
    - To promote school reinsertion and ensure attendance for boys and girls between 5 and 18 years of age.
- To protect senior citizens and persons with disabilities[7]

From the moment it was created, the Program started making payments through a network of private Banks (Banred) or through the Banco Nacional de Fomento. The commission paid to Banks for delivering the transfer (delivered as cash inside of the branch) to each beneficiary of the program is of 0.38US$ per transaction.

From their inception, CCT programs have had a natural partnership with the financial sector. This is because CCTs have used bank branches as a delivery mechanism in most countries. In addition, there seems to be an increasing trend in the relationship between CCT programs and the financial sector. Programs such as Peru`s Juntos are piloting incentives to save in a no maintenance fee savings accounts, or in the case of Ecuador, CCT future transfers are allowed to be used as collateral for obtaining microcredit, other countries are using the cards in order to replace what were formerly universal subsidies as in the case of Dominican Republic (in combination with national targeting systems), and others are in the process of providing free savings accounts to all beneficiaries as is the case of Brazil and Colombia. However until recently, this link and its potential for development had not been well explored.

Evidence about the effects of financial inclusion in general for the poor in order to help them improve their welfare through savings (Gomez-Soto 2007); (Townsend, 2002); (Alem and Townsend, 2010), access to credit (Gertler, Levine and Moretti, 2001); (Aroca, 2002); (Dunn and Arbuckle, 2001); (Roodman and Morduch, 2009) and insurance (Skees et al., 2002); (Siegel, Alwang and Canagarajah, 2001) is not new and many different approaches at estimating its impact have been attempted. In the area of microcredit the results from the first randomized impact evaluations in India (Banerjee et. al. 2009) and the Philippines (Karlan and Zinman, 2009) show positive results for some of the groups analyzed but not a rotund positive effect of access to credit on improved wellbeing of beneficiaries. With respect to savings another recent

[7] Author´s translation

randomized evaluation offering free savings accounts to self employed persons in Kenya (Dupas and Robinson, 2010) did find positive effects on income of beneficiaries with larger impacts for women.

Linking social program payments and financial inclusion is, however a relatively new area in which the relevant questions for research are still being defined (Natu Anant, Jayant et al., 2008, Zimmerman and Maury, 2009). One of the first studies in this area is for the case of Argentina, (Duryea and Schargrodsky, 2008) in which a payment scheme for the local CCT was linked to electronic cards that beneficiaries could use to get transfers from the program from ATMs. Results of this study show that there was in general a good perception of the payment system by beneficiaries; they saved time in obtaining the cash and this translated into increased participation in the labor market. However they found no increased use of financial services.

Financial Inclusion in the Bono de Desarrollo Humano

The CCT program in Ecuador started a policy of financial inclusion of its beneficiaries in 2007. The policy consists on providing access to credit to its beneficiaries through public (Banco Nacional de Fomento) and private institutions. The credit was denominated Credito de Desarrollo Humano (CDH) , the rules of the program allow a beneficiary to obtain a credit of up to US$840 at a 5% interest rate to be paid with the transfers from the program (for 24 months) [8]. By the end of 2009, 7.1% of program beneficiaries (118,090 persons or US$43 million) at the national level had obtained a CDH. The cost of the CDH is US$5.48 that the Program pays to the financial institution for each credit approved, the 5% that the beneficiary has to pay on remaining balances and an additional US$1 that the beneficiary pays as a fee for each credit approved.

Also, since 2008, mothers who are beneficiaries of the program in urban areas can make use of an electronic card called the "Tarjeta MIES bono rapido". Beneficiaries can only make use of the card once a month to retire the total amount of the program's monthly transfer. One of the objectives of the card is to decongest the system for obtaining the programs transfers. Accordingly, beneficiaries can use the card on the days that end in the same number as their

[8] From january to november of 2010, the CDH provided credit to 432 thousand beneficiaries for a total of US$337 million. 90% of credits were provided by Banco Nacional de Fomento, a public financial institution.

National identification number. For example if a person's number ends in 2, that person can make use of the ATM on the 2, 12th and 22nd of the month. Card users are not charged a fee for the use of one of the 1600 ATMs in the country's network regardless of which Bank owns the ATM.[9] As Table 1 shows, the province of Pichincha, where Quito is located, despite being the capital of the country, is only the fourth province in terms of beneficiaries of the BDH behind Guayas, Manabí and Los Rios.

Table 1: Distribution of program beneficiaries and financial services availability indicators

Province	Beneficiaries (%)	Beneficiaries per branch	Beneficiaries per ATM	Urban Beneficiaries with card*
Azuay	4,4	1.038	627	12,4
Bolívar	2,4	1.335	8.346	5,5
Cañar	1,8	863	2.275	9,7
Carchi	1,3	748	2.991	2,3
Chimborazo	4,6	1.303	1.564	7,0
Cotopaxi	4,0	1.655	1.883	26,1
El Oro	3,9	1.393	1.431	20,5
Esmeraldas	4,2	2.610	1.595	44,2
Francisco de Orellana	1,0	1.311	874	22,7
Galápagos	0,0	46	39	20,6
Guayas	21,1	3.499	527	48,6
Imbabura	3,1	1.301	925	17,9
Loja	4,3	1.243	1.460	4,0
Los Ríos	8,1	2.688	2.396	17,8
Manabí	15,5	4.500	2.611	12,6
Morona Santiago	0,9	647	5.824	4,0
Napo	0,8	1.596	5.587	0,1
Pastaza	0,4	625	1.876	2,8
Pichincha	6,4	630	127	57,5
Santa Elena	3,0	5.882	2.422	11,7
Santo Domingo de los Tsáchilas	2,8	3.182	1.317	0,0
Sucumbíos	1,4	1.715	1.451	22,6
Tungurahua	3,4	1.145	809	17,5
Zamora Chinchipe	0,8	798	5.586	0,0
Zona no delimitada	0,4	5.149	n.a.	0,0
Total	100,0	1.704	738	28,2

Source: Programa de Protección Social (PPS).

As the table shows, the province of Pichincha has 6.4 percent of the BDHs beneficiaries and is one of the best suited in terms of supply of financial services, 17.3 of the country´s branches and 37 percent for the ATMs are located in Pichincha. This means that the province of

[9] Program`s website at: http://www.pps.gov.ec/PPS/PPS/BDH/INF/Tarjetas.aspx?par=2

Pichincha should be one of the friendliest in terms of the supply of financial services; the number of program beneficiaries per ATM is 127, second only to Galapagos. As of December 2009, the program had ordered 344 thousand cards out of which only 179 thousand (or 22% of beneficiaries) have been picked up by beneficiaries and are being used.

In contrast to the experience of other countries the cards being used by the program have not been provided by a single financial institution. Rather there is a mix of institutions that provide beneficiaries with debit cards, the main institution being SERVIPAGOS/PRODUBANCO (50%) which is essentially a payment service institution that does not provide access to other types of financial services, the rest has been provided by private financial institutions such as Banco de Guayaquil (23.5%) and Banco de Pichincha (10.6%). The fee being charged by banks for each transfer independently of the form of payment (branch, ATM) is US$0.38, the cost of the cards which is paid by the program and is equal to approximately US$0.24.

Using a mix of qualitative and quantitative methods, the study aims at answering the following questions:

- Do the cards lead to use of other financial services?
- Is the availability of the new payment system affecting wellbeing of beneficiaries through:
    - lower costs (time and money),
    - intra household resource management,
    - increased security,
- How well do beneficiaries understand the financial services being offered to them?

Data

In order to analyze the questions listed above, the study combines three instruments with the purpose of having comprehensive view of the process: (i) a small survey in the city of Quito, (ii) 7 focus groups of beneficiaries in the city of Quito, and (iii) a set of semi-structured

interviews with beneficiaries, bankers and BDH Personnel. For the survey a randomly selected sample of 600 beneficiaries in the city of Quito was asked to answer a survey.

The sample was initially selected from administrative data of the program and a questionnaire containing questions on basic socioeconomic data, financial literacy and use of financial services was implemented on this sample. However at the time of the implementation of the survey it was found that the administrative databases of the program had too many errors regarding physical addresses of beneficiaries, which hampered the implementation of the survey. For this reason a change of strategy was adopted and within Quito a random sample of low income neighborhoods was selected in order to scout for beneficiaries of the BDH. In order to ensure that the number of beneficiaries with debit cards was not low, beneficiaries were also contacted at financial institutions and local markets. Table 2 shows a disaggregation of the sample according to the place in which beneficiaries were found.

Table 2: Composition of the sample by place

Place	Share (%)
Low income neighborhoods	50
Financial institutions	17
Street markets	33

As Table 2 shows, 50 percent of the sample was captured in low income neighborhoods, 33 percent in local markets and 17 percent in financial institutions. The resulting sample disaggregated by the type of beneficiary regarding their level of interaction with credit markets can be seen in Table 3.

Table 3: Type of beneficiary by transfer mechanism
(percentage)

Type of payment mechanism and use of CDH	Share
No card or credit (CDH)	75,1
Has card	19,2
Has card and credit (CDH)	1,7
Only credit (CDH)	4,1
Has card (conditional on card being offered)	59.6
How many months have you been receiving payments with the card	
percentile 25	4
Median	8
percentile 75	12

Source: Authors´ calculations based on survey of beneficiaries

Table 3 shows that from the sample, 75% of beneficiaries do not have either an electronic card to receive the BDH or has not obtained the CDH. 19.2 percent of the sample have an electronic card, 1.7 percent have an electronic card and the CDH and 4.1 percent have only CDH. Table 3 also shows that take-up rates for the card (the card was offered as a voluntary option) was around 59%. From those who do not have a card only 17.32% were offered one, so the large majority of the sample who do not have a card don`t have it because they were not offered one (we do not know if they would have accepted had a card been offered). The median number of months, beneficiaries have used the card is 8, and 75% of the sample have had the card for at least 4 months, which allows for the beneficiaries to have had experience with the card on the basis of which they can answer the survey questions. Regarding the socioeconomic characteristics of the sample selected for the study and the differences between those with and without cards Table 4 shows a series of select descriptive statistics and means tests in order to better understand the samples and the data that will be described below.

Table 4: Descriptive statistics by type of access to cards

	No card	With card	
sex	93	95	
Age	38.9	38.5	
Household size	**4.5**	**5.0**	***
can read and write	75.8	86.2	
Years in "Canton"	14.7	16.5	
ID card	100	100	
Married?	60	54	
works?	71	66	
Hours worked (if Works)	36.9	34.6	*
Years of education	**4.8**	**5.8**	**
Total spending	**256.8**	**292.8**	**
housing	31.5	37.4	
Durable goods	**20.4**	**29.3**	**
Food	126.9	128.4	
Services	17.4	19.6	
Transportation	26.7	31.9	
Health	13.3	13.9	
Education	15.1	20.7	*
Alcohol	1.1	2.1	
Others	**4.3**	**9.8**	***
Percapita consumption	63.9	64.1	
Has shower	38	34	
Electricity	98	98	
Telephone	**16**	**28**	***
Internet	7	9	

Source: Authors` calculations based on survey of beneficiaries

Note: * denotes a significant difference at the 10% level, ** denotes a difference at the 5% level , *** denotes a difference at the 1% level.

Both beneficiaries with and without card are mostly female and average age is around 38 and 39 years, and a large majority can read and write (76% and 86%). Samples of beneficiaries with and without cards differ slightly in education household size and total consumption. Beneficiaries who have the card have on average one more year of education, 0.5 more members of the household and consume approximately US$40 more than beneficiaries who don`t have the card measured as total consumption spending, both differences are statistically significant at conventional levels. The difference in terms of consumption seems to come mostly from consumption in durable goods and education, however when household size is factored in the differences disappear, the percapita consumption levels are not different. In terms of other variables, households have similar access to shower; electricity, and internet, households with a card have higher rates of access to telephone lines which is consistent with them having a higher consumption.

Main results

As stated in the introductory section, there are many areas of interest regarding the relationship between social programs and CCTs in particular and the financial sector. Specifically we are interested in measuring if there is a relationship between the method of payment and the use of financial services, if the choice of payment system indeed has a positive effect in the cost incurred by households in order to receive program transfers, the level of financial literacy of beneficiaries, beneficiaries perceptions about the payment system and any operational issues that we can identify in order to help improve the program.

Use of services

In the survey, respondents were first asked to answer questions about the use of financial services by the household. Table 5 shows the percentage of households that make use of credit and savings services. In the case of credit the question referred to credits obtained by the household in the last two years prior to the survey, in the case of savings the question referred to someone in the household having savings in one of the listed institutions.

Table 5: Household has savings or credit
(percentage)

	Credit (past 2 years)		Savings	
	No card	**With Card**	**No card**	**With Card**
Household has credit/savings	10.4	16.9	8.4	6.2
Bank	46	59	57	50
Cooperative	30	29	39	50
Mutual			2	0
Microfinance institution	4	0		
Friends	20	12		
In the household			2	0

Fuente: Authors` calculations based on survey of beneficiaries.

As Table 5 shows, incidence in the use of financial services by households is relatively low. Only 10.4% of households without card had obtained a credit in the last two years compared to 16.9% of households with card. 46 and 59% of credits for beneficiaries without and with card were obtained from a traditional bank. In the case of savings the difference is smaller, not significant and goes in the opposite direction (i.e. households with card make less use of savings). Another difference is that while friends are a somewhat frequent source of credit, savings are mostly stored in formal institutions.

The second set of questions referred to the use of financial services specifically by the beneficiary of the program. Table 6 shows the results from this section.

Table 6: Use of financial services by mechanism to receive transfers

	No card	**With Card**
Has CDH	**4.65**	**12.31 *** **
Average amount of all loans	637	577
Beneficiary has a savings account	7.25	9.23
How old is the account	2.2	2.2
What was the cost of opening the account	43	67
Reason to open the account		
Savings for microenterprise	25	17
savings for education	28	33
savings to face unforeseen events	18	0
Other	10	33
NR	20	17

Fuente: Authors` calculations based on survey of beneficiaries

Note: * denotes a significant difference at the 10% level, ** denotes a difference at the 5% level , *** denotes a difference at the 1% level.

The first line of Table 6 shows the percentage of beneficiaries who have had access to the CDH. It is clear that there is a big difference between households with and without cards in terms of the use of credit. 12.3% of households with card have a CDH compared to only 4.6 households without card. In the case of savings, only 7.2% and 9.2% of beneficiaries without and with card respectively make use of savings accounts. When asked about the reason for opening the account the main reason given in both cases is education (higher for those with card), except for the "others" category, unforeseen events is the least common category for savings.

In general there does not seem to be a relationship between using the card to receive payments from the BDH and savings. However it is clearer that there is a relationship between the card and access to credit (specifically the Credito de Desarrollo Humano) although the causality is not clear. Households that make use of the card are more educated and slightly less poor than their counterparts, therefore it is possible that they would make more use of credit regardless of the type of payment mechanism. It is also possible that having a card is a consequence of having had a prior interaction with the bank through credit.

The focus groups also showed a low level of interaction with the financial sector by beneficiaries of the BDH. Reasons for not having a savings account were bad experiences or lack of funds to save. However one issue that appeared frequently was the belief that having a savings account meant being expelled from the program, since the program targets poor households.

Lower transaction costs

One of the reasons for using the electronic cards is that operationally the system could make things easier for beneficiaries by having to wait less time in lines and having to travel shorter distances, spending less in transportation as a consequence. Table 7 shows two sets of comparisons. In the first block, the section compares the unconditional difference between time spent in obtaining the cash from the program and the cost in terms of transportation to obtain the programs transfer. The comparison however could be biased, as households that have a card may live in more developed neighborhoods with more access to banks in general and for whom it could be easier to obtain cash from the program regardless of card use. In order to control for this problem a subsample of households from the same geographical location (sector censal) were

used. For this exercise the average time and cost for each sector was calculated and compared between individuals that have card and those that don't have a card.

Table 7: Differences in costs in time and money to obtain the BDH

	With card	Without card	Difference	
Simple difference for beneficiaries with and without card				
How long does it take to get the cash (minutes)	**44.1**	**72.5**	28.4	***
How much do you pay (US$)	0.48	0.64	0.2	
Difference for beneficiaries controlling by geographical zone				
How long does it take to get the cash (minutes)	**45.2**	**76.8**	**31.7**	**
How much do you pay (US$)	0.47	0.65	0.2	

Fuente: Authors` calculations based on survey of beneficiaries.

Note: * denotes a significant difference at the 10% level, ** denotes a difference at the 5% level , *** denotes a difference at the 1% level.

As the Table 7 shows, both exercises consistently show that there are gains both in terms of money and time from using the card. In the case of time spent, the differences are between 28.4 and 31.7 minutes and the difference is statistically significant, in the case of money spent the difference is about US$0.20 in both cases, the differences however are not significant.

The focus groups that were implemented for the study coincided with savings in time and avoiding long lines as the main benefit of the card. Even though the benefits of the use of the card were recognized by beneficiaries, the qualitative analysis also found an aversion to the use of the cards by some beneficiaries due to the lack of familiarity with the payment mechanism, especially fear of losing the card and with it the status as program beneficiary.

Intra household resource management

The next issue we try to address is that of intrahousehold control over resources of the program. Programs such as the BDH traditionally give transfers to the mothers in the household as it is expected that they will be more altruistic in the use of resources, (See Quisumbing and Maluccio, 2003). As it can be seen in studies from Argentina (Duryea and Schargrodsky, 2008) there is a risk of distorting this characteristic of Conditional Cash Transfer programs if there is an incentive for mothers to depend on someone to obtain the funds from an ATM (be it for security or financial literacy reasons). This could happen because cards can be easily used by someone else and this may even be necessary if the main beneficiary does not know or want to interact

with an ATM. We explore this issue in Table 8. In this table, beneficiaries were asked who decides how resources from the program are spent and who besides the beneficiary uses the card.

Table 8. Control over resources provided by the program: Who decides within the household how the BDH has to be spent?

	Without card	With card
Just me	80.1	86.2
Spouse	1.3	0.0
Me and my spouse	17.5	10.8
Me, my spouse or another relative	0.6	1.5
Other	0.6	1.5
Total	**100**	**100**
Who besides you utilizes the card to get cash		
Just me		76.9
Spouse		3.1
Kids		17
other		3.0
	100	**100**
When he/she gets the cash does he/she give you all of it		
Yes		100

Source: Authors` calculations based on survey of beneficiaries

As Table 8 shows, there seems to be a stronger relationship between cardholders and control of the funds from the program, as 86.2% of beneficiaries declare being the only ones with decision power over the funds compared to just 80% of beneficiaries without card. It should be however noted that the difference is not significant and that most of the beneficiaries who are not the only ones who decide over the funds do so in combination with their spouses. The percentage declaring to have no control over the funds is small.

The situation may not be as clear however if we consider in the next block of Table 8 that a full 23% of beneficiaries who have cards have to resort to someone else to obtain the cash from the ATMs. The most frequent person who helps with the card are the beneficiaries kids, almost 17% of beneficiaries rely on their kids to obtain cash from the accounts. In all these cases it is reported that they give 100% of the cash they get from the ATM.

While use of the card is still not widespread, in the focus groups it was found that when beneficiaries are insecure about using the cards they chose to not ask for the card or when they already have the card, go into the branch to obtain the cash themselves (in this case it is important to remember that the card was provided on demand). In this section of the focus groups the use of other persons in the family to retire the transfer did not come up.

Financial literacy/operational issues

An additional set of questions were asked in order to analyze how comfortable beneficiaries feel using the electronic card system in terms of how well they understand how to use an ATM, how well they consider the explanation that was received and main problems in the use of the card. Table 9 compares how beneficiaries ranked these questions regarding the cards.

Table 9a: Beneficiary perceptions about the financial literacy component of the card

	very bad/ difficult	bad/ difficult	regular/ not easy or hard	well/ easy	very well/ very easy
When you where given the card how well did they explain to you how to use it?	9.2	15.4	24.6	24.6	26.2
How would you say you can handle the card?	9.1	27.3	24.2	24.2	15.2
Use of ATMs seems	15.4	29.2	20.0	30.8	4.6

Source: Authors´ calculations based on survey of beneficiaries.

Table 9b: Beneficiary perceptions about the financial literacy component of the card

What is the most difficult part of using the ATM	
Keyboard is confusing	17.8
Procedure	15.6
distrust (sometimes they steal money)	2.2
PINs keep changing	2.2
entering the PIN	33.3
Introducing the card	13.3
Selection to withdraw funds	2.2
Does not read or write	2.2
Remembering the PIN	8.9
Nothing	2.2
So far have you had to replace your card	5.8
Why have you had to replace your card	
It was stolen	100

Source: Authors´ calculations based on survey of beneficiaries

Beneficiaries in general had a good opinion of the explanation that was given about the use of the card. More than half of beneficiaries rated as well or very well the explanation given about the use of the cards. When asked about how well they think they can use the card however only 39.4% rated this as good or very well. Finally when asked how they ranked the use of ATMs only 35.2% rated them as easy or very easy, with 44.6 rating it as difficult or very difficult. In table 9b we can see that most of the problems regarding the ATMs have to do with either entering or remembering their Personal Identification Numbers (PIN) (44.4%). Also about 5.8% of beneficiaries claim to have had their cards stolen from them.

Finally a question was asked in order to compare the level of financial literacy between beneficiaries with and without cards. The question consisted simply on being asked "If you save US$10 a month and receive an interest, after 12 months you would have…" the answers and percentages for each group are shown in Table 10.

Table 10: Financial literacy by payment mechanism
If you save US$10 a month and receive interest after 1 year you would have

	Without card	With card
More than US$120	27	40
US$120	17	15
Less than US$120	7	11
Does not know	49	34

Source: Authors calculations based on survey of beneficiaries

As Table 10 shows there is a positive relationship between the percentage of beneficiaries who replied correctly to this question and having a card. 40% of those with card replied to this question correctly compared to only 27% of beneficiaries without a card.

One additional issue that showed up in the interviews is that when the amount transferred by the program increased from US$30 to US$35, there was a problem in the Banks because they had not traditionally included US$5 bills in ATMs. This led to problems because it became costly to carry the US$5 bills only for the beneficiaries of the BDH and beneficiaries did not want to leave the remaining balance in the machine.

Beneficiary perceptions

The final set of questions in the survey had to do with beneficiary perceptions about the use of the card. Each group was asked how they considered the method of payment of the BDH. Table 11 shows the answers to this set of questions.

Table 11a: Beneficiary perceptions

	Without card	With card
Do you consider the current payment system of the BDH to be:		
Very bad	1.3	0
Bad	2.6	3.1
Regular	10	7.7
Good	69	67.7
very good	17.1	21.5

Source: Authors` calculations based on survey of beneficiaries.

Table 11b: Beneficiary perceptions

In your Opinion the delivery of the BDH is better or worse than cash?	
better	64.6
same	18.5
worse	13.9
DK/NR	3.1
Do you feel the card helped you manage your cash?	66.2
Would you like to save through your card	84.6
Would you like to use your card to make purchases in stores?	81.5
Which one do you think is safer against crime	
Card is safer than cash	50.8
Card is as safe as cash	23.1
Card is less safe than cash	12.3
dK/NR	13.9
Would you like to receive the BDH through electronic card? (for those who do not have the card)	65.2

Source: Authors` calculations based on survey of beneficiaries.

In both cases beneficiaries of the BDH had a mostly positive perception of their current method of payment. 86% and 89% of beneficiaries without and with card considered their method of payment to be good or very good. When card owners were asked how they considered the new system compared to the old one 64.6% considered it to be better than cash, 66% consider that the card helped them in managing their cash. 84% of beneficiaries would like to save through their cards and 81% would like to use the card to make payments in stores. Also 50.85 of beneficiaries considered the card to be safer than cash compared to 12.3 who considered it to be worse. From those beneficiaries who do not have a card 65% declare they would like to have a card to receive the programs` payments.

The focus groups confirmed that most of the beneficiaries who use the card like the advantages it brings in terms of time savings. It should be noted that the focus groups did identify a group of beneficiaries who have the card but opt not to use it because they think it is too complicated. The optional character of the cards is likely to bias these results as the beneficiaries who use the cards are the ones who feel more comfortable with them.

Are certain populations more likely to have problems with the system?

In order to better understand if there are certain characteristics associated with lack of interaction or understanding of the financial system or the use of the cards a set of simple regressions were run with three of the following outcome variables:

1. Has a savings account
2. Somebody else makes use of the card to receive the funds
3. Responded correctly to financial literacy question

In all cases the coefficients and variables were normalized so that a positive coefficient means a positive relationship between the variable and the financial inclusion outcome Table 12 below shows the results of this exercise.

Table 12: Relationship between select household characteristics and financial inclusion variables

	Has savings account		**Does not need help**		**Answered financial literacy question correctly**	
Percapita monthly consumption	0		0		0	
Age	**-0.003**	***	**-0.003**	***	**-0.008**	***
Years of education	-0.008		-0.003		**0.013**	*
Works	**-0.046**	*	**-0.049**	*	0.027	
Can read	0.023		0.004		-0.008	
Number of observations	603		603		603	

Source: Authors calculations based on survey of beneficiaries.

In all regressions age was the one variable that was found to have a negative relationship with any of the dependent variables. This means that older beneficiaries have less savings accounts, depend more on third persons helping them and gave the wrong answer to the financial literacy question. Other variable that had a negative relationship with the dependent variables is the labor market status, those who work save less and also depend more on third persons to help them get the programs transfers. The years of education variable showed a positive relationship with the financial literacy question, although no relationship with other variables.

Conclusions

In the case of the CCT in Ecuador, the program did not implement a full scale financial inclusion program as was the case of Colombia (see Maldonado and Tejerina, 2010). The BDH took the step of offering an optional card to obtain the program's transfers. In this case the card did not have the option of a savings account and beneficiaries had to withdraw the full amount of the transfer in one visit to the ATM. The intervention was in this case similar to the case of Argentina (see Duryea and Schargrodsky, 2007).

When discussing the results from the study it is important to take into account two factors. The first one is that since the card is optional, beneficiaries self selected into the groups with card and without cards based on characteristics that may be unobservable, we do indeed find some differences in few observable characteristics (consumption, education) that though small, they are likely to be the factors behind some of the results that we find. The second one is that there were problems in the administrative information from the program that caused the sampling strategy to change when the survey was being implemented, which may introduce additional biases into the study.

Use of financial services is low among beneficiaries of the BDH, especially if we only consider formal financial institutions. Differences in the use of savings between beneficiaries with and without card are small, however there seems to be a strong relationship between the use of credit (especially the CDH) and making use of a card. This combined with the high take-up rate among beneficiaries who were offered the card may mean that at least at the time of the survey the card was not being promoted widely among the population and more people may have been reaping the benefits from its use.

The main benefit from the use of the card is in terms of the time people save in getting the cash from the program. While the measured time savings is of half an hour, there may be additional advantages from the fact that beneficiaries can make the withdrawal at any time and not depend on the branch being open (for example they don`t have to interrupt a workday to go to the bank). Benefits of the use of the card also include a high level of satisfaction with the payment mechanism including the perception of it being a more secure system. However along with benefits from the payment system the costs also should be considered, while administration of program transfers by mothers seems to be no different or indeed better among cardholders, 20 percent of mothers depend on their family (especially kids) to use the cards, problems of financial inclusion also seem to be more concentrated on older beneficiaries.

As the title of this technical note suggests one of the main goals of the study was to observe the potential of the program or “readiness” to consider a stronger financial inclusion component. While there does seem to be a strong demand for financial services and a large majority of beneficiaries declare being interested in savings options along with the program, problems similar to that observed in other programs that tried this approach seem likely.

This means that if there is an interest in including beneficiaries through a savings component there needs to be a clarity in terms of the objective of the program (is financial inclusion an objective of the BDH? Or is it the goal of a separate institution through the BDH transfers). Also there needs to be a strong literacy component in order to clarify "myths" related to CCTs and financial services such as savings being a reason to be expelled from the program. The literacy component should also be aimed at including those populations less familiarized with the financial system (e.g. older beneficiaries) to reap the benefits from the payment mechanism while avoiding distortions in the original spirit of the program.

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