MICROFINANCE AND SELF-CONTROL OPTIONS: ALTERNATIVES IN DEVELOPING COUNTRIES

Microfinanzas y opciones de autocontrol: Alternativas para los países subdesarrollados

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Summary

This paper focuses on understanding the impact of microfinance on poor households’ self-control capacities and wellbeing. The analysis is based on empirical data about the positive and negative effects of international microfinance experiences. Evidence suggests that microfinance programs can be a positive alternative to improve self-control choices in developing countries. Right microfinance strategies allow gradual accumulation of assets, leading to better control options for poor agents.

Key words: self-control, time inconsistence, preferences, poverty, microfinance, microcredit.

Resumen

El artículo tiene como objetivo dar a entender el impacto de las microfinanzas en la capacidad de autocontrol y el bienestar de las familias pobres. El análisis se basa en datos empíricos acerca de los efectos positivos y negativos de las experiencias internacionales de microfinanciamiento. La evidencia sugiere que los programas de microfinanciamiento pueden ser una alternativa positiva para mejorar las opciones de autocontrol en los países en desarrollo. Estrategias de
Microfinance and self-control options: alternatives in developing countries

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Microfinanciamiento correctas pueden permitir una acumulación gradual de activos conduciendo a mejores opciones de autocontrol para los agentes pobres.

Palabras Clave: autocontrol, inconsistencia temporal, preferencias, pobreza, microfinanzas, microcréditos.

Introduction

Self-control problems and its relationship with financial behavior are widely discussed by scholars. These issues are particularly relevant for macroeconomic policy and household wellbeing. People with self-control issues usually try to take measures in order to resist temptations. Impulsive agents may use internal or external mechanisms to control their time inconsistency problems. Nevertheless, people in developing countries tend to have less self-control options. Poverty and other difficult conditions can undermine their capacity to overcome temptations.

On the other hand, over the past few decades, many poor countries have developed microfinance programs. Such mechanisms are gaining popularity lowering poverty levels and increasing the access of poor households to financial services they previously lacked.

This paper tries to identify microfinance and microcredit benefits, as a possible solution to the lack of self-control options in developing and emerging countries.

Particularly the investigation is focused in the relationship of self-control and time inconsistency problems with financial behavior, financial wellbeing and poverty. The objective of the paper is to highlight positive and negative effects of microfinance mechanisms in the capacity of poor households to control their behavior.

I. Self-control in microfinance

Literature provides many definitions about self-control. Generally, self-control is defined as the ability to regulate current behavior (bad habits, temptations, impulses), in order to obtain larger benefits in the future (Barkley 1997) (Stromback, et al. 2017).

According to (Duckworth and Gross 2014) and (Baumeister, Vohs and Tice 2007), controlling personal behavior is closely related to reaching key goals. Besides, self-control also plays an important role choosing which of these goals
to pursue, the right strategies to achieve them, and when to change these objectives or even quit (Fujita 2011).

Some authors\(^1\) analyze self-control comparing individuals and firms. There are certain points in time when agents face conflicts of interests similar to the ones between the owner and the manager of a business. Both agents and firms try to solve behavior issues in a similar way.

Inadequate self-control has been linked to behavioral and impulse-control problems, which affect several areas of life. Impulsiveness is commonly reflected in addictions\(^2\), overeating, reckless sexual behavior, crime and violence, overspending, among others (Ariely and Wertenbroch 2002) (Baumeister, Vohs and Tice 2007). (R. Baumeister 2002) describes at least three main aspects relevant to self-control: the standards, a monitoring process and the operational capacity to alter one’s behavior. If one of these features fails, self-control capacity will be affected. Standards are much related to guidelines that specify a desired response, like goals, ideals and norms; and monitoring means keeping track of the relevant behavior. The third cause for self-control failure is associated with the ability to influence personal motivations.

According to (Ameriks, et al. 2007), most theories of self-control suggest that there is an important difference between liquid and illiquid assets. They conclude that individuals find hard to avoid spending impulses when their assets are liquid enough. Also, self-control problems depend on the age of agents. Older individuals experience less self-control problems than younger ones, since temptation drops with age. Opening a savings account for retirement allows the agent to access the money in a moment when self-control problems are no longer significant (Ameriks, et al. 2007).

Some papers focus in the difference between “naive” and “sophisticated” agents with self-control problems. Naïve agents are not aware of the future costs of their behavior. Sophisticated ones know about their control issues and try to solve them (Fudenberg and Levine 2006). To face behavior problems agents may use either internal psychological mechanisms or externally enforced commitment devices (Bernheim, Ray and Yeltekin 2015).

**Time inconsistency preferences**

Many economists are interested in time-inconsistent behavior because it is relevant for macroeconomic policy and savings behavior. Time inconsistency

\(^1\) See (Thaler and Shefrin 1981) and (R. Thaler 1980).
\(^2\) Alcohol and drug abuse, smoking, gambling addiction, etc.
predicts that some situations lead to great impatience, altering consumers balance between current and future benefits. The same person could show different behavior according to particular situations. Sometimes people cannot resist immediate satisfaction, while in a different moment they can restrict themselves thinking of future benefits (Hoch and Loewenstein 1991).

Preference changes could be explained by agents struggling at the same time with immediate motivations and long term concerns. Agents with a high need for current satisfaction are often called "myopic" or "time-inconsistent" by economists (Hoch and Loewenstein 1991).

(Ariely and Wertenbroch 2002) argue that self-control problems are much related with inconsistent preferences through time or context. Facing a certain reward today and a bigger one in the future, many people choose the smaller because benefits are immediate. Nevertheless, if there is a time lapse between the two options, the same agents may choose to wait for the larger option (Gul and Pesendorfer 2004) (Fudenberg and Levine 2006).

(Thaler and Shefrin 1981) use the mentioned comparison of people and firms to explain the conflict between short-run and long-run preferences. While the “planner” is concerned about future utility; the “doer” exists only for one period, so he is selfish and just wants to maximize present utility. A similar conflict occurs with individuals. Another possible explanation for the conflict is that people act according to their “discount rates”, meaning that they can calculate the value of future consumption in any point in time by using a personal rate (R. Thaler 1981).

Time inconsistent behavior has motivated models of quasi-hyperbolic time discounting. These models argue that temptation for immediate benefits have a disproportionate effect on preferences over time (Fudenberg and Levine 2006).

**Self-Control, financial behavior and financial wellbeing**

People with adequate levels of self-control usually show a better performance in certain stages of life. They have better interpersonal relationships, stronger and more solid families, and fewer emotional and psychological problems. It is also recognized that people with high self-control can manage their money better than other people, showing higher levels of savings and less spending (R. Baumeister 2002). On the contrary, people with self-control issues behave against their own best interest, which is reflected in financial wellbeing.

According to (Heidhues and Botond 2010), access to competitive credit markets allow consumers with self-control issues to over borrow. Large debt leads to major welfare losses, having to pay the penalties and back load repayment.
Agents with hyperbolic preferences choose to borrow with the compromise to return the loan in one period. But actually they have low chances to fulfill the promise. When repayment strategies fail, agents end up paying the loan and expensive interests over many periods (Melzer 2011). There is also a close relationship between present-biased time preferences and credit card borrowing. Present-biased individuals are more exposed to have large credit card debt (Meier and Sprenger 2010).

(Heidhues and Botond 2010) also share the idea that consumers with self-control problems underestimate their capacity of repaying loans in the future and tend to indeb over their repayment capacity. Moreover, firms may try to take advantage of consumers’ behavior problems. They may offer contracts to confuse naive agents, making credit seem cheap and attracting them to an endless cycle of debt and payments.

Individuals also tend to spend easily unexpected cash receipts. If the same amount of money is received in a bank account, the probability of spending it is lower. The probability of saving part of the receipt raises as the amount of money received increases (Fudenberg and Levine 2006).

On the other hand, people with proper self-control are more likely to regularly save money. This allows a better respond to shocks in the short run and possibly higher levels of accumulation for the future. Savers have a better social positioning than non-savers regarding income levels and education. On the contrary, agents with low self-control will probably save less or won’t save at all. One of the negative effects of self-control problems is that people tend to save too little for retirement (Stromback, et al. 2017).

(Rha, Phillips and Hanna 2006) studied the relationship between mechanisms of self-control (saving goals, foreseeable expenses and saving rules) and households’ saving behavior. According to their research, households that have saving rules are likely to spend less compared to their income levels. These rules are a powerful way to increase saving rates.

Adequate levels of self-control generally have a major repercussion in a persons’ financial behavior. Controlled agents are able to better handle present and future financial decisions. The effects of proper financial behavior will reflect in financial wellbeing (Stromback, et al. 2017).

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3 E.g. saving a certain portion of a second earner’s income or a percentage of household income to achieve certain saving goals.
Self-Control and Poverty

People aware of their self-control problems use persuasion mechanisms to regulate their own behavior. According to Hoch and Loewenstein (1991), individuals use internal tactics and willpower strategies as part of their personal control mechanisms. Anyway, even if sophisticated agents try to regulate their behavior, eventually they tend to deviate from their objectives. When internal mechanisms fail, sophisticated agents may appeal to enforced commitment devices as a possible choice (Ameriks, et al. 2007).

Anyhow, in emerging markets and developing countries a large proportion of the population lives in poor conditions. When monetary resources are low, self-control mechanisms and commitment devices lack much sense. Poverty and lack of self-control options are common problems in these countries (Bernheim, Ray and Yeltekin 2015).

The definition of self-control as the regulation of feelings, temptations or impulses in order to achieve best results in the long run (Barkley 1997), implies the idea that there are things that we must resign in present. Self-punishment in order to get higher future consumption becomes credible when there are some starting assets to accumulate.

Some authors argue that low initial assets can limit self-control, trapping people in poverty, while individuals with high initial assets can accumulate indefinitely (Bernheim, Ray and Yeltekin 2015). Economic decision-making is more difficult for poor people, because it represents a more conflicting trade-off among more important priorities. It is hard for poor people to plan for future periods and even start saving if they are too concerned about basic current consumption needs (Spears 2011). Poor people also lack credit access because they fail to provide collaterals demanded by banks, so they have even less behavior control options. (Bernheim, Ray and Yeltekin 2015).

In that sense, policies to initiate accumulation among the poor may be effective. Also actions that increase access to credit can help people become savers, improving their self-control options. Microfinance, particularly microcredit will be analyzed further in this paper as an alternative for poor households to access financial resources and improve their self-control capacities.
II. Microfinance as an alternative to increase self-control options

Over the past few decades microfinance\(^4\) programs have been introduced in many countries. Microfinance institutions (MFIs) have become a common mechanism to fight poverty in developing and emerging countries. According to the Microcredit Summit Campaign Report 2014\(^5\), about 144.31 million poorest clients of MFIs were reported during 2013 in the Asia and Pacific region. Of these poorest clients, 82.6% were women\(^6\) (Microcredit Summit Campaign 2014).

Poor households face trouble accessing traditional financial services (e.g. credit, savings, repayment mechanisms, etc.). Thus, MFIs become an inclusive alternative with meaningful effects towards development (Gutiérrez 2009).

Sometimes people cannot provide the collaterals demanded by traditional banks. Then, small scale loans could allow them to access the funds to start or develop their own business. Access to financial services could be essential to expand poor people income (Mena 2004). Subsequently, these people will be in better conditions to satisfy their needs and overcome poverty on their own (Samer, et al. 2015).

Through microcredit\(^7\) granted to the poorest, especially women, people may become economic actors with power. They may be capable of increasing live conditions, improve their surrounding environment, especially for their families. Microcredit is particularly important for poor people living in rural areas in developing countries. Better access to resources may allow them to start a small business to fight absolute poverty (Bakhtiari 2006).

MFIs’s main services are related to microcredit under diverse schemes. They also provide accounts for savings and long term deposits. Many microcredit programs include a savings feature. The idea is to reinforce saving habits to

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\(^4\) Microfinance is the provision of a range of financial services to low-income and otherwise disadvantaged, micro enterprises or households, who has no access to the conventional banking sector. The range of financial services includes savings, loans, insurance, leasing, money transfers, and others. (Bakhtiari 2006) (Fenton, Paavola y Tallontire 2017) (Mena 2004).

\(^5\) Most recent published report.

\(^6\) Women are a common target group for microcredit programs since they show better business skills and repayment rates than most men. Historically women had limited access to credit services, but evidence shows that their income usually has a larger benefit for the family. Microcredit improves women financial wellbeing, their decision power and the position they hold in family and society (Martínez y Alberto 2008).

\(^7\) Microcredit emphasizes the provision of small loans to the poor and other people excluded from the traditional credit channels. Microcredit strategies improve cultural values training people to better handle their money (Gutiérrez 2009).
support the sustainability of the system. Increasing savings could eventually allow agents to overcome the need for external help. Furthermore, financing part of the credit with the deposits of their own clients increases payback motivations (Martínez y Alberto 2008).

Microfinance mechanisms, especially microcredit, provide many advantages over the formal and informal traditional finance sector. Microfinance services usually offer better interest rates than private moneylenders. They also provide additional services like training and technical assistance for their clients to support a higher success and repayment rate.

Compared to the formal sector, microfinance services offer certain advantages. First, they improve access levels by overcoming certain barriers. Microfinance institutions generally demand less warranties, offer more flexible conditions, and imply less transaction costs. Second, they could work as a bridge towards formal financial institutions. Using microfinance as collateral could allow access to larger sources of credit. Anyway, these options are still too expensive for a group of agents and they face geographic and resources limitations. Hence, microfinance alternatives cannot cover the whole demand for such services (Gutiérrez 2009).

**Examples of Microfinance effects over wellbeing and poverty**

Microfinance mechanisms have a positive impact over people wellbeing. Most theories suggest that such mechanisms, particularly the ones related to credit, could reduce poverty and associated problems.

A study conducted by (Agbola, Acupan, & Mahmood, 2017) involved a survey of 211 households in Northeastern Mindanao, the Philippines. Their findings proved a modest improvement in the wellbeing of microfinance clients, mostly in terms of income and savings. The research indicates that microfinance causes a positive impact in poverty reduction. These authors also highlight the importance of government participation in the success of microfinance mechanisms. Public institutions could promote legal and regulatory policy to increase the effectiveness of microfinance programs.

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8 The informal financial sector includes individuals such as moneylenders, relatives, friends, neighbors, landlords, traders, etc. It usually implies a high degree of flexibility, ease of transactions and emphasis on personal relationship, compared to the formal financial sector (Bakhtiari 2006). Many poor people can only access the informal financial sector because traditional banking sets too high access standards.

9 Include central banks, commercial banks, development banks, saving banks, social security schemes, and insurance companies (Bakhtiari 2006).

10 Including microfinance clients and non-clients to establish a comparison between results.
More recently, using a data set of 106 developing and emerging countries for the period 1998 to 2013, (Zhang, 2017) noted that microfinance reduces the incidence, depth and severity of poverty, even at the macro level. This approach suggests that the success of microfinance strategies in developing and emerging countries depends on the willingness of agencies and governments to provide more funds to MFIs.

In Bangladesh for example, a panel data research conducted by (Khandker, 2005) suggests that access to microfinance has a positive\textsuperscript{11} impact reducing poverty levels for most participants. Nonparticipants could also benefit from the associated increase in local income levels.

Also in Bangladesh, (Nawaz, 2010) conducted a village study finding that microfinance has resulted in a moderate reduction of poverty levels for most borrowers. This study concludes that microfinance programs need complementary services to succeed and have a major impact. Main complementary activities include skills training, technological support and education and health related strategies.

Similar results were obtained in India by (Imai, Arun, & Kobina Annim, 2010). Using the Indexed Based Ranking (IBR) Indicator and The Propensity Score Matching (PSM) Model, these specialists proved that MFIs play a significant role in poverty reduction. The studies of (Samer, et al., 2015)(Afrane, 2002) and (Bali, Van, & Van, 2008) support the positive effect of microfinance reducing poverty in Malaysia, Ghana, South Africa and Vietnam.

Despite the large amount of empirical work supporting the positive effects of IMFs over poverty, some authors deny the efficacy of such institutions permanently reducing poverty levels. Also, increasing credit access in the short run not necessarily improves financial literacy, education, health, or women’s empowerment (Banerjee, Duflo, Glennerster, & Kinnan, 2015).

Analyzing microfinance institutions in Ghana, some other authors\textsuperscript{12} conclude that the microfinance institution reaches disproportionately a minor percentage of very poor people. (Coleman, 2006) got a similar result, analyzing selection criteria of two microfinance programs in Thailand, where wealthier villagers are significantly more likely to be selected than the poor.

\textsuperscript{11} Especially for female participants.

\textsuperscript{12} See (Adjei & Arun, 2009).
Main Lessons

Actually, there is no a general accepted idea regarding the role of microfinance related to poverty. A possible explanation is that the results obtained in many papers have been influenced by the significant differences in the specific characteristics\(^\text{13}\) of the selected places (Samer, et al., 2015). Anyway, many researches acknowledge that microfinance strategies improve life conditions and reduce poverty of individuals. Even if the impact of such strategies in the macro level is uncertain, in the micro level the effect could be relevant.

Microfinance and microcredit could increase self-control options of poor agents in emerging and developing countries. Microfinance strategies allow poor households to handle risk, invest in better nutrition, health and education. They can also develop their micro enterprises, and enhance their income earning capacity\(^\text{14}\). All these possibilities improve agents’ preparation and their self-control options.

A general idea associated with the impact of microcredit is that it has a major effect on the structure of household consumption. People with better credit access could invest more in home durable goods and reduce expenses related to temptation and recreational goods (Banerjee, Duflo, Glennerster, & Kinnan, 2015). Microfinance also benefits other financial outcomes, like savings and the gradually accumulation of assets (Bali, Van, & Van, 2008). Higher levels of assets allow agents to break the poverty trap and increase their self-control capacity.

Nevertheless mentioned benefits are not automatic. Agents must make efforts to control their own impulses. With microfinance programs people can access some goods that they previously lacked. But if agents waste the opportunities, they would probably end up worse than before. Agents who fail controlling consumption impulses may fall into an endless cycle of overspending, debt and poverty.

Restricting IMFs functions only to financial services can limit their benefits towards poor households. It is important then to combine these institutions with supporting strategies. Governments should promote programs to train the subjects and improve their management skills. Public institutions should also promote these strategies among poor countries, increasing available funds to support the impact and durability of the results.

\(^{13}\) For example: population density, attitudes to debt, group-cohesion, enterprise development, financial literacy, financial service providers, etc.

\(^{14}\) See (Samer, et al., 2015), (Bakhtiari, 2006), (Hermes & Lensink, 2011).
Conclusions

Self-control problems are closely related with inconsistent preferences through time or context. Good self-control is particularly important for the financial behavior of people and their financial wellbeing.

Poverty and lack of self-control options are common problems in developing and emerging countries. Low initial assets can limit self-control, trapping people in poverty, while individuals with high initial assets can accumulate indefinitely. Microfinance institutions emerge as an alternative to solve these issues. Many authors have analyzed microfinance repercussion over poverty and wellbeing.

Maybe microfinance strategies cannot solve countries’ poverty and development problems, but in the micro level they can generate important benefits for poor households. Poverty reduction increases self-control alternatives.

Microcredit affects the structure of household consumption. Better credit access increases the chances for agents to invest in durable goods, reducing expenses in temptation and recreational goods. Microfinance strategies also improve financial outcomes related to savings and assets accumulation.

Anyhow, these benefits are not automatic. People who still cannot exercise self-control will fall into a vicious circle of debt and expenses that will worsen poverty conditions. Policy makers should implement strategies for promoting savings and creating better access to microfinance. Also, more funds should be directed from development agencies and governments into MFIs in emerging and developing markets.

References


