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Although households in developing and emerging countries are relatively poor, there is potential to save. For example, one study estimates that up to 8.1% of a poor household's budget in such countries is spent on so-called temptation goods, like alcohol, tobacco, and festivals ([Banerjee and Duflo, 2007](#)). At the same time, many households are aware of the fact that they do not save enough. They name factors like self-control problems and family obligations as reasons why they cannot save more. In high income countries, *default assignments* already facilitate decision making in many areas of life. Among others, these could not just successfully increase organ donation rates ([Johnson and Goldstein, 2003](#)) but also retirement savings ([Thaler and Benartzi, 2004](#)). With the increased supply of formal financial services in the developing world, default assignments are also a promising and cost-effective tool for these households. Prominent studies on whether and how default assignments increase the savings of the poor are summarized below.

Economists believe that it is desirable for people to smooth consumption over time; e.g. save enough during good times to have more in bad times. The central question is how households with small incomes can be encouraged to save more without disrupting or, even worse, reducing their quality of life. Default assignments are promising because they do not restrict the choices of individuals. Imagine a choice with several different options given. For example, the choice to save between 0% and 20% of the current income for the future. The default option is the predefined option that will be implemented if a person does not make an active choice. The person is, however, free to switch to any other option; hence it is not a constraint. Still, especially for complex choices, defaults do matter. This is described as the default effect: from a given set of options, the default option is more likely to be chosen. Therefore, using default assignments to support the decision making process of individuals is a form of so-called *nudging* (see [Thaler & Sunstein, 2008](#)).

With the rise of formal banking in emerging and developing countries, different default assignments not only become possible but, in some cases, inevitable. Shifting poor people from the informal to the formal sector is possibly one of the largest default assignments that will be observed in the near future. This shift spans from providing formal bank accounts to formal health insurance and formal pension systems. In addition to all the other implications that formalization entails, it is also important to analyze potential default effects. Setting the "right" default might help to overcome various "behavioral" obstacles to saving more. The most prevalent obstacles in the developing world appear to be self-control problems and sharing obligations to the

family and kin. For both issues, it is supposed to be helpful if money is “out of sight and out of mind,” e.g. by storing it in a bank account rather than under the mattress.

Another potential factor is *mental accounting*: if money is labelled or attached to a specific purpose in an individual’s mind, for instance “savings,” the money becomes mentally less fungible for other purposes. These obstacles do not differ tremendously from those facing individuals in high-income countries like Germany. Hence, findings on how and why defaults work in lower income countries could help to understand the unintended effects of established defaults in countries where household finances are formalized for decades. Moreover, these insights can be used to design new policies built on the principle of choice architecture. These policies, for example, could help reduce the dramatic rise in old-age poverty that Germany is experiencing.

How to Uncover the Default Effect

Recently, studies that analyze how default assignments affect the savings behavior of the poor in developing and emerging countries were published. In these studies, the authors conduct “Randomized Control Trials” (RCTs) to estimate the causal effect of default assignments on savings. They study poor individuals who they randomly assign to different “treatment” groups, each receiving different interventions; in this case, different defaults. One group usually serves as a “control group” and does not receive any intervention. Then, average saving patterns across the groups are compared to each other. As persons are randomly assigned to different groups and everything else is held equal, a causal interpretation is possible.

We distinguish two different approaches to default assignments. The first group of studies does not require an active choice by the study participants. They are, for instance, either paid in cash or into their bank accounts, the latter with easy deposits and withdrawals of money. This is the traditional way of setting defaults and what we call “default assignments in a narrow sense.” There is a second set of studies that are related to default assignments. These studies require participants to explicitly commit to use a product that is randomly assigned to them by the study authors beforehand. Study participants are, for example, offered a bank account where their income is deposited. If they decide to use this account, from this point on, the default is that the money is on the account and not at home, although participants are still free to withdraw everything immediately. We coin this “default assignments in a broad sense,” because the default effect might emerge after an initial choice is made. Persons who actively decide to use a specific product might differ in various aspects from those who are automatically defaulted into one. Furthermore, the results of the second set of studies could be driven by reasons other than the default effect. Therefore, results must be interpreted with care.

Default Assignments in a Narrow Sense

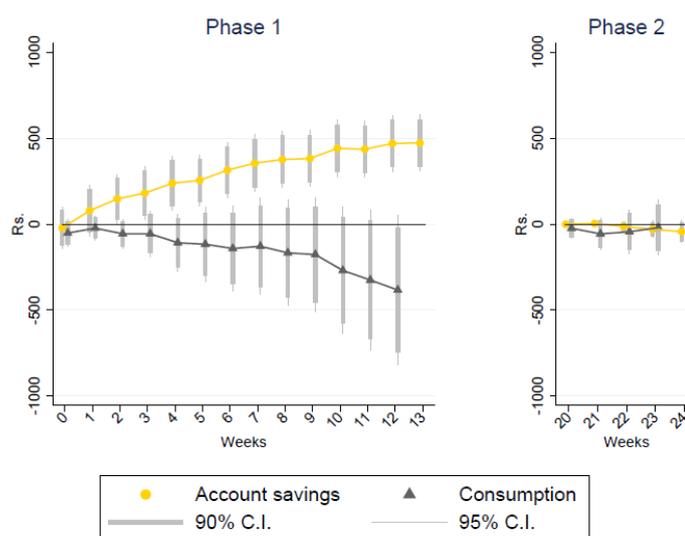
Blumenstock et al. (2018) cooperated with a large mobile phone operator in Afghanistan to install a phone-based savings account for their employees. Necessary information on how to use the mobile savings account was provided to all participating employees. The authors first randomly assigned them to have zero or five percent of their monthly salary deducted and directly transferred into the pre-installed account. The employees could change contribution rates at any time with a simple phone call. In a second step, financial incentives were randomly assigned. One third received a 50% percent match on their savings contributions, the second third received a 25% match, and the last third did not receive any match. The match was only paid if no savings were withdrawn during the six months that the study ran. In total, over 50% of the employees did not change their default assignment, including

39% of those who contributed nothing but would have received matching contributions. Overall, there was a large positive effect of default assignment on savings.

The default effect was roughly as large as the 50% matching contribution effect but was much cheaper to implement. Additionally, the authors found a long-term effect of attitudes changing in favor of savings products as well as less spending on temptation goods. After the experiment, every employee had to actively choose a new contribution rate and financial incentives were removed. Those originally assigned to the 5% default were 10 percentage points more likely to contribute. Empirical investigation on what was driving the default effect points to a combination of low self-control and a high cognitive cost of dealing with financial decisions.

In a study by **Somville and Vandewalle (2018)**, participants in rural India received additional money (about a daily salary) on a weekly basis after taking a household survey. In phase one, the money was randomly given either in cash or was directly transferred to a bank account that was pre-installed for everyone. All participants learned how to deposit and withdraw money. Transaction costs were negligible, because the bank branch was very close to the survey location and participants' homes. After three months, savings of those who received the money directly in their account were **131% higher** than of those who received the money in cash. Strikingly, the cash-receiving participants increased their consumption and this percentage increase was similar to the percentage increase in savings of the account-receivers. The positive savings effect lasted over 22 weeks after the last payment was made. The second phase began roughly 2 months after the first had ended. During this phase, all the participants were only paid in cash after the surveys. As seen in Figure 1, the difference in savings and consumption completely vanished. This shows that, in general, participants across both groups showed similar savings and consumption patterns and that the former difference occurred because of the different defaults. The authors found that participants were aware of self-control problems and that paying into the accounts helped to overcome these problems. They did not find evidence for redistributive pressure from social networks.

Figure 1: Gap in Savings and Consumption between Account and Cash Group



Source: Somville, V. and Vandewalle, L. (2018). "Saving by Default: Evidence from a Field Experiment in Rural India". American Economic Journal: Applied Economics.

In Malawi, **Brune et al. (2017)** investigated how much of an unexpected one-time

payment of around 60 USD is saved dependent on whether it was paid directly into a bank account or given in cash. All study participants had to come to the issuing bank to receive the money irrespective of assignment.

The money was issued either immediately, with a one day delay, or with an eight day delay. Receiving the money directly in the account led to significantly higher net deposits while receiving the money now or later did not have an effect. The impact was larger for women than for men. However, an increase in total savings could not be found because the formal savings account crowded out informal savings. The researchers argue that, even given a large one-time windfall payment, their study households were able to smooth consumption without a formal bank account. They did not find much evidence for self-control problems which might explain why they did not find a positive effect on savings.

Default Assignments in a Broad Sense

The study by [Brune et al. \(2016\)](#) randomly assigned tobacco farmers in Malawi to an offer of an ordinary savings account, an ordinary savings account plus a commitment savings account (CSA), or nothing. Study participants in the two account treatments were further offered to receive their harvest proceeds directly into these accounts. Those who declined or who did not have accounts received the proceeds in cash, which is the local standard. Offering savings accounts led to **higher savings**. Both account types contributed to this result, but the effect of the CSA was larger. The explanation the authors provide is that farmers could more easily resist sharing their proceeds with the social community because the money is (mentally) less accessible. However, farmers lived far from the next bank branch and the waiting time to withdraw money was long. It cannot be excluded that defaulting income to bank accounts led to higher savings because it both mentally and physically impeded access to the money.

[Dupas and Robinson \(2013\)](#) worked with Rotating Savings and Credit Associations (ROSCAs) in Kenya to examine how health savings could be increased. The researchers randomly assigned each ROSCA to be in a control group or to four different savings products related to health. The first product was a lockbox at home to store savings. Study participants were encouraged to write down the health product they were saving for and its cost on a passbook. Within the first six months, almost 75% of those who were offered the lockbox actually took it. It **positively affected** the level of health savings and investments. Given additional survey evidence, the researchers conclude that the lockbox worked primarily through mental accounting. Just due to the fact, that money inside the box was labelled as health savings and, thus, defaulted to this purpose, the funds were made less fungible for temptation goods or for claims from the social network.

Conclusion

After comparing the different study settings – employee or household oriented, agriculture or health oriented, saving proceeds or salary – defaults seem to be a promising tool to increase savings of the poor. Almost all studies found an increase in total savings (in both the short- and long-run). In only one out of the five studies were other forms of savings definitively crowded out.

Even for people without apparent self-control problems, reducing *temptation* seems to be an important channel through which defaults work. Transaction cost and cognitive cost are two other channels identified. In settings where these two costs are relatively high, assigning the right defaults, although cost-effective, might not be the desired method from a policy perspective. In these cases, defaulting becomes a highly

paternalistic measure and alleviating the “cost burdens” instead seems to be more appropriate. This again highlights the importance of financial education for decision making, also in high-income countries.

If default assignments are the policy instrument of choice, the first step is to increase (semi-)formal financial inclusion. Most households were not previously formally banked prior to participating in the respective study. However, assigning defaults is mostly coupled to the formal financial sector. At the same time, if increasing formal financial inclusion is the goal itself, possible default effects should be taken into account as they are almost inevitable. In some settings, using formal instead of informal financial products was already the actual default assignment that led to higher savings. However, the actual financial product offered played a crucial role as well. Therefore, the second step is thoughtful design. The defaults assignments presented here were designed by research teams in collaboration with saving institutions or employers and then evaluated with scientific methods. This approach is highly desirable for ensuring that the defaults are beneficial for the persons they are designed for. The size and the impact of the default effect cannot be generalized and strongly depends on the institutional and cultural setting. Nevertheless, apparently defaults do work, **whether intended or not**.

References

- Banerjee, A. and Duflo, E. (2007). [“The Economic Lives of the Poor”](#). *Journal of Economic Perspectives*, 21(1), 141-167.
- Blumenstock, J., Callen, M. and Ghani, T. (2018). [“Why Do Defaults Affect Behavior? Experimental Evidence from Afghanistan”](#). *American Economic Review*, 108(10), 2868-2901.
- Brune, L., Giné, X., Goldberg, J. and Yang, D. (2016). [“Facilitating Savings for Agriculture: Field Experimental Evidence from Malawi”](#). *Economic Development and Cultural Change*, 64(2), 187-220.
- Brune, L., Giné, X., Goldberg, J. and Yang, D. (2017). [“Savings defaults and payment delays for cash transfers: Field experimental evidence from Malawi”](#). *Journal of Development Economics*, 129, 1-13.
- Dupas, P. and Robinson, J. (2013). [“Why Don't the Poor Save More? Evidence from Health Savings Experiments”](#). *American Economic Review*, 103(4), 1138-1171.
- Johnson, E. and Goldstein, D. (2003). [“Do Defaults Save Lives?”](#). *Science*, 302(5649), 1338-1339.
- Thaler, R. and Bernatzi, S. (2004). [“Save More Tomorrow™: Using Behavioral Economics to Increase Employee Saving”](#). *Journal of Political Economy*, 112(S1), S164-S187.
- Thaler, R. and Cass, R. (2008). [“Nudge: Improving Decisions about Health, Wealth, and Happiness”](#). Yale University Press.
- Somville, V. and Vandewalle, L. (2018). [“Saving by Default: Evidence from a Field Experiment in Rural India”](#). *American Economic Journal: Applied Economics*, 10(3), 39-66.

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