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MEDIA, CONTENT, AND BEHAVIOR: SOME EMPHASIS ON FINANCIAL INCLUSION*

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INTRODUCTION

This document summarizes the recent literature about the role of media in relation to social behavior, with a particular emphasis on financial inclusion. Our aim is modest: to raise awareness on the significant role that “everyday tools” may have in fostering social change when employed positive and proactively by policymakers. With this in mind, we provide a comprehensive review of the literature on the role of different media and in particular, television for

achieving financial inclusion. As La Ferrara, Chong and Duryea (2012) point out, television is key for the functioning and reproduction of contemporary society, as well as for the process of articulating new behavioral patterns in many developing countries, argument also emphasized in Faria and Potter (1999). For instance, La Ferrara et al. (2012) explain that: “in the span of three decades, exposure to television messages rose from zero to universal in urban areas and reached almost half of the households in rural areas where one of the reasons for its massive influence has been the strength of its oral tradition. In this context, television helps give a sense of belonging.”

* The complete document is available at the Proyecto Capital website: <www.proyectocapital.org>.

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Furthermore, they point out that the effect of television on values and attitudes is by no means confined to urban areas. It also, reaches remote communities, inducing, among other things, a reorientation of beliefs regarding the role of women in society toward greater autonomy as described by Kottak (1990)¹.

These authors show that in the case of Brazil, the share of households owning a television set had grown from 8 percent in 1970, to 81 percent in 1991, figure that remained approximately the same during the following ten years (La Ferrara et al., 2012). La Ferrara et al. (2012) argue that spectacular growth in television viewership as opposed to slow increases in education levels is characteristic of many developing countries. They suggest, at the same time, that a wide range of messages and values, some which are important for development policy, have the potential to reach households through the screen as well as through the classroom. In the context above, they focus on the effect of exposure to one of the most ubiquitous forms of cultural communication in many developing societies, soap operas, and zero-in on the case of Brazil. They show that historically, the vast majority of the Brazilian population, regardless of social class, has watched the 8 p.m. *telenovela*, while arguing that in the last decades, one group, Rede Globo, has had the virtual monopoly over the production of Brazilian soap operas (La Ferrara et al., 2012; Chong and La Ferrara, 2009). These authors provide a content analysis of 115 *telenovelas* aired by Rede Globo in the two time slots with the highest audience between 1965 and 1999, which revealed that 72 percent of the main female characters aged 50 and lower had no children whereas 21 percent had only one child.

1. In contrast, in the case of Brazil during the early 1990s, and after more than 30 years of expansion of basic schooling, adult only reached reached 80 percent. Ten years later, people with four or fewer years of schooling accounted for 39 percent of the adult population in urban areas, and 73 percent in rural areas. The country's elevated rate of geographical, occupational, and social mobility contributes to the impact of television (La Ferrara et al., 2012).

MEDIA AND SOCIO-ECONOMIC AND POLITICAL IMPACT

In recent years there has been a dramatic increase in empirical literature focusing on the effects of media over social and political outcomes. As presented by La Ferrara et al. (2012), some of the related literature relies on studies on the role of newspapers and radio as mechanisms of political accountability (Besley and Burgess, 2002; Stromberg, 2004), as well as on the effects of the media on voters' behavior (Gentzkow, 2006; DellaVigna and Kaplan, 2007). There are also examples of education through entertainment media in other parts of the world as Berg and Zia (2013) describe. Specifically, these authors look into the case of the radio soap opera "Apwe Plezi" that aired between February 1996 and September 1998 in St. Lucia. It dealt with topics that included family planning and prevention for sexually transmitted diseases. Through interviews, Vaughan et al. (2000) found that the program had a positive effect on knowledge and on attitude change however it present a minimal change in behavior. Another example mentioned by both La Ferrara et al. (2002) and Berg and Zia (2013) is the case of the study of Paluck and Green (2009), that evaluates the effectiveness of a radio program over conflict resolution and intergroup tolerance in Rwanda by using a group-randomized controlled trial. While a treatment group was exposed to a reconciliation program, the control group listened to a program about health issues. As a result, dissent from popular opinion increased, as well as collective action among the treatment group. Similarly, Berg and Zia (2013) also describe the case of the soap opera "Twende Na Wakati" that was broadcasted between 1993 and 1997 in Tanzania, and which featured messages promoting the adoption of family planning methods and HIV/AIDS prevention. Rogers et al. (1999) and Rogers and Vaughan (2000) evaluated the effectiveness of this program and found that the soap opera had strong behavioral effects on family planning.



Similar studies focus the effects of television on social behavior, as opposed to political behavior; in particular on adults' participation in social activities and trust (Olken, 2009) as well in children's school performance (Gentzkow and Shapiro, 2008). Olken works in Indonesia and has taken advantage of the fact that the island of Java is almost entirely formed by volcanoes that lay a string of mountains along its spine. As explained by Lahart (2008) because of those mountains some parts of Java receive all seven television channels available on the island, while others, namely those in the shadow of the mountains, only receive a couple. Olken (2009) conducted surveys in more than 600 villages in East and Central Java and showed that for each additional channel a village received, people watched, in average, seven additional minutes of television per day. He also found that there were fewer social organizations in villages with better television reception, and that people in those villages reported lower participation rates in social organizations. In addition, Olken points out the participants trusted less their fellow villagers, a consequence that may be detrimental to village economies in the measure that it may hinder trade and cooperation (Lahart, 2008).

Certainly, a traditional stand among medical professionals is that television is bad for children. Many studies show television is correlated with slower cognitive development, as well as violence and other behavioral problems. The American Academy of Pediatrics recommends parents limit children's use of TV, movies, video and computer games to no more than two hours a day (Lahart, 2008). According to Gentzkow and Shapiro (2008), after countries such as the United States started tuning in to television, it wasn't long until people started to worry about its effects on children². In fact, a generation later, the Scholastic Aptitude Test scores of college-bound

2. "When it offers a daily diet of Western pictures and vaudeville by the hour, television often seems destined to entertain the child into a state of mental paralysis," wrote The New York Times in 1949 (Lahart, 2008).

teenagers had fallen significantly. As Lahart (2008) explains, the 1977 panel appointed by the College Entrance Examination Board suggested television bore some blame for the drop. Indeed, the decline began in the mid-1960s, just as the first students heavily exposed to TV took their SAT exams. Interestingly, Gentzkow and Shapiro (2008) presented a series of analyses that showed that the advent of television might have actually had a positive effect on children's cognitive ability, showing that television influence on children is far from straightforward. The variation Gentzkow and Shapiro (2008) worked with the time when TV was introduced in different cities. As explained by Lahart (2008), television began taking off in the U.S. in 1946, after a wartime ban on TV production was lifted. However, the Federal Communications Commission stopped giving new licenses for commercial television from September 1948 to April 1952 time during which it made changes in the allocation of the broadcast spectrum. There was a long gap between the time television arrived each city considered in study's sample. Lahart (2008) explains how these economists looked at results of a survey applied to 800 U.S. schools that in 1965 administered tests to 346,662 sixth-grade, ninth-grade and 12th-grade students and found, when controlling for differences in household income, parents' educational background and other factors, that children who lived in cities and were more exposed to television during their early childhood performed better on the tests. Also, Gentzkow and Shapiro (2008) found that television was especially positive for children in households where English wasn't the primary language and parents' education level was lower³.

As reported by Lahart (2008) while in 1960, nine in 10 U.S. households had a television set. In many areas of the developing world, television is still being

3. As explained by Lahart (2008), Gentzkow and Shapiro note that they studied the effects of 1950s therefore it must be taken into account that today's television given its different content, may have other effects on children.

introduced, context that allows researchers to observe its effects as they occur. It has been noted that the introduction of television in rural villages apparently exerts a positive influence on attitudes toward women. These, however, are anecdotal observations limited to small communities studied by anthropologists. As Berg and Zia (2013) state, entertainment education through soap operas has been quite popular in developing countries. For instance, the classic Peruvian soap opera “*Simplemente Maria*” became a success in educating and inspiring people to take actions to improve their own lives (Singhal et al., 1995). Similarly, as Berg and Zia (2013) explain, the U.S. soap opera “*The Bold and the Beautiful*” successfully reached minority women at-risk when a storyline was accompanied by the display of a free hotline number (Spader et al., 1993). Furthermore, after a character was diagnosed with HIV, the number of calls to the U.S. Center for Disease Control’s AIDS hotline increased substantially (Berg and Zia, 2013).

Berg and Zia (2013) also report the case of “*Seeking Happiness*”, a six-episode soap opera funded by USAID in Kazakhstan, which was used to explain capitalism, especially privatization and rule of law. Mandel (1998) describes how the project failed since the local production company was unfit to produce a social marketing soap opera; the budget was too small to produce the series well; and policymakers lacked experience in rural Kazakhstan. Also set in Kazakhstan, another soap opera, “*Crossroads*”, took a different approach and became one of the most popular Kazakhstani television programs in 1998 (Berg and Zia, 2013). The most important element for success was ensuring high quality at all production levels, especially a good storyline and convincing actors. In addition, Brown and Cody (2006) have explored the effects of a pro-social soap opera “*Hum Log*” on promoting the status of women in India. The authors find that although the soap opera was popular, it did not influence

significantly society’s perception of women (Berg and Zia, 2013).

Also, a recent contribution by Jensen and Oster (2009) estimates the impact that the entry of cable TV had on subjective measures of female autonomy, school enrollment, and fertility in India. In fact, in the South Asian context, female disadvantage is seen as an outcome of deeply ingrained patriarchal cultures reflected in kinship and other social practices (Dyson and Moore, 1983; Rahman and Rao, 2004). According to Iversen and Palmer-Jones, (2013) the literature addressing female disadvantage and women’s empowerment in these settings emphasizes the access to resources such as education, land rights, employment, opportunities. The work of Jensen and Oster (2009) challenges this view and suggests that rigid norms may change rapidly once cable TV arrives in a village (Iversen and Palmer-Jones, 2013). For arriving to this conclusion, Jensen and Oster (2009) use a three year panel data set from rural India in order to identify the impact of cable television on women status’ indicators and demographic change by differencing stable village and individual characteristics while controlling for income and pre-existing differential trends. Jensen and Oster (2009) find that cable television reduces women’s tolerance of spousal beatings, bolsters female autonomy, and reduces son preference and fertility. In fact, these authors examine how the introduction of cable television in India affected attitudes toward women. Among households with television, the number of those with cable service doubled from 2001 to 2006. In villages, entrepreneurs run cables to satellite dishes, allowing villagers to watch commercial television. Because some villages had cable by 2001, some got it in 2002 and others got it in 2003, these authors were able to monitor the effects of television effect as they occurred. They conducted annual surveys of women in 180 Indian villages between 2001 and 2003 (Lahart, 2008; Jensen and Oster, 2009). Furthermore, Jensen and Oster found that as cable arrived to their villages

women reported greater independence. It was found that it was more likely for women to be able to do things like go to the market without their husbands' permission. There was a drop in the number of situations in which they thought that it was acceptable that men beat their wives. The women also reported a decline in their preference for sons (Jensen and Oster, 2009; Lahart, 2008). According to Iversen and Palmer-Jones (2013) these results contrast not only with prevailing beliefs, but also with the continuing disadvantage women experience during a period that witnessed extensive cable television penetration.

La Ferrara, et al, (2012) and Chong and La Ferrara (2009) have also studied the role of soap operas in developing countries, in particular, Brazil. They consider a universe comprising Brazil's municipal areas from 1970s to the early 1990s, which allows them to look at the long-run impact of television viewing on socio-economic outcomes, in particular, fertility and divorce. Their results suggest that what matters is not only watching television, as much as watching shows (soap operas) that contain certain messages and are framed in such a way that makes it easy for the public related directly to the situations portrayed. One of the ideas advanced in sociological and communication studies, is that there may be a link between the dissemination of television, and specifically of soap operas, and socio-economic outcomes. As La Ferrara, et al (2012) explain, Brazilian soap operas are different from stereotypical Latin American soap operas because of the high quality of their plots and overall production. Since military-imposed censorship was in effect during most of the developmental period of soap operas in Brazil, a number of writers started to write screen plots for Rede Globo, who held the monopoly of soap opera productions in the country. At the time a number of these writers had political problems with the military government and saw this as an opportunity of employment in the cultural industry and a way of fighting the dictatorship through the reinforcement of new ideas in their plots

(La Ferrara et al., 2012). In addition to freedom, recurrent themes included criticism of religious and traditional values, consumption of luxury goods, the portrayal of wealthy families, the display of new life-styles, the circulation of modern ideas, such as female emancipation, and emphasis on individualism (La Ferrara et al., 2012, Rios-Neto, 2001, Fadul, 1999). Soap operas in Brazil deal with topics directly or indirectly relevant to family size preferences, which include references to small, beautiful, white, healthy, urban, middle and upper-middle classes, and consumerist families. The families in Brazilian soap operas are small, partly because the shows portray idealized versions of the lives of the upper and middle classes, but also because it would be hard for viewers to keep track of big families with multiple characters (La Ferrara et al., 2012).

THE SPECIFIC CASE OF SOAP OPERAS IN BRAZIL⁴

Television has played a central role for the functioning and reproduction of contemporary Brazilian society as well as in the process of articulating new behavioral patterns in the country (Faria and Potter, 1999). In the span of three decades, exposure to television messages rose from zero to universal in urban areas and reached almost half of the household in rural areas. Television became a mass medium in Brazil earlier than in most developing countries. The military government in power in 1964 saw in television the potential of becoming a tool for integrating the country, creating a national identity, developing markets, and controlling political information. The military further encouraged the expansion of television by subsidizing credit for set sales and by promoting the growth of one specific network to encourage national production. Rede Globo, selected as the privileged partner, began functioning in 1965 and quickly became the leading national network⁵.

4. This section draws very heavily from La Ferrara, Chong, and Duryea (2012), and Chong and La Ferrara (2009).

During the military regime of General Joao Baptista Figueiredo (1978–1985), the concessions of television networks followed clientelistic, political, and ideological criteria. The dictator had the absolute power to give licenses for radio and television stations. Although this law was later changed to put the congress in charge of approving licenses, the clientelistic criterion was not abandoned (Lima 2001). The media played a central role for the military regime. As recognized by several authors, the regime was invested in national integration and the media was a key vehicle for cultural, political, and economic integration. During that period the association between the government and Rede Globo was clear (Miguel 2001). The government of President Jose Sarney (1985–1990), the first elected government after the fall of the military dictatorship, provides a good example of how the clientelistic provision of licenses persisted. In 1989, there was a constitutional amendment to increase the government term from four to five years. During the two years before, the government gave a large number of TV and radio licenses to companies associated with congressmen who later voted in favor of the constitutional amendment (Costa and Brener 1997). A similar situation occurred during the first mandate of President Fernando Henrique Cardoso (1995–1998), when the congress was about to vote a constitutional amendment to approve reelection. Again a large number of licenses for retransmission stations were given to firms associated with congressmen (Lima and Capparelli 2004). Obviously, political clientele and a solid marketing strategy had to be complemented with a viable, quality product. Soap operas were such a product.

Typically, a soap opera is watched by between 60 and 80 million viewers. The reason for the enormous

success of this television format can be traced back to three aspects. First, soaps are set up in easily recognizable locations and deal with the daily life of Brazilians, so that viewers can relate to the story. Second, they use a colloquial language, a typical middle-class setup, and often include an element of social mobility that is appealing to the viewers. Third, the network spares no expense in order to produce soap operas of the highest technical and artistic quality: an episode costs about 15 times more than the production costs of the other Latin American soap opera powerhouse, the Mexican Televisa (de Melo 1988).

FINANCIAL LINKS

As it is well known, financial education is important, yet despite of many recent efforts, there it is still no clear evidence on which is the best way to deliver it. The literature on careful evaluations of financial literacy is small but growing, and has moved away from classroom based interventions to more innovative delivery mechanisms, such as videos and DVDs (Berg and Zia, 2013). Emotional connection is particularly central to media campaigns. Advertisers, for example, consistently and successfully use influences of emotions to affect consumer choices (Berg and Zia, 2013). For instance, Bertrand et al. (2010) and Agarwal and Ambrose (2007) show that persuasive advertising and direct mail solicitation can influence consumer loan contract choices. In a recent paper, Berg and Zia (2013) analyze the impact of financial education messages delivered through a popular South African television soap opera in which the soap storyline features one of the main characters borrowing excessively through hire-purchase, gambling, and falling into a debt trap; and eventually seeking help to find her way out and manage her debt responsibly. The storyline plays out over a two-month period, and the study evaluates the effectiveness of these messages through two intermediate surveys and one final follow-up survey conducted four months

5. Globo is the fourth biggest commercial network in the world, after ABC, CBS, and NBC, with a coverage area of 98.4 percent of the municipalities in Brazil, reaching over 183 million Brazilians (La Ferrara et al., 2012).



later. Further, three qualitative focus groups provide insight into the mechanisms behind measured impacts (Berg and Zia, 2013).

In fact, Berg and Zia (2013) explain that the use of mass media and specifically soap operas to communicate financial capability-related messages is a relatively new approach to financial education, and the effectiveness of the few existing financial literacy mass media programs have not yet been rigorously tested. The telenovela “*Nuestro Barrio*” in the US was one of the earliest soap operas to incorporate financial literacy messages. It aimed at educating Hispanic immigrants about financial matters and promoting the use of bank accounts. It was primarily directed towards households outside the formal financial system with the goal of making the products and services of the formal financial system attractive. They also refer to “*Makatuno Junction*”, a Kenyan soap opera that is still being aired and includes financial literacy themes. Berg and Zia (2013) argue that since 2005, the series has reached large audiences in Kenya (over 7 million viewers in 2009), Uganda (3 million viewers in 2009) and Tanzania (2 million viewers). They explain that through the featured storylines the soap operas have encouraged viewers to open bank accounts, save, and make budgets. Yet, to date, no careful evaluation of these messages has been conducted⁶.

As Berg and Zia (2013), La Ferrara, et al (2012), Gentzkow and Shapiro (2009) and others explain, television offers not only broader outreach since nearly every household nowadays has a television set, but also a captive audience. When emotional connections are established between a show and its audience, the program provides a potentially powerful platform for communicating messages and influencing behavior (Berg and Zia, 2013). In this regard, the study carried out by Carpena et al (2011) measures the causal chain of impact, from financial knowledge to financial behavior. They show significant improvements in content specific financial

knowledge, a 4.5 percentage point increase, and no differences in knowledge regarding financial concepts outside the soap opera’s storyline. Central to the soap opera’s topic the high interest charges and hidden costs of borrowing through hire-purchase (Carpena et al., 2011). Their analysis of financial behaviors found a significant and substantial increase in the likelihood of borrowing through formal channels – 22 percent compared to 13 percent in the control group, and a greater likelihood to borrow for productive purposes such as investments in household durable goods and vehicles (Berg and Zia, 2013). They also measure hire-purchase use and find a significant reduction in the likelihood of entering such contracts, 15 percent compared to 19 percent in the control group (Berg and Zia, 2013).

In Berg and Zia’s (2013) financial study, the soap opera featured a counselor who helps the main character build a financial plan to enable her to save enough and repay her debts. An actual toll-free helpline also appeared at the end of several shows. The findings on this public call to action are quite stark. While they experienced a significant uptake in the number of calls received within days of the debt agency being featured in the soap, the long term analysis shows no recall of the agency or even memory that a debt counselor appeared in the soap storyline (Berg and Zia, 2013). According to these researchers, not recalling the debt agency could be explained, at least in part, by the fact that the messages were not delivered by the main character, but by an external one, who only appeared in 2 or 3 episodes. Hence, the audience did not get the opportunity to establish or maintain a connection with this character. Overall, Berg and Zia’s (2013) findings suggest an important

6. Berg and Zia (2013) also refer to the efforts that the online world has made on financial education. An example is “Doorway to Dreams”, which offers online games that teach players important lessons on managing finances. Similarly, the VISA Financial Literacy Road Show is a traveling theatrical performance that provides educational messages on financial matters in unbanked communities in Sub-Saharan Africa.



role for entertainment media as an accessible and important tool for policymakers to deliver carefully designed educational messages that resonate with the audience and may potentially influence financial knowledge and behavior. Furthermore, their findings suggest that emotional connections and familiarity with media personalities play a role in motivating knowledge and behavior change among viewers, and that harnessing such potential can be an important channel for achieving development impact (Berg and Zia, 2013).

AN APPLICATION FOR PERU

Is embedded messaging in soap operas focused on the common aspirations, as presented above, applicable in Peru? In particular, can JUNTOS' women beneficiaries from increase their propensity to save, thereby empowering the women within the household and improving the welfare of the household as well as its strategies for generating income? Our on-going intervention develops episodes that will be shown at the Juntos meetings during separate sessions. Each episode will be based on a concrete goal common to JUNTOS participants, such as investing in their children's education, or spending for a village traditional party, sickness, or death. The soap opera will feature characters such as *Isidora*, *la ahorradora* (Isidora, the saver), who have been created and tested in small areas. These characters will have to face situations familiar to JUNTOS beneficiaries and promote savings through messages arising from and relating to such events. There will be two treatment groups, one of which will be shown soap operas featuring a positive message regarding savings. The idea is to show the soaps at the moment women receive their cash transfer. Immediately after the showing of the episode, the women will discuss the telenovela's message. In subsequent meetings, these women will participate in village-level contests focusing on thematic elements from previous episodes in order

to improve the internalization of these messages and to connect the latter to the beneficiaries' aspirations.

Our experiment will evaluate the effectiveness of specifically designed soap operas for increasing savings among women participants of JUNTOS. We aim to establish causality between viewership of the soaps and i) savings in financial and non-financial assets; ii) household consumption; iii) household income strategies; and iv) graduation rates from JUNTOS. We will also look at the cost effectiveness of the intervention *vis-à-vis* the cost of encouraging each new dollar or *sol* of savings. The specific evaluation questions our study addresses are as the following:

1. Can the use of *telenovelas* that link the benefits of savings (or dangers of not saving) with women's goals change savings patterns in terms of both financial and non-financial (livestock, jewelry, etc.) goods?
2. Do *telenovelas* affect savings levels differently depending on whether the messages focus on the positive effects of having saved or on the negative effects of having failed to save?
3. By what means do these changes in savings patterns empower women to change the patterns of household consumption and strategies for generating family income?
4. How can the positive savings and investment messages embedded in the *telenovelas* contribute to improving graduation rates of JUNTOS participants?
5. Do the effects of *telenovelas* on the patterns of saving, the women's empowerment, and the wellbeing of the household differ according to the characteristics of women, their families, and their communities?



This intervention aims at discovering the causal relationship between telenovelas and savings among the women participants of JUNTOS. As seen above, the small but growing body of evidence in both media and microfinance confirms not only the external validity of this project, but also its theory of change. Aspirational messaging, whether in soap operas or savings reminders, can cause a positive change in the behavior of those who receive the messages. The soap operas will revolve around common savings struggles, such as holidays, health emergencies, or children's schooling. The main character could be a mother struggling to save for an important holiday. Her success or failure will be followed closely by the viewers, and it is thought that those women viewers, having shared a similar experience or with a big holiday looming, will likewise save after seeing the fruits of her labor or the tragedy of her failure. The important element here is that these goals and struggles are ones that the viewers share. Seeing such situations on screen reinforces the paths one can take, and the consequences of failure, which in turn will drive the women to alter their behavior. In order to maximize internalization of messages, group discussions will be organized immediately after the showing of each episode so that treated women are able to discuss the messages and how these connect to their own aspirations or struggles. Furthermore, at the end of the three episodes, women will participate in village-level contests focused on thematic elements from previous episodes. These contests, and the prizes, will be announced during the showing of each episode.

Aspirational *telenovelas* can cause changes in thematic areas including education, participation, and financial inclusion for at least three reasons: (i) the role that women play in household financial management; (ii) women's empowerment derived from a well-designed soap opera; and (iii) elements related to women's confidence. While (i) is well known in the microfinance literature, (ii) and (iii) have not been

explored widely. It is not for nothing that in the case of Brazil, La Ferrara et. al. (2012) found that in households where soap operas are watched with regularity, children's names tend to be strongly and statistically linked to the names of soaps characters. Empowerment and women's confidence, in addition to improved financial management, will therefore serve as two of the main outcome variables within our broader theory of change.

The cost effectiveness analysis of this intervention will, in its most basic form, link the cost of developing and showing the soap opera to the amount of additional funds saved per beneficiary. This analysis belies a significant amount of nuance and does not include the hard to quantify variables of empowerment and confidence, as well as secondary effects such as improved educational and health outcomes. Nevertheless, the basic formula will provide an assessment of the cost of encouraging each additional *sol* of savings among women in the JUNTOS program. We will be able to provide two figures, one highlighting the cost of this pilot and another suggesting the estimated cost of scaling up the project nationwide. With a national scope, we believe that the larger number of showings would absorb the high initial costs of *telenovela* production, over the course of time. We will compare these figures to existing pro-savings programs. In addition to the *sol* cost of each additional *sol* saved, we also aim at creating indices for defining women's empowerment, understood as defined by changes in employment strategy and income levels. This analysis could also lead to an approximate cost of each additional *sol* earned by women involved in the program.

In the last decade, Conditional Cash Transfer (CCT) programs have become popular development solutions. By tying welfare benefits to certain conditions, such as child school attendance or vaccinations, governments can claim that they encourage incentivizing behavior that will generate

future economic rewards while ensuring that welfare recipients are held accountable for the funds they receive. In Mexico, an RCT evaluated the Oportunidades program (formerly *Progresa*), and demonstrated the impact of the program. By using this “gold standard” evaluation method, the Mexican government cemented the success of the CCT, and spurred greater adoption of such model. This project seeks to build on that history of innovation and evaluation to help CCT programs reach the essential goal of graduating participants out of the program, a goal shared by the officials of the Ministry of Development and Social Inclusion. That goal requires increasing savings levels, expanding asset formation, and improving household management. By building on innovative research regarding the ability of dramas to impact decision making, this project hopes to spur the development of pro-social soap operas in conversation with the JUNTOS conditional cash transfer program.

Our project builds on these lessons to address an even more pressing issue in Peru: graduating families out of pro-poor programs and into self-sufficiency. Building on the success of these studies in Brazil, and other studies which suggest that messaging can impact savings when it addresses aspirations close to one’s realities, this study hopes to combine elements from both, thereby increasing the potential effect size of the intervention. This intervention will therefore build on the lessons learned from these studies and push the frontier on the possibilities for 21st century public broadcasting.

This intervention is relevant not only because it seeks to induce a large increase in savings among female participants of JUNTOS and help their families out of poverty, but also because of its novelty and scalability. This evaluation will be one of the first to assess the impact of soap operas specifically for the purpose of encouraging pro-social behavior. Perhaps more importantly, the underlying content, once produced, can be re-broadcasted in greater numbers

of villages with minimal marginal costs. The soap operas could be broadcasted at JUNTOS meetings throughout the country, where they would reach approximately 500,000 households. And with CCTs proliferating worldwide, other countries may choose to incorporate aspirational media into their own programs to increase savings and improve outcomes for families in poverty.

The soap opera intervention and evaluation will have the potential to impact government policy at the local and national levels and may affect financial institutions and result in the creation of new credit products to encouraging savings. The process of disseminating results and building partnerships for following up on activities will begin once the survey and data collection process are complete. The desired outcomes of the study for the women beneficiaries of JUNTOS and the broader academic and policymaking community include:

1. Establishing if the type of message incorporated into the *telenovela* (positive with respect to savings) has differential effects, and if those effects differ with respect to the women’s characteristics, those of their families, and those of their communities.
2. Formalizing the process of social learning by publishing the results in a variety of media and for different audiences, including local and international academics, local and international policy-makers, and the general public.
3. Promoting the design of policies and pro-poor social programs whose processes and impacts have been rigorously evaluated.
4. Promoting savings and women’s empowerment through productive investment coupled with graduation from the JUNTOS program.

In turn, these data will be used to suggest new uses for the existing soap opera series. Future showings will be targeted more accurately to maximize future impact based on heterogeneity across age groups of community characteristics, for example. The preliminary data analysis will therefore allow us to refine the broadcasting of the existing soap operas and provide a pathway for developing future programs that target other elements of the JUNTOS program, from savings, to education, to health. By virtue of the data's robustness and granularity, particularly with respect to heterogeneous effects, we expect to generate significant academic interest in the project.

WORKS CITED

- Baker, M. J. y L. M. George (2010). "The Role of Television in Household Debt: Evidence from the 1950's". *The B.E. Journal of Economic Analysis & Policy*, 10(1), (Advances), Artículo 41.
- Berg, G. y B. Zia (2013). "Harnessing Emotional Connections to Improve Financial Decisions. Evaluating the Impact of Financial Education in Mainstream Media". *World Bank Policy Research Working Paper 6407*. Disponible en: <http://elibrary.worldbank.org/doi/pdf/10.1596/1813-9450-6407>
- Besley, T. y R. Burgess (2002). "The Political Economy of Government Responsiveness: Theory and Evidence from India". *Quarterly Journal of Economics*, 117(4), pp. 1415-52.
- Brown, W. J. y M. J. Cody (1991). "Effects of a Prosocial Television Soap Opera in Promoting Women's Status". *Human Communication Research*, 18(1), pp. 114-42
- Carpena, F., Cole, S., Shapiro, J., y B. Zia (2011). "Unpacking the Causal Chain of Financial Literacy". *World Bank Policy Research Working Paper 5798*.
- Chapman, J., (2005): *Comparative Media History*, Cambridge: Polity Press.
- Chong, A. y E. La Ferrara (2009). "Television and Divorce: Evidence from Brazilian Novelas". *Journal of the European Economic Association*, 7(2-3), pp. 458-468.
- Costa, S. and J. Brener (1997). "Coronelismo electrónico: O governo Fernando Henrique e o novo capítulo de uma velha história." *Comunicação & Política* 4 (2): 29-54.
- DellaVigna, S. y E. Kaplan (2007). "The Fox News Effect: Media Bias and Voting". *Quarterly Journal of Economics*, 122, pp. 1187-1234.
- Dyson, T. y M. Moore (1983). "On kinship structure, female autonomy and demographic behaviour in India". *Population and Development Review*, 9(1): 35-60.
- Fadul, AnaMaria (1999). "Novela e Família No Brasil". *Manuscrito*, Congreso Brasileiro de Ciências de la Comunicación, Rio de Janeiro.
- Faria, V. y J. Potter (1999). "Television, Telenovelas, and Fertility Change in North-East Brazil". En Richard Leete (ed.) *Dynamics of Values in Fertility Change*, Oxford: Oxford University Press.
- Gentzkow, M. (2006). "Television and Voter Turnout". *Quarterly Journal of Economics*, 121(3), pp. 931-972.
- Gentzkow, M. y J. Shapiro (2008). "Preschool television viewing and adolescent test scores: Historical evidence from the Coleman study". *Quarterly Journal of Economics*, 123(1), pp. 279-323.
- Iversen, V. y Palmer-Jones, R. (2013) "TV, Female Empowerment, and Demographic Change in Rural India". *Manuscript*.
- Jensen, R. y E. Oster (2009). "The Power of TV: Cable Television and Women's Status in India". *Quarterly Journal of Economics*, 124(3), pp. 1057-1094.
- Kottak, C. (1990). *Prime-Time Society: An Anthropological Analysis of Television and Culture*. Belmont, CA: Wadsworth Modern Anthropology Library.
- Lahart, J. (2008). "A New View On TV". En: *The World Street Journal Online*, 6 de Setiembre del 2008. Disponible en: <http://online.wsj.com/news/articles/SB122065245432005241>
- La Ferrara, E., Chong, A. y S. Duryea (2012). "Soap operas and fertility: Evidence from Brazil". *American Economic Journal: Applied Economics*, 4(4), pp. 1-31.
- Lima, V. (2001). "Comunicação e Política". São Paulo: Hacker Editores.
- Lima, V. y S. Capparelli (2004). "Comunicação e Televisão: desafios de pos-globalização". São Paulo: Hacker Editores.
- Mandel, Ruth, 1998. "Structural adjustment and soap opera: A case study of a development project in Central Asia". *Central Asian Survey*; Vol. 17, No. 4, pp. 629 – 638.

- Marques de Melo, José. (1988) *As novelas da Globo: producao e Exportacao*. São Paulo: Summus Editorial.
- Olken, B. (2009). "Do Television and Radio Destroy Social Capital? Evidence from Indonesian Villages". *American Economic Journal: Applied Economics*, 1(4), pp. 1-33.
- Paluck, E. (2009). "Reducing intergroup prejudice and conflict using the media: A field experiment in Rwanda". *Journal of Personality and Social Psychology*, 96, pp. 574-587.
- Paluck, E.L. & Green, D.P. (2009). Deference, dissent, and dispute resolution: A field experiment on a mass media intervention in Rwanda. *American Political Science Review*, 103(4), 622-644
- Rios-Neto, L. (2001). "Television, Value Constructs, and Reproductive Behavior in Brazilian Excluded Communities". Manuscrito, XXIV General Population Conference, International Union for the Scientific Study of Population, Brazil.
- Rogers, E. M. et al. (1995): Television Promotion of Gender Equality in Societies. In P. J. Kalbfleisch & M. J. Cody (eds) *Gender, power, and communication in human relationships*. New Jersey:Lawrence Erlbaum Associates, pp. 277-304
- Rahman, L. y V. Rao (2004). "The Determinants of Gender Equity in India: Examining Dyson and Moore's hypothesis with new data". *Population and Development Review*, 30(2), 239-68.
- Singhal, A., Rogers, E. M., y W. J. Brown (1993). "Harnessing the potential of entertainment-education telenovelas." *International Communication Gazette*, 51(1), pp. 1-18.
- Spader, J., Ratcliffe, J., Motiva, J., y P. Skillern (2009.) "The Bold and the Bankable: How the Nuestro Barrio Telenovela Reaches Latino Immigrants with Financial Education". *The Journal of Consumer Affairs*, Vol. 43, No. 1, pp. 56-79
- Strasburger, V.C. y E. Donnerstein (1999). "Children, Adolescents and the Media: Issues and Solutions". *Paediatrics*, 103(1), pp.129-139.
- Stromberg, D. (2004). "Radio's Impact on Public Spending". *Quarterly Journal of Economics*, 119(1), pp. 189-221.

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