

Rethinking Financial Education Delivery Systems - the Power of Social Marketing,

(Previously: The Bold and the Bankable: How the Nuestro Barrio Telenovela Can Effectively Provide Financial Education to Latino Immigrants)

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The current landscape of financial education programs is dominated by a model in which financial content is conveyed through workbooks, classroom instruction, and individual counseling. Such programs have been shown to inform participants but require that the individual actively seek out financial education. They are therefore limited in their ability to convey financial content to many households, particularly those that are not aware of the potential benefits of financial education. Moreover, few programs have been evaluated for their effect on behavior of participants.

This proposal presents an innovative policy for extending the reach of financial education. Specifically, it proposes that federal support for traditional financial education instruction be coupled with a separate funding stream for social marketing activities. Our approach is well rooted in both theory and practical experience. As a theoretical basis, we apply the Transtheoretical Model of Behavior Change (TTM), a framework that allows for a better understanding of why standard financial literacy programs do not initiate new financial practices among many households. From a practical basis, the proposal examines the effectiveness of *Nuestro Barrio*, a Spanish-language soap opera that uses entertainment media to communicate financial literacy content to Latino immigrant viewers. *Nuestro Barrio* provides a distribution model for delivering financial literacy that has a potential for exponentially increasing public benefit returns while steeply diminishing per-person costs.

Nuestro Barrio was developed to address a key challenge of the explosive growth of Latino population in the United States: how to empower and integrate these Latino households into the financial mainstream. Yet the major point of our policy recommendations is not that *Nuestro Barrio* needs to be replicated for outreach to Latinos, but that the educational theory undergirding it needs to be incorporated into the policy and evaluation of financial education models. Edutainment and the use of media to reach audiences must be a core element of any outreach strategy. Products need to be tailored for special groups' cultural affinity, yet all demographics can benefit from the theory and practical application of widespread financial education.

Rethinking Financial Education Delivery Systems: the Power of Social Marketing

I. Introduction

“Financial literacy and consumer education...makes the financial marketplace effective and efficient, and better equips consumers to make tough yet smart financial decisions.” -- Federal Reserve Chairman Ben Bernanke, April, 2008

This proposal highlights an innovative approach to financial education delivery using social marketing. It examines the model of *Nuestro Barrio*, a mini-series of thirteen episodes that constitutes the nation’s first Spanish language show distributed on English-speaking networks. This telenovela is intended to compete for viewers based on its entertainment value, while simultaneously providing educational content on financial literacy topics.

Nuestro Barrio’s innovative model of financial education delivery highlights the shortcomings of current approaches to financial education in the U.S. While federal support for traditional financial education programs has expanded rapidly since the early 1990s, these existing programs rely almost entirely on classroom instruction and the distribution of written materials. Such delivery mechanisms are likely to be effective at communicating financial content to highly motivated participants, but only reach households that go out of their way to seek out financial education.

Nuestro Barrio’s educational model complements this traditional model in two ways. First, *Nuestro Barrio*’s use of the telenovela delivery format carries the potential to attract viewers that might not otherwise seek out financial education. In this way, *Nuestro Barrio* has the potential to communicate financial information to viewers unlikely to be reached by other financial education initiatives.

Second, *Nuestro Barrio*’s educational curriculum is tailored to include topics of specific interest to Latino immigrants. An estimated 56% of the nation’s 40 million Latinos lack a relationship with a bank. Linguistic, cultural, literacy and knowledge gaps contribute to barriers to

establishing relationships with mainstream banks. Where many financial education initiatives seek to distribute a single curriculum broadly, *Nuestro Barrio* tailors both its financial content and the presentation of this information. In addition to the core elements of the financial education and homeownership curriculums, *Nuestro Barrio* episodes address documentation requirements, discrimination, and other topics relevant specifically to Latino immigrants. Additionally, the show relies on community relationships to convey this information. Viewers are presented with financial content through the direct experiences of characters and through discussions between friends and family members, some of whom work in banks, insurance offices, and other financial institutions.

This paper proposes that federal support for traditional financial education provision include greater support for social marketing activities. *Nuestro Barrio*'s educational model is presented and evaluated as a demonstration of the potential of social marketing strategies to deliver financial education. This discussion and evaluation is based on the Transtheoretical Model of Behavior Change (TTM). This model is suited to framing the design and benefits of financial education programs and comparing their effectiveness. As a case in point, the TTM explicitly recognizes that individuals begin in a stage called "precontemplation"—at which individuals lack awareness of the potential benefits of behavior change—and then move through various stages of change. *Nuestro Barrio* has the potential to attract viewers in precontemplation, while traditional financial education programs serve individuals who have sought out instruction and therefore have likely progressed well beyond precontemplation. The telenovela model also has the appeal of encouraging sustained behavior change through repeated delivery of messages, which can enhance the benefits of traditional modes of financial education.

II. Nuestro Barrio: Telenovela with a Message

The Nuestro Barrio telenovela (soap opera), a Spanish-language mini-series, seeks to provide both entertainment and financial education. Nuestro Barrio's education and outreach model—"edutainment"—seeks to attract viewers with its entertainment value, simultaneously providing educational value on financial literacy topics. The mini-series of thirteen episodes is the nation's first Spanish language show distributed on English-speaking networks. Originally broadcast on the WB in North Carolina markets, Nuestro Barrio has since appeared on both for-profit and subsidized television channels throughout the United States, including markets in Chicago, Miami, and New York. As of August 2007, Nuestro Barrio's reach included 25 million potential viewers.¹

In the context of existing financial education programs, Nuestro Barrio's educational model contains several unique features. First and foremost, Nuestro Barrio delivers financial education to viewers in their homes. Our own experiences in conducting this research highlighted many Latino immigrants' inability and/or reluctance to attend meetings. Concerns about documentation and skepticism regarding banks further prevent many Latino immigrants from seeking out financial education, particularly from bank- and government-sponsored programs. In addition, many Latino immigrants are functionally illiterate. These are among the factors that create barriers to financial education delivery, requiring outreach efforts that alter immigrants' perceptions of financial institutions and that inform potential participants regarding banks' documentation requirements. Nuestro Barrio's educational model directly addresses these obstacles through its use of mainstream media.

A second and related feature of Nuestro Barrio is its use of the telenovela delivery format. Run on network television, Nuestro Barrio is intended to compete for and attract viewers based on its entertainment value, and it incorporates educational content into the plot and storyline of its

¹ A DVD of the first season is also distributed by partner banks. Freddie Mac funded production of the first season, and BB&T—a southeast regional bank and the 9th largest bank in the United States—became the first bank partner to distribute Nuestro Barrio in its branches. Viewership is also supported by cross-marketing in English and Spanish, and by grassroots outreach through non-profit community organizations. In early airings in the Raleigh/Durham/Fayetteville market, Nuestro Barrio attracted more than 6,000 households per episode.

characters. This equal emphasis on entertainment value is a central component of *Nuestro Barrio*'s model of financial education delivery. By attracting viewers to its storyline, *Nuestro Barrio* carries the potential to reach households that otherwise might not seek out financial education.

Third, *Nuestro Barrio*'s educational curriculum is tailored to the needs of Latino immigrants, covering both core financial education content and topics of specific interest to Latino immigrants. Over the course of the first season, viewers are exposed to the core elements of the homeownership curriculum. Additionally, viewers are introduced to the landscape of financial services in the United States, including the types of financial services products and providers and the documentation requirements necessary for each. A final unique feature of *Nuestro Barrio*'s educational model is its use of community relationships to convey financial information. *Nuestro Barrio*'s educational content is communicated either through the experiences of the show's characters or through dialogue in which characters relay information to their family and friends. Several of the show's characters work in banks, insurance offices, and other financial institutions and offer professional advice to friends and family members. Financial information that may not be familiar to viewers is embedded in relationships and community settings with which viewers can identify.

These characteristics of *Nuestro Barrio* are perhaps best illustrated through a brief exposition of several plotlines. Fedi, a young adult, provides a cautionary tale about the dangers of credit card overspending. The mechanic, Javier, loses his cash savings in a robbery and is finally convinced to open a bank account. The Sanchez family of six lives in a crowded apartment with noisy neighbors and dreams of owning a home. Several episodes follow the Sanchez family as they shop for and purchase a home, including one episode in which they file a formal complaint against a discriminatory real estate agent. Lastly, Ricardo, a banker, interacts with Fedi, Javier, and the Sanchez family both at the bank and informally at social events, talking with them about their situations and about his work at the bank. Each of these situations provides both entertainment through dramatic situations and practical information that viewers can apply to their everyday lives.

III. The Transtheoretical Model of Behavior Change (TTM) and Financial Education

Nuestro Barrio's capacity as an educational tool is informed by the Transtheoretical Model of Behavior Change (TTM). First developed by researchers interested in addiction and recovery, TTM defines the stages individuals progress through as they move toward sustained behavioral change. This framework structures actions as a set of repeated decisions between a 'healthy' and an 'unhealthy' outcome. In its original applications to smoking and other addictions, TTM explicitly recognized the potential for individuals' actions to deviate from their intentions and/or desires. Financial educators have since applied the TTM framework to financial behaviors including saving and debt reduction. The administrators of the Money 2000 program used TTM theory to develop interventions targeted to individuals' specific needs (Xiao et.al. 2004, 2001). Shockey and Seiling (2004) used measures of the TTM stages of change to evaluate the impact of financial education on participant saving in an individual development accounts program.

The discussion in this article focuses on the potential for Nuestro Barrio to impact viewer behavior with respect to two actions: (1) bank account ownership—defined as regular depositing of checks into a bank account—and (2) preparation for homeownership—defined as regularly saving for a down payment or building credit in preparation for the purchase of a home.² These are “healthy” outcomes for Latinos that will help empower them to use the mainstream financial market to their advantage and enjoy its potential benefits.

TTM categorizes individuals into five stages with respect to any given action—precontemplation, contemplation, preparation, action, and maintenance (see Prochaska, DiClemente, and Norcross 1992):

1. Precontemplation: Individuals in the precontemplation stage have no intention to change, and though some in the stage may wish to change, many are unaware of a need to change. Instead, a friend or spouse usually brings the desired action to the individual's attention. The lack of any

² In choosing these actions, we performed three focus groups to explore Latino immigrants' interactions with financial services.

serious intention to change in the foreseeable future (usually defined as within six months) identifies individuals in precontemplation.

2. *Contemplation*: Individuals in the contemplation stage are seriously considering the benefits and costs of changing. These individuals are fully aware of the benefits of changing behavior, but are not quite ready to take action. Most analysts define contemplation as the intent to change behavior sometime in the next six months. This type of weak intention lends itself to procrastination and to continued weighing of the benefits and costs of action. One study of smokers in the contemplation stage found that the modal stage of these smokers two years later was again contemplation (DiClemente and Prochaska 1985).

3. *Preparation*: Preparation is a hybrid between contemplation and action. Individuals in the preparation stage exhibit a serious intention to change the problem behavior within the *next* month, and may have unsuccessfully attempted to change the behavior in the past. In fact, preparation may include small steps toward behavior change, such as leaving credit cards at home when going to the mall. However, a basic problematic behavior persists.

4. *Action*: As the name suggests, action is the stage in which individuals actively modify their behavior patterns to address a problem. These individuals have successfully altered their behavior, but are at some risk of relapse. Prochaska, DiClemente, and Norcross (1992) define action as having successfully achieved behavior change for less than six months. This definition overtly recognizes the conscious effort sometimes required to maintain a pattern of healthy action.

5. *Maintenance*: The maintenance stage involves continued positive behavior and prevention of relapse. Individuals in maintenance may still need to exert effort to sustain continued behavior change, but have generally established a pattern of healthy action. Entrance into maintenance is generally considered to occur after six months of sustained action without relapse.

The stage descriptions suggest that traditional financial education programs may serve primarily individuals who have already reached or surpassed the contemplation stage. For instance,

homeownership education programs are designed to meet the needs of individuals who are actively considering and/or pursuing homeownership. Similarly, general financial literacy programs often reach only those individuals who seek out instruction. Existing financial education initiatives thus may overlook individuals in the precontemplation stage. For these individuals, financial education provision may be of little value until the individual becomes convinced that bank account use and/or homeownership are/is potentially beneficial.

Nuestro Barrio's educational model seeks to couple the provision of financial education with outreach to those in the precontemplation stage. While some viewers are likely to be in the later stages of change, many may be relatively unaware of the potential benefits of bank account use and/or homeownership. The ability to reach these individuals in precontemplation is hypothesized to be a primary strength of Nuestro Barrio's educational model.

Nuestro Barrio also addresses core topics of the financial literacy and homeownership education curriculums, which may be useful to individuals in later stages. Individuals in contemplation may use the experiences of the show's characters to evaluate different behaviors. Additionally, Nuestro Barrio may reinforce the behavior of individuals in the maintenance stage. While traditional financial literacy programs last for fixed periods, viewing Nuestro Barrio consistently may reinforce positive behavior among individuals switching from check cashing to bank account use or among individuals attempting to save toward a down payment.

In addition to defining incremental stages of change, TTM also identifies processes of change associated with forward movement into later stages. Consideration of Nuestro Barrio with respect to these processes of change helps to clarify the pathways through which Nuestro Barrio may direct borrower behavior. TTM theory identifies multiple processes of change by which individuals progress into later stages. We identify seven processes of change relevant to financial behaviors—consciousness raising, dramatic relief, environmental reevaluation, social liberation, self reevaluation, self liberation, and reinforcement management.³ Each process is

³ Prochaska et.al. (1988) defines ten processes of change. We exclude three processes of change both because of concerns about their relevance with respect to financial behavior and because of time constraints with the survey instrument. The definitions of the relevant processes are: *consciousness raising*- 'increasing information about one's self and the problem behavior'; *dramatic relief*- 'experiencing and expressing feelings about one's

associated with individuals in specific stages and is theorized to reflect an internal mechanism used by individuals to progress into a later stage.

Viewers in the precontemplation stage must become aware of the potential benefits of bank accounts and homeownership. Individuals in the contemplation stage struggle with doubts about the potential benefits of behavior change, and continue to weigh the benefits and costs of behavior change. These individuals rely on consciousness raising, dramatic relief, and environmental reevaluation, processes that reflect the collection and evaluation of information about the potential benefits of behavior change. Progress to preparation is associated with the self-reevaluation process of change, whereby individuals make connections between the behavior of interest and their own perceptions of themselves and the surrounding society.

The progression from preparation towards action and eventually maintenance requires that individuals translate their internal evaluations of potential behavior change into observable steps toward sustained action. The self liberation process occurs as individuals commit to act and/or begin to believe in their ability to change, characteristics common among individuals moving from preparation to action. Lastly, individuals who succeed in sustaining their behavior change often report reinforcement management, in which the individual uses internal or external incentives to prevent relapse.

Nuestro Barrio may stimulate these processes among individuals to the extent that viewers internalize the characters' experiences. For example, viewers without bank accounts may emotionally react to the episode in which Javier loses his savings in a robbery, a reaction consistent with the dramatic relief process of change. In contrast with the factual provision of financial education, *Nuestro Barrio* frames financial problems and behaviors in terms of relatable characters and social community. *Nuestro Barrio*'s characters thus may render viewers more likely to connect the show's financial topics to their own behaviors.

problems and solutions'; *environmental reevaluation*- 'assessing how one's problem affects physical environment'; *social liberation*- 'increasing alternatives for nonproblem behaviors available in society'; *self reevaluation*- 'assessing how one feels and thinks about oneself with respect to a problem'; *self liberation*- 'choice and commitment to act or belief in ability to change'; and *reinforcement management*- 'rewarding one's self or being rewarded by others for making changes' (Prochaska, DiClemente, and Norcross 1992).

IV. Evaluation Methodology and Results

Survey Instrument and Measures:

In structuring the processes of behavior change, the Transtheoretical Model of Behavior Change (TTM) directly informs the delineation of a set of outcome measures that capture incremental behavior change. This section presents and discusses our measures of the stages and processes of change, as well as direct measures of financial knowledge and attitudes. The appeal of the TTM is that it provides a theoretical framework for measuring the processes through which individuals move toward action.

The evidence from evaluations of general financial literacy programs is mixed. While multiple researchers show positive impacts for individual financial education programs, these evaluations vary widely in the types of evaluation methods and measures used. Several evaluations of employer-based financial education programs show robust effects on employee savings rates and other action-based outcome measures (Berheim and Garrett 2003; Thaler and Benartzi 2001). However, studies of other types of financial education have generated less conclusive results. This diversity of findings has generated calls for stronger theoretical linkages between financial education and behaviors, specifically for the development of a framework that can inform the choice of outcome measures (Fox et.al. 2005; Lyons et.al. 2006; GAO 2004).

Our choice of the TTM framework for this analysis is limited by the newness of the TTM model in financial education research. Researchers developing the Money 2000 program first applied the TTM framework to financial issues, using TTM theory to develop targeted interventions (Xiao et.al. 2004; Xiao et.al. 2001). Shockey and Seiling (2004) later used the TTM stages in their evaluation of a financial education program, classifying individuals into stages and examining progress across time. While these studies conceptually inform our application of TTM to *Nuestro Barrio*, our analysis is the first to apply empirical measures of TTM stages and processes of change to bank account ownership and preparation for homeownership. Development of these measures therefore relies on previous application of the TTM framework

to health behaviors (see Sutton 2000; Marttila and Nupponen 2003; Lechner et.al. 1998; Povey et.al. 1999; Reed et. al. 1997; Cardinal 1997).

For each behavior—bank account ownership and preparation for homeownership—we sort respondents into the five stages of change using a common staging algorithm (see Attachment 1). While some variation of this staging formula is used by almost all TTM studies, researchers have raised concerns about the arbitrary nature of the time lengths used to classify stage boundaries (Brug et.al. 2005; West 2005). As a result, the discrete categorization of stages should be interpreted as an approximation of respondents’ progress along the continuous spectrum toward sustained behavior change. This criticism carries important ramifications for stage-based intervention programs (Adams and White 2004). However, it is less concerning with respect to the use of TTM for evaluation. Provided that all respondents are classified similarly, comparison of respondents’ progress through stages of change reflects movement toward sustained action.

The processes of change measures are presented in Table 1. For each measure, respondents were asked to indicate how often they experienced the associated process—never, occasionally, sometimes, a lot, or all the time. Each measure is coded from one to five with higher values indicating more intense experience of the change process. To identify whether certain processes of change are active, respondents were asked each of the questions in Table 1. Because this is the first application of TTM to bank account use and homeownership, the measures shown in Table 1 are original. Development of these measures was informed by the measures presented by Prochaska et.al. (1988) with respect to smoking. Nevertheless, the reader should examine the content and validity of each measure and interpret all results accordingly.⁴

Table 1: Processes of Change Measures

Variable:	Measure (1-5 with 1=never and 5=all the time):	Process:
<i>Account Ownership:</i>		
	How often do you...	
Prac1	Pay attention to friends and family when they talk about using bank accounts?	Consciousness Raising
Prac2	Collect information about banks or credit unions?	Consciousness Raising
Prac3	Fear getting robbed when you carry lots of cash?	Dramatic Relief
Prac4	Think about the fact that there would be fewer robberies against Latinos if more of us kept our money in the bank?	Environmental Reevaluation

⁴ See the previous note for the definition of each process of change.

Prac5	Think about how having an account can help make your life better?	Self-reevaluation
<i>Homeownership:</i>		
	How often do you...	
Prho1	Pay attention when people talk about owning a home?	Consciousness Raising
Prho2	Seek out information about getting a mortgage?	Consciousness Raising
Prho3	Dream about owning a home of your own one day?	Dramatic Relief
Prho5	Notice that more and more Latinos are buying homes?	Social Liberation
Prho7	Tell yourself you can own a home if you work at it?	Self-Liberation
Prho9	Look at houses that are for sale to encourage yourself?	Reinforcement Management

The measures created using the TTM framework are also supplemented with several direct measures of financial literacy and financial attitudes. First, *Nuestro Barrio* directly informs viewers about multiple financial literacy topics. To test whether viewers absorb the factual information presented, the survey instrument also included three yes/no questions on topics covered in *Nuestro Barrio* episodes (see Lit1-Lit3 in Table 2). We also create an additive index score by summing the individual measures. It should be emphasized that this additive measure is not intended to reflect the respondent’s general level of financial literacy, but rather whether the viewer absorbed specific financial content addressed in *Nuestro Barrio*. Table 2 also includes a fourth financial literacy measure (Lit4) on a subject not covered in *Nuestro Barrio*; this question is included as a test of the research design and the resulting samples, and is discussed in greater depth in later sections.

Table 2: Financial Literacy Measures

Variable:	Question (Yes/No Answer):
<i>Literacy:</i>	
Lit1	You must make a 20 percent down payment to purchase a home. (false=1)
Lit2	Money in the bank is safe. (true=1)
Lit3	You must have a social security number to open a bank account in the U.S. (false=1)
Lit4	If a person buys a home and is deported, they lose ownership of the home. (false=1)
Littot	Lit1+Lit2+Lit3

Second, *Nuestro Barrio* attempts to impact viewer attitudes about banks and financial services providers. Because many Latino immigrants come from countries with less stable financial institutions, a central component of *Nuestro Barrio*’s educational mission is to overcome distrust of banks and bank employees. Table 3 displays the questions used to measure financial attitudes. For the attitudinal questions, respondents were asked whether they strongly disagree, disagree, neither agree nor disagree, agree, or strongly agree, coded with values from one to five with

higher values indicating greater trust. We again created an additive index score by summing the individual attitudinal measures.

Table 3: Attitudinal Measures

Variable:	Question (1-5 with 1=strongly disagree and 5 = strongly agree)
<i>Attitudes:</i>	
Att1	I feel welcome in a bank.
Att2	I would feel comfortable asking a bank employee for financial advice.
Att3	Banks don't want to do business with people like me (reverse coded).
Att4	I can become a homeowner in the U.S.
Attot	Att1+Att2+Att3 (reverse coded)+Att4

Data Collection and Methodology:

The survey measures presented in the previous section form the substantive core of the survey instrument. To administer the survey, we recruited Latino immigrants through two separate channels, as recruiting a sufficient number of Latino immigrant respondents required multiple efforts.⁵ First, the treatment group was recruited through Latino festivals, supermarkets, health fairs, flea markets, and churches. In each case, the respondent agreed to participate, provided contact information, and was given or sent a DVD of *Nuestro Barrio*'s first season.⁶ Each treatment group respondent was then interviewed by telephone. Of the 213 resolved phone numbers, 101 interviews were completed producing 83 usable observations.

A comparison group of respondents not receiving a *Nuestro Barrio* DVD was recruited and surveyed by telephone. Respondents were sampled by random digit dialing of households in the Raleigh/Durham metropolitan area. Consistent with the requirements applied to the treatment group, respondents were also screened for Spanish-language dominance and were required to be 18 years of age or older, not currently homeowners, and originally from a Latin or South American country. For the control group, calls to 2,032 resolved phone numbers carried an acceptance rate of 49.4 percent. Of these respondents, 115 respondents met the screening requirements and completed interviews, producing 88 usable observations.⁷

⁵ The treatment group was therefore recruited through multiple recruitment events over the course of several months. Recruitment of the control sample was phased to match the timing of treatment sample interviews.

⁶ Only 30 DVDs were distributed at recruitment sites, of which only one produced a complete survey response. Excepting this respondent, the treatment sample received a mailed DVD after agreeing to watch episodes and providing contact information at the recruitment site.

⁷ It should be noted that comparing response rates for the treatment and control groups is not possible, as the screening requirements were applied to treatment group respondents at the recruitment sites and applied to

Recruitment of the treatment and control group samples in this way does not reflect random assignment and therefore must be approached as a quasi-experimental design. In particular, we are concerned about the potential for unobserved differences between individuals recruited through each channel. We approach this issue first by using the propensity score matching methodology to construct a counterfactual control group.⁸

The propensity-score matching estimator (PSM) approaches the construction of a control group by using observed characteristics to match each treatment group observation to the most similar observation in the control group. The initial sample contains 171 respondents who met the screening requirements for survey participation.⁹ Of this group, 83 respondents were originally recruited to the treatment sample, of whom 68 reported having watched *Nuestro Barrio*. Of the 88 respondents recruited to the control sample, four reported having watched *Nuestro Barrio* and are removed from the control sample.

The PSM estimator requires the analyst to explicitly examine the distribution of the covariates through the common support and balancing requirements (Foster 2003). In specifying the PSM model, we require common support with respect to the propensity score, eliminating 12 observations whose propensity scores fell outside the common support region. We also implement balancing tests to examine the distribution of covariates in different regions of the propensity score continuum (Smith and Todd 2005).¹⁰ The resulting analysis file consists of 155 observations, of which 66 viewed at least one episode of *Nuestro Barrio*. For the remainder of this article, we define the treatment group to consist of these 66 respondents, with the remaining

control group respondents over the phone. Furthermore, we do not observe the number of potential respondents contacted at recruitment sites.

⁸ Evaluations of the propensity score matching method have shown that empirical implementation of matching methods require that (1) the same survey questions are used for both treatment and control group respondents and (2) respondents in each group are drawn from the same geographic area (Heckman et.al. 1997, 1998; Smith and Todd 2001, 2005). Both requirements are met by the *Nuestro Barrio* survey design.

⁹ Respondents recruited into both the treatment and control groups were screened for Spanish-language dominance and required to be 18 years of age or older, not currently a homeowner, and originally from a Latin or South American country.

¹⁰ The matches used in estimation pass tests comparing the covariate means at all levels of the propensity score continuum.

89 respondents in the control group (12 recruited through the first channel and 77 recruited through the second channel.)¹¹

Table 4 describes Nuestro Barrio viewers (treatment) and non-viewers (control) prior to matching on the basis of the variables used to calculate the propensity scores. Table 4 also reports whether t-tests indicate that the difference between the means of the viewers and non-viewers are significant at the .05 level. For the majority of covariates, the treatment and control groups are remarkably similar with respect to both economic and demographic characteristics. Respondents earn between \$20,000 and \$25,000, on average, and have been in the U.S. for an average of seven to eight years.¹² Nearly 80 percent of both groups report Mexico as country of origin, and the groups report very similar household characteristics. The exceptions to this comparability are the education and English ability variables. Members of the treatment group are more likely to have completed high school and more likely to speak some English.

Table 4: Mean Values of Covariate Variables

Covariate	Treatment	Control
Household Income	\$24,555	\$22,602
Speaks Some English	.79*	.61
High School Degree	.61	.47
Age	31.3	32.8
Female	.61	.62
Married/Partnered	.59	.71
Divorced/Separated/Widowed	.11	.09
Children in the household	.74	.76
Number of household members	3.7	3.8
Number of Years in the U.S.	7.2	7.3
Country of Origin Mexico	.73	.81
N	66	89

*p<.05 for t-tests of differences in means.

The treatment group’s higher levels of education and English proficiency may raise concerns for estimation to the extent that they reflect a greater ability to navigate the financial services system. We directly adjust for this possibility by requiring an exact match for the education and English ability variables. The matched sample contains precisely equal levels of education and English ability. While this adjustment does not alter the large sample properties of the PSM

¹¹ As we detail later in the report, as a robustness test, we also estimate each model using the original assignment to the treatment and control samples to define the treatment variable. Our results are generally robust to this definitional choice.

¹² The difference in mean incomes between samples closes substantially in the matched sample.

estimator, it may improve the empirical implementation with respect to the evaluation of *Nuestro Barrio*. Consequently, the differences in education and English ability in the unmatched sample raise concerns for estimation only if these variables are reflective of different unobserved characteristics among viewers and among non-viewers.

Rosenbaum and Rubin (1983) show that matching based on a propensity score provides unbiased estimation of treatment effects. Because of the relatively small sample size, we match with replacement and match each treatment group observation to one ‘nearest neighbor’ control group observation.¹³ The simple matching estimator for the average treatment effect can be represented as:

$$(1) \quad \beta = \frac{1}{N} \sum_{i=1}^N (2T_i - 1)(1 + K_M(i))Y_i$$

where T_i indicates whether the respondent viewed *Nuestro Barrio*, Y_i is the value of the outcome variable of interest for individual i , and $K_M(i)$ is the number of treatment observations to which a given control group observation is matched (Abadie et.al. 2004). Abadie and Imbens (2002) present a bias correction to this estimator to adjust for potential bias in small sample estimation.¹⁴ We evaluate equation (1) using the measures of financial knowledge, attitudes, and behavior as the outcome variable Y_i .

While the PSM approach directly addresses the differences between samples in the observable characteristics, unobserved differences may persist and result in sampling bias. In an attempt to evaluate the adequacy of the matching process, we directly test for unobserved differences in financial knowledge. The fourth financial knowledge measure—whether a deported homeowner loses possession of the home—is not addressed in *Nuestro Barrio*. Therefore, viewing *Nuestro Barrio* should not be associated with a higher likelihood of answering this question correctly, and this measure offers a test of the research design.

¹³ We test additional specifications of the matching estimator, examining the sensitivity of our results to choices regarding the number of matches, matching with or without replacement, requiring exact matching, and the use of the bias-corrected estimator. Estimations under these alternative specifications are generally similar to those reported.

¹⁴ We implement estimation of equation (1) using the `nmatch` command in STATA9. We use the bias correction, match with replacement to one observation, and require exact matching with respect to the education and English ability variables. The covariates shown in Table 4 are otherwise used to identify the propensity score.

To further test the validity of the PSM results, we use a second approach to identifying the impact of *Nuestro Barrio*. Instead of comparing viewers and non-viewers, we examine whether the number of episodes viewed can serve as an alternative measure. Limiting the sample to respondents who viewed at least one episode, we identify the effect of viewing intensity on the set of outcome measures. We repeat the PSM analysis with this identification strategy, using OLS/logistic regression. Because this approach limits the sample to *Nuestro Barrio* viewers, the estimated impacts should not be influenced by unobserved differences between samples.

Evaluation Results:

This section presents the results of the propensity score matching estimator defined in equation (1) with respect to multiple measures of financial knowledge, attitudes, and behaviors.

Interpretation of these results is limited by the small sample size available for analysis. Because only 66 *Nuestro Barrio* viewers are observed, the estimated effects reported may not be efficient reflections of the actual effects. While data is complete for all observations on the variables used to calculate respondents' propensity scores, several observations contain missing values for one or more of the outcome variables. Because of the small sample, we do not exclude these observations from all analyses. Instead, we exclude observations only from analyses in which data is missing on the specific outcome variable. The extent of such missing data never exceeds more than 6 percent of the sample (7 observations), and the majority of outcome measures do not suffer from any missing values. As a robustness test, we also estimate each model on the sample of observations with complete information on each outcome measure, finding no evidence that our results are sensitive to this treatment of missing data.

The reader should be aware of one additional reduction to the sample. Six *Nuestro Barrio* viewers (9 percent) reported that they did not think it would ever be possible to own a home in the United States, and are therefore not asked the processes of change questions with respect to homeownership. Keeping these caveats in mind, we turn to analysis of the survey evidence.

Table 5 describes respondents' viewing habits. The first measure shows that 77 percent of respondents regularly watch telenovelas, a finding that reflects the popularity of telenovelas among Latino immigrants. The remaining measures of Table 5 describe the viewing habits of

Nuestro Barrio viewers. Of the respondents who watched Nuestro Barrio, 91 percent viewed more than one episode and 47 percent watched 5 or more episodes. Over 62 percent of viewers had watched Nuestro Barrio within the previous month and nearly all viewers had watched an episode in the previous six months. The fourth measure shows that the vast majority of viewers used the DVD to watch Nuestro Barrio episodes, although 18 percent of viewers had also seen episodes of Nuestro Barrio on television.

Table 5: Nuestro Barrio Viewership

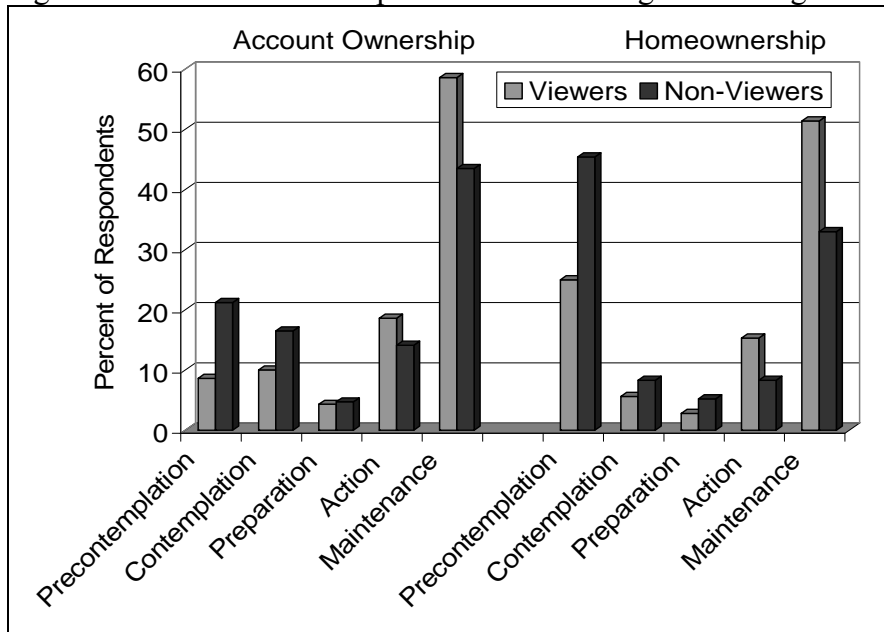
Variable	Percent
All Respondents (n=155)	
Regularly Watch Telenovelas:	
Yes	76.6
No	23.4
Viewers Only (n=66)	
Number of Episodes Viewed:	
1 or less	9.1
More than 1, but less than 5	43.9
More than 5, but less than 10	22.7
More than 10	24.2
Time Since Most Recent Viewing:	
Within one month	62.1
1-5 months	31.8
6 or more months	6.1
Media:	
TV	7.6
DVD	81.8
Both	10.6
Future Preferences:	
Prefer other programming	3.0
Watch Nuestro Barrio sometimes	50.0
Always prefer Nuestro Barrio	47.0

N=155 for the first measure; N=66 viewers otherwise.

The final measure suggests that viewers responded positively to Nuestro Barrio relative to competing programs. Ninety-seven percent of viewers said that they would sometimes prefer Nuestro Barrio over other programming and 47 percent reported that they would always prefer to watch Nuestro Barrio. These frequencies suggest that the treatment group generally viewed several episodes of Nuestro Barrio and responded positively to its content. This evidence is descriptive but is also suggestive about Nuestro Barrio's entertainment value relative to other programs. The ability to compete for viewers is central to Nuestro Barrio's attempt to reach viewers in all stages of behavior change.

Figure 1 shows the distribution of treatment and control group respondents across the stages of change with respect to both bank account ownership and home ownership. It should be emphasized that the distributions shown in Figure 1 reflect the unmatched treatment and control group samples. As a result, the differences between the distributions should be interpreted with care, particularly with respect to comparisons of treatment and control group members. With this caveat in mind, the distributions are useful in showing that the Latino immigrants surveyed were in all stages of change with respect to both bank account use and homeownership, although some clustering existed in the precontemplation and maintenance stages for both actions.

Figure 1: Distribution of Respondents Across Stages of Change



N=155

Table 6 displays the estimated treatment effects with respect to bank account ownership. Nuestro Barrio viewers report significantly greater progress along the stages of change toward consistent account usage. Similarly, viewers are significantly more likely to exhibit the first processes of change. Additionally, the estimated treatment effect for each individual process of change is positive.

Table 6: Treatment Effects for Account Ownership
(Refer to table 3 for description of outcome measures)

Outcome Variable:	PSM	
	Coef	z-stat

Stageac (account ownership stage)	.65*	2.23
Prac1 (consciousness raising)	.62*	2.46
Prac2 (consciousness raising)	.32	1.20
Prac3 (dramatic relief)	.38	1.15
Prac4 (environmental reevaluation)	.22	0.76
Prac5 (self-reevaluation)	.42	1.89

*p<.05

Table 7 reports similar findings with respect to the measures for homeownership preparation. Nuestro Barrio viewers report significantly greater progress along the stages of change toward entering homeownership (defined as regularly saving for a down payment or building credit in preparation for homeownership). Viewers also have significantly higher scores on the measures of consciousness raising. Again the coefficients on the other processes of change are positive, although not significant.

Table 7: Treatment Effects for Homeownership Preparation
(Refer to table 3 for description of outcome measures)

Outcome Variable:	PSM	
	Coef	z-stat
Stageho (homeownership stage)	.91*	2.59
Prho1 (consciousness raising)	.76*	2.84
Prho2 (consciousness raising)	.73*	3.02
Prho3 (dramatic relief)	.48	1.59
Prho5 (social liberation)	.19	0.75
Prho7 (self-liberation)	.27	0.96
Prho9 (reinforcement management)	.14	0.46

*p<.05

Interpretation of the processes of change effects requires reference to TTM theory. Previous analyses of the processes of change suggest that each process is associated with progress out of a specific stage, with individuals using different processes to make progress at different stages of the behavioral continuum. Ideally, the analyses would reflect these associations. Unfortunately our sample size prevents analysis at this level of detail. Instead, the processes of change estimations identify whether viewing Nuestro Barrio triggers the process of interest among respondents across stages of the behavioral continuum. Interpreting the results in this way, the processes of change estimations suggest that Nuestro Barrio may be particularly effective at

raising viewers’ awareness. Nuestro Barrio viewers were significantly more likely than non-viewers to exhibit three of the four consciousness raising processes. This finding is consistent with Nuestro Barrio’s educational model, which seeks to reach out to viewers that might not otherwise seek out financial education.

We also examine the impact of Nuestro Barrio with respect to the measures of financial knowledge and financial attitudes shown in Tables 2 and 3. Table 8 reports the results of these analyses; the first panel shows results with respect to financial knowledge and the second panel shows results with respect to financial attitudes. The results concerning financial literacy do not show the consistent effects documented for the behavioral variables. The coefficient of .24 on the cumulative score (Lit1+Lit2+Lit3) implies that Nuestro Barrio viewers, on average, scored one quarter of a point higher on the cumulative knowledge score than non-viewers. Of the individual knowledge questions, the third measure is positive and nears significance. However, none of the financial knowledge measures offers strong empirical evidence that Nuestro Barrio affects viewers’ knowledge of the financial topics presented.

Table 8: Estimated Treatment Effects for Financial Knowledge and Attitudes
(Refer to table 3 for description of outcome measures)

Literacy			Attitudes		
Outcome Variable:	Coef	z-stat	Outcome Variable:	Coef.	z-stat
Lit1	-.02	-0.21	Att1	.11	0.62
Lit2	.08	1.12	Att2	.41*	2.08
Lit3	.18	1.80	Att3	.17	0.70
Lit4	-.03	-0.23	Att4	.16	0.90
Littot (Total Score)	.24	1.52	Atttot (Total Score)	.83*	2.02

*p<.05.

The second panel of Table 8 presents estimation results with respect to the attitudinal measures. The cumulative attitudinal score is positive and significant, suggesting that viewing Nuestro Barrio is associated with greater comfort with financial services providers. In particular, the second attitudinal measure—“I would feel comfortable asking a bank employee for advice”—is positive and significant, suggesting that Nuestro Barrio may increase viewer trust.

The fourth financial knowledge question—whether a deported homeowner loses ownership of his or her home—is included as a test of bias resulting from the sampling design. This measure was not included in *Nuestro Barrio* episodes and therefore should capture differences in the baseline financial knowledge of viewers and non-viewers. If *Nuestro Barrio* viewers carry higher financial literacy as a result of some unobserved characteristic rather than as a result of watching *Nuestro Barrio*, we would expect this measure to be positive. Instead, the estimate for this variable is not significant, and is one of the few negative coefficients in Table 8. This result offers no evidence to suggest that the sampling design accounts for the observed differences between viewers and non-viewers. If anything, it suggests that the identified differences between viewers and non-viewers reflect the impact of *Nuestro Barrio* rather than underlying differences between viewers and the matched non-viewers.¹⁵

The image that emerges from the evaluation evidence is consistent with *Nuestro Barrio*'s educational model. While the small and geographically-concentrated nature of the sample limits the strength and generalizability of the findings, the empirical analysis offers limited evidence that *Nuestro Barrio* effectively educates viewers. In particular, comparison of *Nuestro Barrio* viewers and non-viewers suggests that *Nuestro Barrio* may be particularly effective both at raising awareness and at altering viewers' attitudes. To the extent that *Nuestro Barrio* attracts viewers with its entertainment value, these impacts suggest that it may also push viewers to progress out of precontemplation. Further research is necessary to corroborate these findings for other financial education behaviors of interest. However, the empirical evidence is consistent with *Nuestro Barrio*'s intended role in financial education provision.

¹⁵ As an additional precaution, we also repeat each analysis using two alternative definitions of treatment. First, treatment is defined as whether the respondent was recruited to the treatment sample, regardless of whether the respondent viewed any episodes. This specification is subject to the potential for sampling bias, but robust to selection bias. Second, we limit the sample to the set of 66 viewers, defining treatment as the number of episodes viewed (see Table 5). While several differences exist between specifications, the results are remarkably consistent with those presented. This consistency across definitions of treatment provides further confidence that the analyses identify the effect of *Nuestro Barrio* and not sampling and/or selection bias.

V. Implications for Delivery of Financial Education

The current landscape of financial education programs is dominated by a single model in which financial content is conveyed through workbooks, classroom instruction, and individual counseling. Such programs have been shown to effectively educate program participants, but require that the individual actively seek out financial education or be referred by a partner organization. Such programs are therefore limited in their ability to convey financial content to many households, particularly those that are not aware of the potential benefits of financial education. The Transtheoretical Model of Behavior Change (TTM) provides a theoretical framework for understanding this limitation. Defining the stages through which individuals' progress in their attempts to modify their behavior, TTM emphasizes that individuals often begin in precontemplation, a stage in which they are not aware of the need for or potential benefits of behavior change.

As households in precontemplation are unlikely to seek out financial education on their own, traditional financial education programs must be coupled with active outreach and recruitment. In many cases, providers have built localized recruitment and referral networks within their communities, relying on these mechanisms to reach out to potential participants. The use of these informal recruitment channels is reinforced by the structure of federal funding, which compensates financial education providers with a fixed amount *per participant served*. This funding mechanism mirrors the traditional model of financial education, but is less suited to alternative educational initiatives.

As a result of this existing framework, financial education providers have only recently begun to experiment with public service announcements and other social marketing campaigns. For instance, the American Savings Education Council (ASEC) initiated an advertising campaign that highlights the positive benefits of saving and discourages accumulation of consumer debt. Similarly, the Federal Reserve Board recently funded public service announcements as part of its Money Smart program (Muñiz 2004). This emerging desire for high-scale outreach was reflected by the participants at a recent General Accounting Office forum on the government's

role in financial education, who listed a major national media campaign as a priority for financial education policy (GAO 2004).

Consideration of Nuestro Barrio's method of financial education directly informs the discussion over the shape that federal support for such initiatives should take. In particular, it suggests that support for social marketing initiatives must be broad enough to encompass innovative projects that target populations with specific needs. Nuestro Barrio relies on the telenovela format both because it is an effective method for attracting Latino immigrant viewers and because it provides an accessible format for delivering the desired financial content. Where the technical information on financial education concepts may be best suited to classroom instruction, Nuestro Barrio seeks to affect viewers' attitudes and to familiarize viewers with the landscape of public institutions. The telenovela format also allows Nuestro Barrio's characters to become trusted peers, particularly through repeat viewings, a status that is difficult to establish in a 30 second advertising spot and difficult to convey in classroom- or workbook-based delivery systems. The implication is that alternative strategies may be suited to the needs of different target populations. Therefore, a policy that supports this type of creative outreach must be broadly inclusive of different communications tools.

The central role of entertainment in Nuestro Barrio's educational model similarly reinforces the need for flexibility in supporting social marketing strategies. Because providers rely on entertainment to draw viewers' interest, an effective policy must recognize the functional necessity of creative discretion. To illustrate this point, the following sections describe Nuestro Barrio's creative marketing strategies and cost effectiveness, highlighting the direct and indirect functions of each. The final section presents the policy proposal in detail.

Media and Marketing Strategies:

Nuestro Barrio demonstrates the ability of relatively small investments by small organizations to access high-scale communications. With the growing use of blogs, streaming video, podcasts, and other internet technologies, small organizations increasingly have the tools necessary to inexpensively distribute their message to millions of viewers. Nuestro Barrio relies on broadcast television and the distribution of DVDs, but supplements these episodes with its website, the use

of social networks such as MySpace, and cross marketing efforts on radio, in print, and during community outreach events.

Television Distribution: Television allows for distribution of the educational material through entertainment, on a scale and in a format that reaches viewers in the comfort of their home. Attachment 2 includes a map of the markets and stations that broadcast *Nuestro Barrio*. The show originally aired on WB channels in North and South Carolina in the winter and spring of 2005. This was the first Spanish language series on English language television (with subtitles). Subsequently, the program aired on WB in Miami. The program also showed on LATV, a low frequency distributor in select markets in the Southwest, and VME, a Spanish language television service distributed by PBS on digital and cable broadcast in select markets. On a satellite feed of Dish TV, the show was distributed nationally to 14 million households. Recently, Spanish language affiliates Telemundo and Univision, stationed in Albuquerque and Denver, respectively, began to broadcast the series. In total, we estimate that *Nuestro Barrio* has been made available in more than 25 million households.

The number of actual viewers cannot be measured for a number of reasons. The Nielsen Rating is a flawed measurement, particularly for Spanish speakers because they are underrepresented in the metered sampling size. Nonetheless, out of a Nielsen scale of 1-4, *Nuestro Barrio* received a “2” rating when it aired on WB in the Raleigh-Durham market. This translates to an estimated 6,000 households for the market. By comparison, Univision programming received only a “1” rating for the same time period.

This type of measurement is lacking in other markets or distributors because Nielsen only monitors certain distributors and markets. For example, LATV was not monitored by Nielsen. VME, the PBS Spanish language affiliate, aired *Nuestro Barrio* in major media markets (New York, Chicago, San Diego, Miami) on cable, digital, and, nationally, on satellite distribution. However, public television is not monitored by Nielsen. We can estimate the number of households that receive the broadcast signal of *Nuestro Barrio* among the various channels and markets; we cannot, however, determine how many of the 25 million households in which it was distributed actually watched it. Similarly, we cannot know how many watched the 60,000 DVDs

that were distributed or read the newspaper articles covering the show. Still, based on the number of households in which *Nuestro Barrio* was made available, we can make a strong argument that it is one of the most widely distributed financial literacy programs in the country.

Crossmarketing and Community Outreach: Awareness of the television broadcast of *Nuestro Barrio* was promoted through cross marketing events. These included community programs where local bank partners, nonprofits, and consumers were invited to a social event at which *Nuestro Barrio*'s stars would appear to sign autographs and speak about financial literacy issues. These events were used as a media hook for coverage in Spanish language radio, television, and print outlets. *Nuestro Barrio* received more than 250 independent media articles including coverage on National Public Radio, *The Miami Herald*, *The New York Times*, the Associated Press, and many local outlets.

In each market, one of the primary funders (Freddie Mac) would invite a bank partner to team up with nonprofits to conduct outreach in the community using *Nuestro Barrio* both to educate and promote local housing services. Freddie Mac reproduced more than 60,000 *Nuestro Barrio* DVDs that were distributed by these bank and nonprofit partners.

Media coverage and community outreach serve the dual purpose of driving viewers to watch the show and concurrently promoting the educational messages of financial literacy. Entertainment is a powerful vehicle for generating attention to a public interest message. The video product is not a stand alone approach and is not as effective without utilizing multiple methods of generating momentum among viewers. *Nuestro Barrio*'s very nature as a potentially popular television program provides a vehicle for cross marketing a message for consumers.

Social Marketing via the Internet: *Nuestro Barrio* created MySpace pages for the series and for two of its stars, Fedi and Laura, the young, attractive love interests. When a show aired in a local market, staff would contact our targeted demographic group of Spanish speakers under age 35 with a "be my friend" request from Laura or Fedi. Those who responded were informed of the *Nuestro Barrio* series and directed to the website. The website (www.nuestrobarrio.tv)

is rich with video, music, updates on the show, financial literacy information, and links to educational and resource sites.

Cost Effectiveness:

Successful television shows have upfront production costs; these costs are recovered and profits are made from the licensing fees or advertising revenue generated, which can take several forms. As a show achieves greater distribution and viewership, revenue increases and production cost per viewer decreases. *Nuestro Barrio* generated some revenue from distribution by utilizing a barter split of ad time, or having a licensing fee with distributors.

But *Nuestro Barrio* offers an additional dimension for cost-benefit analysis: The greater the distribution and viewership, the greater the public benefit from financial education, and the fixed cost of production is spread over a greater number of viewers.

Thus, the *Nuestro Barrio* model stands in stark contrast to traditional financial education products/programs for two main reasons. First, the traditional products/programs do not generate revenue. And second, workshop and individual financial counseling may have lower up-front costs, but have very high marginal staff and other costs associated with delivery, and the greater the distribution, the greater the program cost. As a result, the reach of traditional programs is limited by fixed budgets of local groups and national funders.

It also contrasts with the economics of funding of explicit public interest messaging such as public service announcements (PSAs) that typically rely on the good will and schedules of television distributors or the purchasing of air time for distribution. Distribution costs can far exceed the cost of video production when the market is as large as the United States with 438 distinct media markets and a population of 300 million. Because *Nuestro Barrio* *sells content* rather than *buys airtime*, it has provided 6.5 hours of television entertainment and education to 25 million households while generating revenue.

It should be noted that *Nuestro Barrio* distribution revenue did not meet a bench mark of a profitable television show, that is, revenue exceeds cost. The subsidy provided by Freddie Mac

was necessary for the program's success and delivery. Had grants been secured to cover all "above the line costs", or with future broadcast opportunities, it would be possible to generate a profit.

A review of the specific costs of *Nuestro Barrio* is instructive. First, there were "above the line" costs (director, producer, marketing, etc.), and then direct expenditures for the production of the film (talent, sets, grips, technicians, equipment, etc.). Next came distribution costs/revenue (the cost of paying for reproduction and airing, netted against income revenue from airing and sales). For *Nuestro Barrio*, the above the line costs were approximately \$300,000; direct production costs were approximately \$1 million; DVD reproduction cost for 60,000 DVDs at \$5 each was \$300,000. The net distribution costs were a positive offset, generating revenue from barter sharing ad revenue of approximately \$250,000.

In this model, the largest cost area is production. Broader distribution via wider broadcast increases revenue potential while simultaneously decreasing the cost per viewer. Assuming that 2% of the 25 million households to which *Nuestro Barrio* is broadcast watch it, the cost is \$2.60 per household; if you doubled the penetration or the number of households, the cost per viewer drops in half.

Thus, every time *Nuestro Barrio* is aired the cost per viewer is reduced. In the case of financial education delivered via classroom and print materials, every student costs more money to serve.

In summary, by leveraging economies of scale, *Nuestro Barrio* provides a distribution model for delivering financial literacy that has a potential for exponentially increasing public benefit returns while steeply diminishing per-person costs. Provided the product is commercially competitive, *Nuestro Barrio* demonstrates how relatively small social investments can yield widespread public benefits with minimal marginal costs.

VI. Policy Proposal for Integrating Social Marketing in Financial Education

Federal initiatives for housing counseling and financial literacy have reached a high water mark in political attention and funding in the wake of the subprime mortgage crisis. But, the model for funding and education remains based on reimbursement of counseling expenses for individual households. This administrative approach efficiently allocates funding to programs in which instruction is directly provided to participants. However, it excludes edutainment, social marketing, or mass media as tactics or eligible funding activities. We therefore propose that the existing appropriation for financial education be coupled with a second funding stream that is specifically devoted to financial education outreach. Implementation of this policy requires authorization legislation, along with an annual appropriation to be distributed by HUD. This proposal is highly actionable and easy to implement within a relatively short timeframe.

Budget and Funding Source:

We propose that Congress authorize up to \$15 million to support social marketing initiatives designed to raise financial awareness. The U.S. Department of Housing and Urban Development (HUD) currently receives an annual appropriation to support financial education provision. This appropriation should be coupled with a second funding stream of \$15 million to support social marketing activities that create high-scale distribution of financial education content. Of this amount, \$5 million should be prioritized for small organizations seeking to demonstrate the potential of emerging communication technologies, broadly defined. Both authorizations should be structured as extensions of the existing funding for financial education, rather than as independent appropriations.

Proposed Legislation and Implementation:

Distribution of funds will be achieved through a grant application process administered by HUD in conjunction with its existing financial education programs. On an annual basis, HUD will evaluate applications and distribute funding to qualifying grantees, and HUD will retain discretion for determining the criteria by which to evaluate both applications and successful implementation.

Qualifying applicants must propose social marketing initiatives that meet key components for a successful campaign evidenced by *Nuestro Barrio*. These components include the development of quality content utilizing the conceptual approach of Transtheoretical Model of Behavior Change, packaged as edutainment, and including viable distribution plans for television and cross-marketing to improve viewership and usage of the product.

- 1) *Based on the Transtheoretical Model of Behavior Change*: Programs must utilize this educational model to replicate the effectiveness demonstrated by *Nuestro Barrio* in conveying financial information and changing financial attitudes and behaviors. The way in which any intervention is applied should consider the target audience, their likely location on the continuum of behavioral change, and the best strategies for advancement. Applying *Nuestro Barrio*'s educational theory is particularly effective in reaching individuals in precontemplation, defined to include any household that would not otherwise seek out financial education because of a lack of awareness of its potential benefits. Moreover, given the size of public investment in financial education, it is important that program outcomes be measured more rigorously using the TTM.
- 2) *Utilizes Edutainment*: Grant applications will be evaluated with respect to both entertainment value and educational value. Preference will be given to programs whose entertainment value is sufficient to attract a sizeable number of applicants and/or generate revenue that partially offsets program costs.
- 3) *Utilizes mass media distribution*: Without evidence and competency of mass media distribution of the product, the production of videos fails to achieve the program objective of reaching audiences.
- 4) *Utilizes cross marketing components*: Programs should contain a cross marketing and promotion plan that is replicable across markets to promote the television show and public interest message.

Grantees will be accountable to HUD to document the successful achievement of educational goals. Acceptable documentation of educational content includes presentation of the educational curriculum and content of the funded program. Grantees must also document the high-scale distribution of program materials, defined by the number of viewers/participants. Non-

traditional measures of distribution such as web hits, downloads, and Nielsen ratings will be accepted when relevant for programs whose delivery mechanisms preclude traditional measures.

The Importance of Evaluation:

As just indicated, measurements of reach can be achieved via such tools as Nielsen ratings, etc. But as our proposal demonstrates, evaluation techniques to gauge the relative effectiveness of various forms of financial education should be incorporated federal policy. As more funds and resources are allocated to financial education, most recently in response to the subprime crisis, programs should be held to account for their relative impact. Therefore, we propose additional funds be allocated and distributed via HUD under a competitive process for assessing various methods of delivery. We further propose that such assessments employ, to the fullest extent possible, the TTM as a framework, as modeled by the research methods previously detailed in this paper.

Conclusion

Nuestro Barrio's innovative model of financial education delivery highlights the shortcomings of current approaches to financial education in the U.S. While federal support for traditional financial education programs has expanded rapidly since the early 1990s, these existing programs rely almost entirely on classroom instruction and the distribution of written materials. Such delivery mechanisms are likely to be effective at communicating financial content to highly motivated participants, but only reach households that seek out financial education.

This proposal therefore defines a policy that couples existing federal support for traditional financial education with a separate appropriation devoted to social marketing and outreach. As TTM theory makes clear, policies that rely on individuals to seek out financial education will not reach many of the households most in need. Instead, the use of entertainment value to reach audiences is critical to delivering repeated financial literacy messages to motivate individuals to contemplate change. Edutainment and the use of television and internet to reach audiences must be used as an outreach strategy, and it can be a highly cost effective one, particularly if support for such initiatives allow programs to tailor their approach with respect to the financial education objectives and the cultural affinities of the target population.

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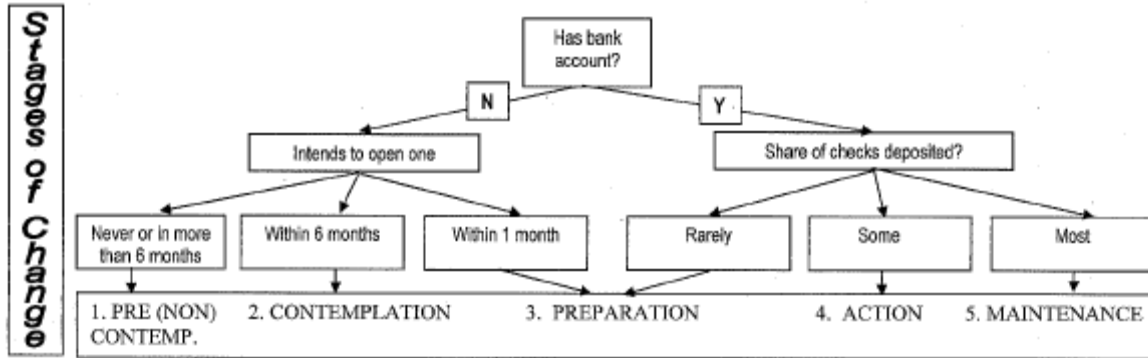
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Exhibit 1: Staging/Classification Algorithm for Stages of Change

Action 1: Uses Bank Account



Action 2: Homeownership

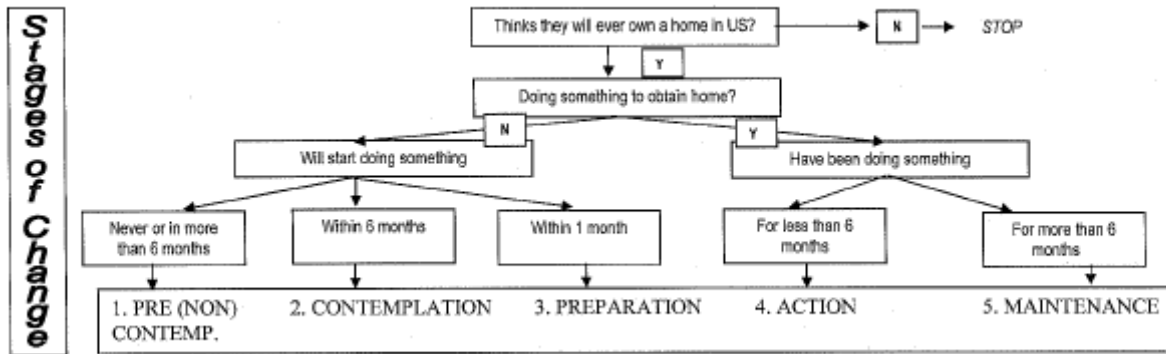


Exhibit 2: Markets and Stations where Nuestro Barrio has been distributed.



Jonathan S. Spader

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Education:

University of North Carolina at Chapel Hill
 Doctoral Student in Public Policy
 Projected Date of Completion: May 2009
 Advisor: Professor Emeritus Michael A. Stegman

Truman State University (May 2004), Kirksville, MO
 BS in History, Minor in Mathematics (Magna Cum Laude)
 President's Honorary Scholarship
 Phi Beta Kappa

Professional Experience:

Research Assistant, Center for Community Capitalism (June 2004-present)

- Authored academic papers, professional policy reports, and presentations.
- Developed and implemented survey instruments related to financial services and affordable homeownership.
- Provided research assistance on projects related to predatory lending, affordable homeownership, and access to financial services.

Contact: Professor Roberto G. Quercia

Paid Intern, Senate Minority Leader Thomas A. Daschle (Summer 2003)

- Worked primarily with Legislative Aide for Indian Affairs to collaborate with Native leaders in SD and communicate with Native constituents.

Working Papers:

Spader, Jonathan S. and Roberto G. Quercia. "Mobility and Exit from Homeownership: Implications for CRA Lending." Center for Community Capitalism Working Paper. (under review)

Roberto G. Quercia and **Jonathan S. Spader**. "The Impact of Pre-Purchase Homeownership Education and Counseling on the Performance of Affordable Loans." Center for Community Capitalism Working Paper. (revise and resubmit)

Technical Papers/Policy Reports:

Spader, Jon, Janneke Ratcliffe, and Michael Stegman. "Transforming Tax Refunds into Assets: A Panel Survey of VITA Clients in Greenville, Henderson, and Raleigh." August 2005. Chapel Hill, NC: Center for Community Capitalism. Prepared for the North Carolina

Commissioner of Banks and the Annie E. Casey Foundation.

Spader, Jon, Janneke Ratcliffe, and Michael Stegman. "Latino Lending: Analysis of the Consumer Loan Portfolio of North Carolina's Cooperativa Comunitaria Latino de Credito." September 2005. Chapel Hill, NC: Center for Community Capitalism. Prepared for Freddie Mac.

Research Assistance:

Stegman, Michael A. "Payday Lending." *Journal of Economic Perspectives* 21 (Winter 2007): 169-190.

"Self-Help's Community Advantage Home Loan Secondary Market Program Research Plan." March, 2006. Chapel Hill, NC: Center for Community Capitalism. Submitted to the Ford Foundation.

"Creating a Low-Income Renter Panel as Part of the Evaluation of the Fannie Mae Self-Help Community Advantage Secondary Mortgage Demonstration Program." December 2005. Chapel Hill, NC: Center for Community Capitalism. Submitted to the Ford Foundation.

Research Grants:

\$1,500. "The Role of Public Programs in Stimulating Minority Enterprise in Atlanta, GA and Durham, NC." Center for the Study of the American South. Received May 2005.

Presentations:

2007 Urban Affairs Association Annual Meetings. "Mobility and Exit from Homeownership Among Community Reinvestment Loan Borrowers." Seattle, WA. April 27th, 2007.

Self-Help Mini-Summit: Presentation to representatives from Self-Help, the Center for Responsible Lending, and the Ford Foundation. "Evidence of the Effectiveness of Homeownership Education and Counseling in Underserved Neighborhoods." January 2007.

Department of Public Policy Research Seminar. "Evidence of the Effectiveness of Homeownership Education and Counseling in Underserved Neighborhoods." March 2006.

2006 Interdisciplinary Conference for Graduate Research on the American South. University of North Carolina. "The Role of Public Programs in Stimulating Minority Enterprise in Atlanta, GA and Durham, NC." April 2006.

Honors and Awards:

Research Assistantship, Center for Community Capitalism, 2004-present.

Phi Beta Kappa, Truman State University, 2003.

Phi Sigma Pi Leadership Award, Truman State University, 2003.

President's Honorary Scholarship, Truman State University, 2000-2004.

Departmental Service:

Committee Member, Faculty Hiring Committee (November 2004-Spring 2005)

Student Representative, Department of Public Policy Faculty Meetings (Fall 2005-Spring 2006)

Teaching/Guest Lectures:

Policy 460: Quantitative Analysis for Public Policy. "Stata Lab." Spring 2007.

Sociology 444: Race, Class and Gender. "Housing Discrimination." Summer 2007.

Professional Memberships:

Association for Public Policy Analysis and Management

American Real Estate and Urban Economics Association

Short Courses/Professional Training:

Inter-University Consortium for Political and Social Research. "Introduction to Spatial Regression Analysis." July 2007.

Odum Institute for Research in Social Science. "Propensity Score Matching and Causal Inference in Non-Experimental Settings." January 2007.

Kenan Institute for Private Enterprise, "Entrepreneurship Boot Camp: A Short Course," July 2004.

Janneke Ratcliffe
Associate Director, Center for Community Capital
at the University of North Carolina at Chapel Hill
Janneke_ratcliffe@unc.edu
919-843-4968

Twenty-year career in financial markets, spanning the private sector and the community development arena. Expertise in housing finance, community development, capital markets, and small-business & minority entrepreneurship.

April, 2005 to present: Center for Community Capital, University of North Carolina at Chapel Hill, Associate Director. Specific areas of focus include expanding the Center's research program in the area of community development finance and venture capital; leading research in consumer financial services; and research on low-income homeownership.

1998 to 2005: Self-Help Ventures Fund, Durham, North Carolina

Six years building innovative programs for one of the leading community development financial institutions in the US. Contributed to significant growth in the organization's assets and impact, including:

- Mortgage Secondary Marketing: Implementation of groundbreaking \$4 billion mortgage capital markets program in partnership with Fannie Mae, The Ford Foundation, and over 20 banks nationwide.
- New Markets Program: Directed successful application and implementation of new tax credit program, more than doubling Self-Help's available resources for commercial lending in low-income communities.
- Financial services reform: Support of Self-Help's Center for Responsible Lending work to combat abusive financial services particularly in areas of predatory mortgage lending, payday lending, and consumer financial services.

1988 to 1998: GE Capital, GE Capital Mortgage Corporation, Raleigh, North Carolina

Ten years with one of the largest and most profitable organizations in the mortgage industry, in positions of progressive responsibility, including:

- **Vice President, Product Management and Implementation:** Led department managing portfolio of products for the Mortgage Insurance company. Managed "New Product Introduction" process using "Design for Six Sigma" Quality tools.
- **Vice President, Strategic Planning & Product Development:** Work with senior leadership to set strategy for the mortgage company. Provided strategic support and market research to multiple divisions: sales, international, consumer mortgage, wholesale, M&A, and fair lending/affordable housing.
- **Risk Manager, Negotiated Transactions:** Set credit and pricing policy for over \$5 billion in structured transactions. Managed team that performed due diligence and transaction analysis.

1983-1988:

Capital Economic Development Corporation, Raleigh, NC: Executive Director of non-profit providing financing to small businesses. Led small non-profit from inception to become a self-

sufficient organization serving 3 counties with multiple programs ranging from microloan guarantees to long-term, fixed asset financing.
Analytical Consultants, Chapel Hill, NC: Associate in commercial real estate consulting firm.

Education

University of North Carolina at Chapel Hill: Bachelors Degree in Economics and French, 1983

Research Reports Co-Authored

North Carolina Consumers after Payday Lending: Attitudes and Experiences with Credit Options. November 2007. Prepared for the North Carolina Commissioner of Banks.

Who's Counting? Measuring Social Outcomes from Targeted Private Equity. June 2007. Community Development Investment Review, Federal Reserve Bank of San Francisco. Volume 3, Issue 1, 2007.

Persistence Pays Off: Prepayment Behavior of Affordable Mortgages. April, 2007, submitted for publication

Technology is Making Preventive Servicing Even Smarter: But the Affordable Lending Sector is Lagging; Housing Policy Debate

Transforming Tax Refunds into Assets: A Panel Survey of VITA Clients in Greenville, Henderson, and Raleigh. Prepared for the North Carolina Commissioner of Banks. August 2005.

Latino Lending: Analysis of the Consumer Loan Portfolio of North Carolina's Cooperativa Comunitaria Latino de Crédito. Prepared for Freddie Mac. September 2005.

Low Income Homeowners in the Community Advantage Panel: A Preliminary Longitudinal Examination. November 10, 2005. Chapel Hill, NC: Center for Community Capitalism working paper

Community Advantage Panel Study - Comparative Statistics between Low-Income Homeowners and Low-Income Renter Comparison Group. December, 2005. Center for Community Capitalism working paper

Peter Skillern, Executive Director

Community Reinvestment Association of North Carolina

Peter Skillern is the Executive Director of the Community Reinvestment Association of North Carolina a nonprofit agency that uses social entrepreneurship and advocacy for corporate responsibility to realize its mission of promoting and protecting community wealth. Under Skillern's leadership the agency has created, produced and distributed *Nuestro Barrio*, a Spanish language telenovella that provides financial education in a soap opera format. The television series is commercially successful and has had national distribution with availability in 50 million households. The agency owns shares in 50 financial institutions for the purpose of asset growth and shareholder advocacy to promote fair lending practices. More than \$40 billion of lending commitments to low income communities has been secured as a result of the agency's work. Skillern's exposure in the media involves radio interviews including National Public Radio, numerous television appearances, and coverage in more than 250 print outlets including USA Today and the New York Times.

Skillern is a member of the Eisenhower Fellowship and as the United States representative to the program's International Advisory Council he has studied political, economic and cultural systems in Ireland, Mexico, Turkey and Singapore with a focus on the cross disciplinary aspects of social change. He is also a William Friday Fellow for Human Relations, a leadership program based in North Carolina.

Skillern graduated with Highest Honors from the University of California at Santa Cruz and earned a Masters in City and Regional Planning with a specialization in Real Estate Development with the Kenan Flagler School of Business at UNC Chapel Hill.

He co-authored the book, [Too Much Month at the End of the Paycheck Payday Lending in North Carolina](#) in partnership with the UNC Center for Community Capitalism. He produced [This is My Home: Manufactured Housing Challenges and Opportunities](#) published by Carolina Academic Press. Skillern has written numerous policy pieces on housing, community development and financial issues.

Prior to his current position, Skillern worked with the National Low Income Housing Coalition and was the Executive Director of the Durham Affordable Housing Coalition where he raised and packaged millions of dollars for affordable housing development.

Skillern's work has won regional and national awards including: the City of Durham's Affordable Housing Award; the News and Observer Tarheel of the Week; the National Fair Housing Alliance Award for Outstanding Contribution to Civil Rights; the National Community Reinvestment Coalition James Rouse Award for Exemplary Contribution to Economic Justice.

JORGE A. MONTOYA, PhD

President and CEO

Education

1992	University of California at Berkeley, BA, Psychology
1997	University of Southern California, MA, Social Psychology
2000	University of Southern California, PhD, Social Psychology

Positions and Employment

2002-present	Director of Communications, Outreach, & Program Evaluation, Sexually Transmitted Disease Program, Los Angeles County Department of Health Services, Los Angeles, CA
2000 – 2002	Research Analyst, Frank N. Magid Associates, Inc., Sherman Oaks, CA
1998-2000	Research Consultant, Department of Occupational Science and Occupational Therapy, University of Southern California, Los Angeles, CA
1997-1998	Research Consultant, Health Research Association and Los Angeles County Hospital + University of Southern California Medical Center, Los Angeles, CA
1996-1999	Graduate Research, Annenberg School for Communication, University of Southern California, Los Angeles, CA
1994-2000	Graduate Research, Department of Psychology, University of Southern California, Los Angeles, CA
1992 – 1993	Undergraduate Research Internship, Department of Psychology, University of California at Berkeley, Berkeley, CA

Honors and Awards

1997	American Psychological Association Minority Assistantship Program, Honorable Mention
1994-1997	University of Southern California Merit Fellowship, Graduate Fellow
1992	University of California at Berkeley Summer Research Opportunities Program, Undergraduate Research Fellow

Selected peer-reviewed publications (in chronological order)

- Taylor, M.M., Aynalem, G., Smith, L.V., Montoya, J., Kerndt, P. (2007). Methamphetamine use and sexual risk behaviours among men who have sex with men diagnosed with early syphilis in Los Angeles County. *International Journal of STDs & AIDS*, 18(2), 93-97.
- Ahrens, K., Kent, C.K., Montoya, J.A., Rotblatt, H., McCright, J., Kerndt, P., & Klausner, J.D. (2006). Healthy Penis: San Francisco's social marketing campaign to increase syphilis testing among gay and bisexual men. *PLoS Medicine*, 12, e474.
- Patel, P., Taylor, M., Montoya, J.A., Hamburger, M.E., Kerndt, P.R., & Holmberg, S.D. (2006). Circuit parties: Sexual behaviors and disclosure practices at the White Party, Palm Springs, California, 2003. *AIDS Care*, 18(8), 1046-1049.
- Rotblatt, H., Montoya, J.A., Kerndt, P.R., Kim-Farley, R., Fielding, J., Darr, E., Bustamante, T., Brooks, J.T., Kalish, M., Robbins, K., Kenne, K., Laubacher, L., & Taylor, M. (2005). HIV transmission in the adult film industry – Los Angeles, California, 2004. *CDC Morbidity and Mortality Weekly Report*, 54(37), 923-926.
- Taylor, M., Montoya, J.A., Cantrell, R., Mitchell, S.J., Williams, M., Jordahl, L., Freeman, M., Brown, J., Broussard, D., & Roland, E. (2005). Interventions in the commercial sex industry during the rise in syphilis rates among men who have sex with men (MSM). *Sexually Transmitted Diseases*, 32(10 Suppl), S53-S59.
- Montoya, J.A., Kent, C., Rotblatt, H., Kerndt, P., & Klausner, J. (2005). A social marketing campaign and significant syphilis testing among MSM. *Sexually Transmitted Diseases*, 32(7), 395-399.
- Cornwell, E.E., Belzberg, H., Hennigan, K., Maxson, C., Montoya, J., Rosenbluth, A., Berne, T., & Demetriades, D. (2000). Emergency medical response service (EMS) vs. non-EMS transport of critically injured patients: A prospective evaluation. *Archives of Surgery*, 135, 315-319.
- Read, S.J., & Montoya, J.A. (1999). An autoassociative model of causal reasoning and causal learning: Response to Van Overwalle's critique of Read and Marcus-Newhall (1993). *Journal of Personality and Social Psychology*, 76, 728-742.
- Montoya, J. A., & Read, S. J. (1998). A constraint satisfaction model of the correspondence bias: The role of accessibility and applicability of explanations. In *The Proceedings of The Twentieth Annual Cognitive Science Society Conference*, Madison-Wisconsin.

