Saving for the First Home

A Report for the Nationaal Instituut voor Budgetvoorlichting (Nibud)

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Background

Homeownership is a prominent societal value within the Netherlands. In a survey of Dutch students of the MBO, HBO, and university level, over 85% of respondents reported an intention to purchase their own home. This societal value is reinforced through governmental policy. Historically, Dutch banks lend at loan-to-value (LTV) ratios up to 120% of the value of the home, thereby making it possible for regularly employed people to secure a loan that covered the value of the home, associated fees, and closing costs. The mortgage loan could not be repaid until maturity and interest on the mortgage was tax deductible. A Dutch mortgage customer was thereby not required to save for out-of-pocket costs.

The international economic crisis of 2008 was largely due to mortgage lending failures. Dutch lawmakers recognized the financial vulnerability of their current system of upside-down loan values. In response, legislation is phasing out LTV ratios higher than 100% and reducing them down to as low as 80%. Additional regulations now also allow banks to offer better interest rates to mortgage customers who borrow at lower LTV ratios. These new regulations make it necessary to save money in order to pay the costs of the mortgage and, ideally, some amount of down-payment.

The National Institute for Budget Information (Nibud) advises Dutch consumers on developments and recommendations in effective personal and household financial management. Nibud is worried that inertia and lack of salient information about new housing regulations will lead to a problem of first-time homebuyers not having the newly required savings necessary to secure a mortgage. Admittedly, this hypothesis may not be valid if the Dutch population continues to be savers as they have been for generations. While most of the citizens' wealth is tied up in pensions and home equity, about 65% (CPB and DNB, 2013) of the Dutch GDP is available in the form of savings and stock accounts, in other words, liquid assets. Moreover, the IMF (2013) reports that the Dutch average household saves about 6.5% of its net disposable income, with the low in 2010 reaching no less 4%.

Nonetheless, we are exploring nudges to reduce the likelihood of a problem developing from the regulatory changes. This report outlines the decision process for saving for a home purchase, the related behavioral biases, and the intervention to overcome the problem. A randomized control trial design to test the intervention, the considerations and limitations, and other possible solutions will round out the analysis.

Research

Relevant research included:

- Nibud-generated reports: “MBO’ers and Money Matters”, “At-Risk Groups for Mortgage Provision”, and “Research on Student Finances”
- 2014 Dutch Banking Association report on the Dutch Mortgage Market
- International Monetary Fund report on the Kingdom of the Netherlands
- World Bank statistical tables on Dutch homeownership and mortgage lending
- Interviews with mortgage and savings experts from Dutch commercial banks
- Survey of both MBO, HBO, and University students (n=101)

In our own survey conducted among 101 students of all three different levels (MBO, HBO and University), we found that 88% of the respondents expressed an intent to own their own home in the future. IMF developed a report about the Kingdom of the Netherlands in 2014. The report stated that approximately 65% of the houses in the Netherlands are owner-occupied (2014). Together the survey and report show a strong social-norm of home-ownership in the Netherlands. The embedded societal expectation is that salaried professionals purchase their first home at age 27, on average, according to an ING housing market report (2012).

Our research revealed dynamic inconsistency of saving behavior as the larger problem than the *awareness* of the new regulations that Nibud had hypothesized. While only 21% of our survey respondents were aware of the regulation changes, 90% of the respondents whom intend to purchase a home were aware that they need to save money in order to do so. And 92% estimated that they needed 10.000 euro or more – the target amount that Nibud utilizes for sufficient home savings. An ING survey conducted amongst potential first-time home buyers (defined as employed individuals that intend to purchase a first house within the next 3 years) revealed that 37% of the respondents had not begun saving. The ING results along with our survey suggests that while most young people are not aware of the regulation change, but they are aware of the need to save in order to purchase a house.

Decision Process

We reconstructed the multiple cognitive steps and corresponding actions involved in saving towards a first-home purchase in order to identify the specific point(s)-of-failure in an individual’s decision making. Our literature review and survey suggests that several biases interplay at each step to obstruct the observed savings behavior.

The initial step is the recognition of the need and importance of saving for a house. This step most directly corresponds to the awareness of the regulation change (and the housing market more broadly). Our research suggests significant awareness of the need to save; however, the

survey data available may be skewed by the leading question prompts. The unprompted awareness is likely less.

Three behavioral tendencies interplay to attenuate awareness. Salience is low because the house-purchase decision is distant and the need to save receives limited attention. The regulatory change has generated media attention, but that seems to have had limited success in translating the changes into salient action items for young adults. The new information may also be subsumed on account of the availability bias engendered by the misleading previous examples of proximate home owners, *i.e.*, family and friends. Lastly, young adults face the challenges of information overload. In transitioning to working life, young adults face a multitude of issues that demand attention, such as insurance, pension facing, and career planning on their increasingly scarce time.

The next step in the cognitive process is the allocation of a specific amount to save. This is a complex calculation that depends on *future* house prices, as well as income. Even if young adults are aware of the need to save for house in general, they may not be aware or unwilling to delve into the calculation of the mortgage levels available (and hence, the necessary amount to save). In the face of such a demanding task, research suggests that individuals tend to revert to the status quo. This effect is often compounded by the complexity of the issue.

Another important behavioral tendency is hyperbolic discounting, which is the inability to conceptualize and invest for payoff at a future date (Frederick et al, 2002). Saving today to buy a house in several years is much harder than investing money for a car that you can use right now for example.

Opening a savings account is the next step in saving for the purchase of a house. This step is the easiest step in the decision process. As our survey showed, the vast majority of the target group has already a savings account. This means all of them should be able to easily open a savings account or start using it.

Once the savings account is operational, monthly deposits should be made to start saving. This proves to be a major bottleneck (together with allocating money to save, the most important one). Although the need to save is relatively well acknowledged by survey respondents, they also indicate to have little savings. Further literature also indicates this low level of savings in relation to the required amounts (Nibud, 2015).

Two important behavioral tendencies ensure the difficulty of actually making monthly deposits. First of all, at this point the actual financial loss will occur. Given people's strong tendency to loss aversion they are likely very reluctant to incur the direct reduction in their disposable income. This is exaggerated through hyperbolic discounting: by emphasizing the present loss and understating the future benefits, the cost becomes even larger.

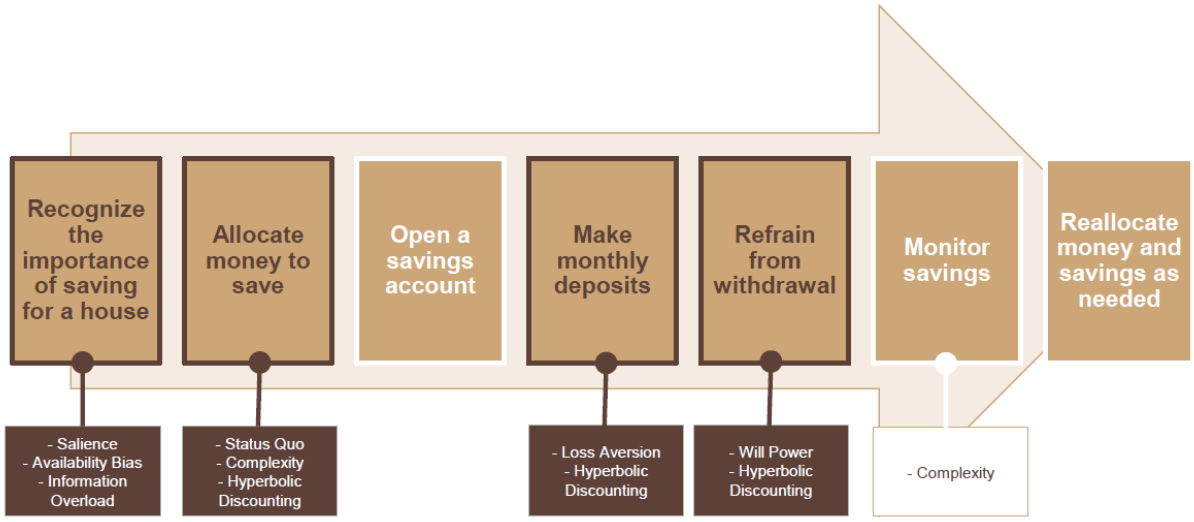
With deposits being made and the savings account getting some balance, it is crucial to refrain from withdrawing these earnings. These hard-earned savings are easily accessible for transfer to the current account and, hence, immediate consumption. With widely spread online and mobile banking applications, this has only become easier.

Here, again, some behavioral insights play a role in creating bottlenecks. Will power plays an important role. Where deposits are likely to be made when people's willpower is at its strongest, withdrawals are likely when it is at its weakest. This means that people will be more prone to behavioral biases. Here, again, hyperbolic discounting is an important one of these. By overvaluing present consumption and undervaluing future consumption they will find it very tempting to withdraw (some of) their savings. However, the third behavioral insight, mental accounting, plays a positive role in this step of the decision process. By depositing money into a separate account, i.e. a savings account, people engage in mental accounting (Thaler, 1999). Financially speaking, money is the same irrespective of the name of the account. However, people change their perception of the money once it is transferred to a different account. Money earmarked for savings, or a more specific goal, is less likely to be used for other purposes. Altogether, this means refraining from withdrawals out of the savings account is a bottleneck, but less so than making the deposits in that same account.

At this point in the decision process everything is actually proceeding nicely. As long as the allocation and deposits steps are executed correctly, monitoring savings mainly involves enjoying the steady progress of one's savings account balance. The need to actively monitor savings only arises from possible changes in the housing environment. For instance, mortgage regulations could change (once more); house preferences or price could change; and so could interest rates.

Complexity is a behavioral insight that could play a role here once more. Here, it is important to keep track of the housing environment, at least to some extent: important changes in the relevant variables should be noted. For example, for most consumers it will be hard to interpret the effect of a decreasing interest rate on their savings on the amount they have to save each month to reach their goal in time.

The final step is to reallocate money and savings in accordance to the findings from monitoring one's savings, i.e. changes in the housing environment. It might be necessary to save more or less per month; or withdraw or deposit extra savings from or to those aimed at buying a house. This includes the difficulty to determine how much to allocate to saving in the initial situation now that the situation has changed. But if that step was already dealt with properly in the earlier step it seems likely this can be repeated here.



The challenge of getting someone to sacrifice money in the present for a reward in the future is a monumental one and is the subject of extensive research. The overarching behavioral concept is present bias, which is a preference to have some measure of utility now, as opposed to some greater utility in the future (O'Donoghue, 2015). Present bias is one of the most powerful and pervasive biases in human nature and has severe personal and societal consequences, as evidenced by the longitudinal delayed gratification study done by Stanford psychologist Walter Mischel (1989) subsequent to his famous "marshmallow tests."

Present bias is a manifestation of several different biases that conspire to devalue the future relative to the present (O'Donoghue, 2015):

- Hyperbolic discounting is overvaluation of the present and undervaluation of the future far more than the simple opportunity cost difference predicted by traditional economics.
    - An important subset of hyperbolic discounting is "quasi-hyperbolic" discounting, which factors in an additional discount factor between "now" and "now +1" relative to between any other two time periods, which leads to "dynamic inconsistency", or a change in preferences depending on whether the choice is "now" or in the future.
- Exponential growth bias is the tendency for compound interest and other forms of exponential growth to be "smoothed" into a linear heuristic.
- Impulsivity and emotional "hot states" can significantly impact both spending and savings decisions.

The combination of these contributing factors leads to overuse of credit, overeating, procrastination, failure to exercise, dropping out of school, and – significantly for this case – under saving. In our research we found an exhibit dynamic saving inconsistency. That is,

survey respondents expressed an appreciation of the importance of saving for a home, expressed a desire to save, and expressed an intent to save, but will do it later.

Intervention

Based on Thaler's work (1999) on mental accounting, we felt it was important to have a separate salient account that was set aside for the expressed purpose of saving for the costs of securing a home loan.

Dutch workers have three major institutions that enable savings:

- Government (traditionally taken their pension savings directly from their paycheck and invested it for them)
- Employer (many of whom offer vacation savings plans, additional pension accounts, and health insurance accounts)
- Personal commercial banks (offer standard savings accounts, as well as customizable goal-savings accounts)

Based on literature (for example; Benartzi & Thaler, 2004), we believe that a government program that automatically deducts a small portion of income to be invested in a home owners account (unless the citizen purposefully opts out) would be the most successful program. However, Nibud has no regulatory power and pushing legislation of this type would be controversial and likely take a number of years.

The second most effective would again be an opt-out homeowner's account, but this one is dependent upon the employers. Nibud has limited influence on the over 800,000 employers in the Netherlands. While it might be worthwhile to work with major employers to encourage programs like this, the scope of instituting universal home-owners savings accounts through employers is well outside the mandate of Nibud.

However, Nibud has a well-regarded and established relationship with the banking industry in the Netherlands and could encourage banks to offer a specialized account to save for homeownership. Not only would this product be a service to the customer, but would benefit the banks as a natural pipeline into their mortgage lending divisions.

Such a specialized account would not be alien to Dutch banks. The major banks offer accounts or account add-ons whereby customers can partition money for particular things, set their own savings goals, and even set automatic deposits into those accounts. These goal-savings, or *doelsparen*, accounts, however, are all opt-in, customer designed and driven products. That is, the customer must intentionally set up and name their own account, based on their own savings priorities.

Our recommendation is for the banks to offer a predefined goal-savings account that is simple to activate (2-3 clicks) and contains behaviorally informed features which will encourage people to save to buy a home.

We named the account *Spaarhuis*. *Spaarhuis* would serve the primary function of compartmentalizing and earmarking otherwise fungible money. Additionally, with banks offering such a product, the account would reinforce the importance of saving for a home. *Spaarhuis* would help with mental accounting, overcome the present bias, point to the salience of saving, and provide direct information.

Product

Spaarhuis will be the product that Nibud can offer to the commercial banks to help people save for buying their first house. *Spaarhuis* is based on the already existing goal savings account that most commercial banks in the Netherlands offer to their clients. The main features of goal savings accounts are the creation, naming, and automatic transfers to the account. ING noted in an interview that the most common goals picked for goal savings accounts are for emergency buffers, vacations, and cars.

Spaarhuis will build on the features of the goal savings account. It will be a partitioned and earmarked account for saving to buy a house. *Spaarhuis* will allocate a predefined goal-account, which prioritizes home savings and will include tools to increase the savings amount. The account will be designed such that it minimizes obstacles to open/activate the account and thus minimizes the cognitive effort to begin saving. By earmarking the account to home savings and separating it from other savings accounts, customers will be assisted with mental accounting.

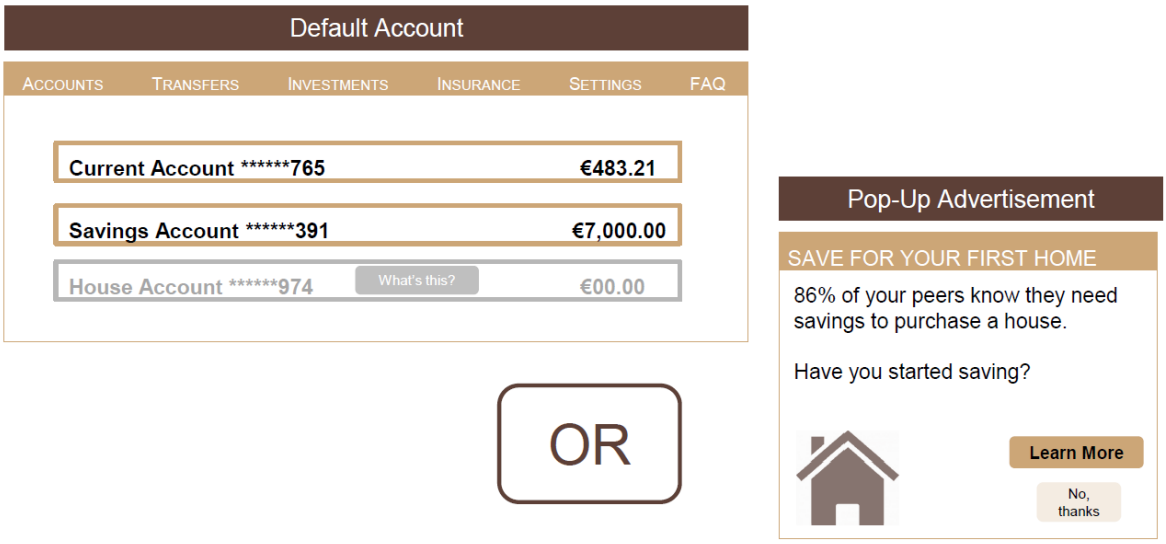
Customers will be presented with the account option in two ways, via automatic enrollment or a pop-up advertisement initiated in their personal online banking account. (This is further discussed in the study design section.) The default account will emphasize the salience of saving and overcome the status quo effect of not saving for a house. The pop-up will also emphasize the salience of saving, but will be an opt-in option.

The default account will be automatically generated for the customer and will appear when the customer logs in to his/her online banking account. The *Spaarhuis* account will appear with the existing accounts that the customer has, but it will be inactive. There will be a “What’s this?” button next to the account that will hopefully catch the customer’s attention to learn more.

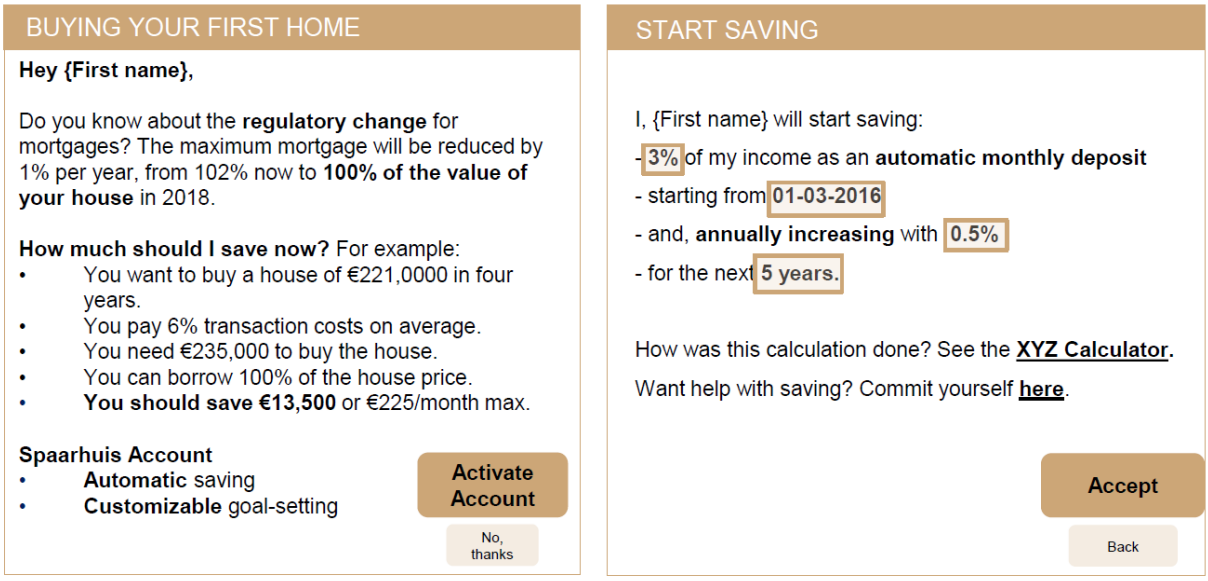
Literature shows that defaults can be used as a tool to help people save (see Appendix A). ING noted in an interview that it is experimenting with automatic enrollment to a savings account for customers that do not currently have one. The uptake for this account, measured as actively transferring money to the account, is ten times higher than through their traditional marketing.

This shows that it is possible for banks to implement automatic enrollment in saving accounts and that it seems to be an effective way to help consumers start saving.

Besides the default account, the other option is that the customers will receive a pop-up that will lead them to opening a house savings account. The pop-up should include minimal information in order to combat information overload. In this pop-up, a social norm about saving for a home will be included. Literature shows that the behavior of an individual is influenced by others across cultures, sectors and countries (see Appendix A).



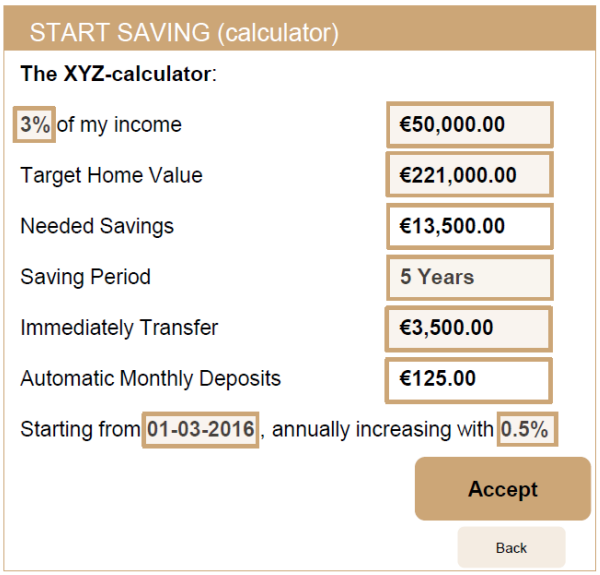
When the customer has clicked on "What's this?" on the default account or Learn More" on the pop-up, they will be led to a webpage containing information as to why it's important to save in order to purchase a home. This webpage (see picture below) will start with a personalize greeting, as people tend to respond to the use of personalization (see Appendix A). The webpage will also include information about the change in mortgage regulation, so the customer will understand the need for savings to buy a house. The webpage will also include an example that will help the customer understand how much they have to approximately save.

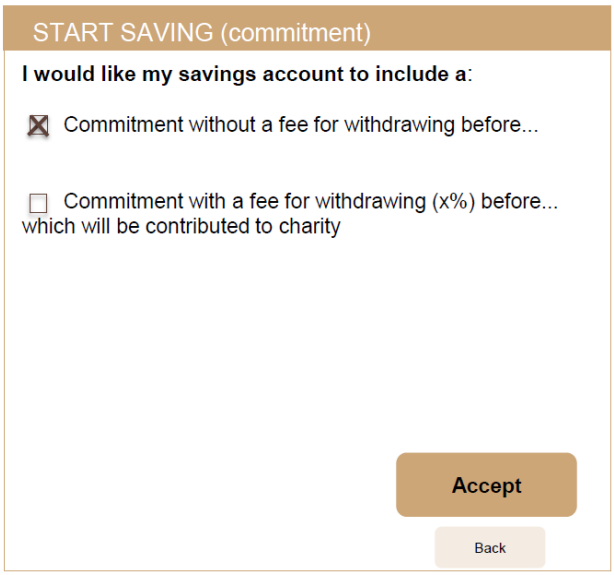


The customer will need to click the "Activate Account" button in order to initiate the account. Throughout the page, important numbers/actions should be bolded in order to focus the individual's attention on that information (see Appendix A).

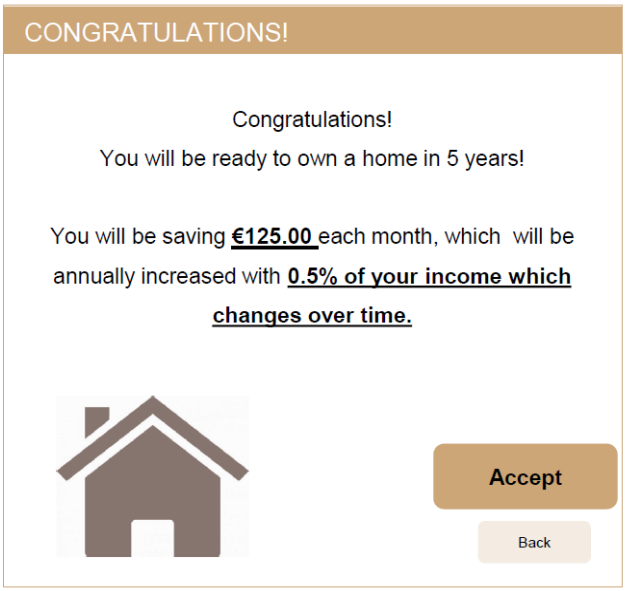
When the customer has clicked on "Activate Account", he/she will be led to the next webpage with the option to make automatic deposits to the account (see picture above). These automatic deposits will be presented in a default for the customer and will be calculated based on the personal account data of the customer. The use of defaults will make it easier for the customer, and literature shows that people tend to accept the default option (see Appendix A). The automatic deposits to the account will also include the option to "save more tomorrow", i.e. the customer can indicate a date in the future at which they will begin saving. Literature shows that this approach helps people to overcome their present bias and tends to lead to increased savings (see Appendix A).

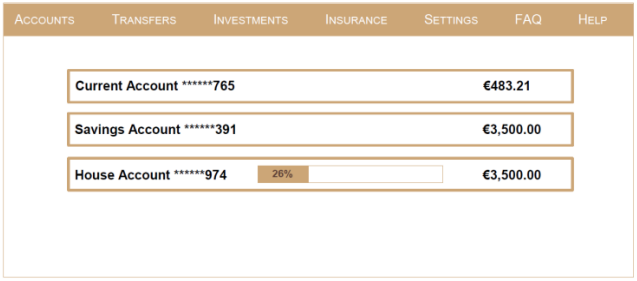
On the page for making the automatic deposits, there will also be two drop-down menus (see picture below). The drop-down menus will give the customer the option to adjust the calculation of the automatic deposit and to commit to automatic deposits. The calculator will be prefilled based on their personal account data; but again, the option will exist to adjust the numbers. The commitment drop-down menu will give the customers the option to commit themselves to not withdraw any savings till their goal is reached. The default option for this commitment device will be no commitment, since the interviews with the banks suggested banks are hesitant to be too intrusive with customers. However, it is worth noting that literature has shown commitment devices increase savings (see Appendix A).





The last webpage (see picture below) shown to the customers will be a summary of the previous steps and give them an overview of how much they will save each month. When the customer clicks on "Accept" his/her account will be activated and he/she will begin saving to purchase a house.





Sample Selection - Determining the Target Demographic

Initially, the focus was on Dutch students, due to the bifurcated Dutch education system. This effectively split the initial demographic into two groups: a large group of students who graduate from the secondary vocational education (MBO) at about 19 years old and another group of students who follow higher professional education or University (HBO/WO), and so do not generally enter the full-time work force until they are approximately 22 years old.

While we initially treated these groups as potentially requiring separate interventions, our research and interviews led us to the conclusion that MBO graduates, on average, buy their first homes roughly at the same age as University graduates (27 years old), and have approximately the same challenges and concerns when it comes to buying. We therefore elected to both unify those two groups of buyers and broaden our target demographic to include all first-time home buyers with steady employment who were struggling to save the requisite amount of money for securing the mortgage. From our own survey we found that most students don't have enough money saved to purchase a house, which is why we mostly focused on graduated students and starters on the housing market.

Our sample will focus on four main parameters:

- *Age 18-35*: this demographic will include the next generation of future homebuyers who are currently students as well as those who are starting their careers and beginning to potentially settle down.
- *Current savings < 10.000 Euros*: we want to screen out anyone who might already have adequate savings to purchase their first home and this is the lower end of the targeted home savings amounts suggested by Nibud.
- *Employed:* we will want to look at those who have a source of income from a job that generates at least 1.000 Euros per month for the participant. We believe that it is necessary for them to have a stream of income from which they could save for a home in order to be a valid candidate for our study.
- *First-time homebuyer:* with the Dutch people generally holding their properties for 30+ years on average (with more frequent turnover in the urban cities), we know that once someone buys a house they have a higher likelihood of being able to buy another property in future from the home equity value of their first home. Thus, we are focused on helping those who do not currently own a home to save and have the ability to make that first purchase, if they desired to do so. We will screen out subjects by looking at their mortgage relationship with the bank and at their checking account to see whether any payments are being made to an existing mortgage elsewhere.

In summation, we are targeting young adults who are employed but do not currently own a home and may not have enough savings to buy one anytime in the short-term.

Study Design

We will conduct a randomized control trial of the selected sample set. We have interviewed banks that we are able to run studies with 10,000 subjects in their sample sets without any problem on account of them having such reach with their millions of bank customers and with the ability to run the trials all online to manage the scale and data measurements. We would recommend having at least a sample size of 10,000 subjects unless a statistical power calculation calls for a need of a larger sample size, which may be the case depending upon the desired effect (i.e. how much savings growth you want the account holders to generate).

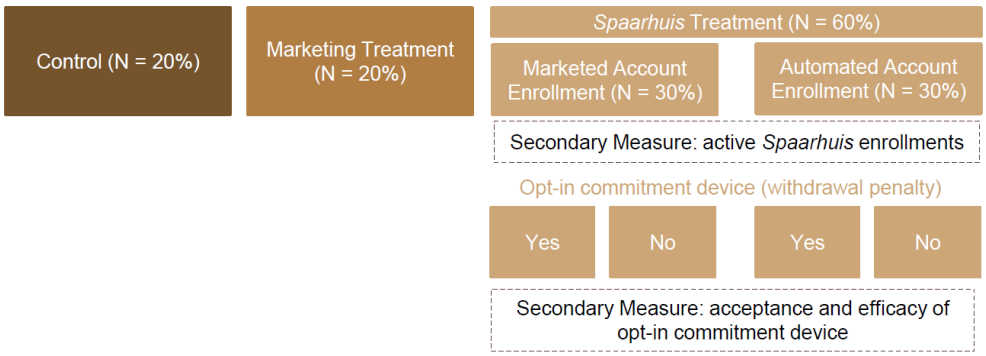
The sample would be split into three main groups: a control group; a marketing treatment group; and a product ("*Spaarhuis*") treatment group.

- *Control group:* current account holders without any treatments
    - Size: 20% of the sample allocated to this group
    - Goal: observe conventional savings habits of current
    - Measure: the increase in savings of control group over 3 year period
- *Marketing treatment group:* send marketing material to set of account holders with a message that instills the need to save and make use of current account
    - Size: 20% of sample allocated to this group
    - Goal: observe the effect that marketing and increasing awareness has on savings behavior by making the need to save more salient to subjects
    - Measure: increase in savings of marketing group over 3 year period
- *Product ("Spaarhuis") treatment group:* this group will be treated with the account product that was designed to save for a home using various behavioral insights. This group will be broken into two primary subsets based on the product delivery method: marketed product group & automated product group.
    - *Marketed product group:* a pop-up marketing display will be shown to this group providing social norms
        - Size: 30% of sample allocated to the marketed product treatment (half of the overall product treatment group)
        - Goal: see whether the uptake of the new product is higher when the account has been marketed to an individual and they opt-in
        - Measure:
            - primary - increase in savings over 3 year period
            - secondary - active number of *Spaarhuis* account enrollments compared to the automated delivery of the product
    - *Automated product group:* a pop-up marketing display will be shown to this group providing social norms
        - Size: 30% of sample allocated to the automated product treatment (half of the overall product treatment group)

        - Goal: see whether the uptake of the new product is higher when the account has been marketed to an individual and they opt-in
        - Measure:
            - primary - increase in savings over 3 year period
            - secondary - active number of *Spaarhuis* account enrollments compared to the marketed delivery of the product

Both of the product treatment groups (marketed and automated) will also be offered an optional commitment device, which would require an active choice by the participant. This commitment device would be in the form of a withdrawal penalty, which could potentially deter participants from withdrawing money for unintended reasons that do not involve the purchase of a home, the primary purpose for the funds placed into the product account. This commitment device would be completely optional and it is believed that while this feature may not be taken up by the majority, there may be a small minority of people who know that they need such a penalty in place to help keep them from accessing the money. We considered a commitment device that would not allow withdrawals whatsoever, which may have a higher efficacy, but believe it would be more feasible to first start with a study that utilized penalties as a device.

- *Optional commitment device:* product treatment groups would be given the option to voluntarily set up a penalty on unintended withdrawals as a future deterrent
    - Size: 60% of the total sample set (both of the product treatment groups) are given the option
    - Goal: assess the preference for having such a device to help account holders honor the goal commitment and observe the efficacy it has on savings amounts for those who do select such a device (keeping in mind that there is self-selecting bias for those who opt-in)
    - Measure:
        - primary - increase in savings over the 3 year period
        - secondary - uptake rate of those who actively choose to give up flexibility and to pay a future penalty on withdrawals



Considerations and Limitations

While we are confident that the intervention and study design will yield substantial results, there are some implicit considerations and limitations that should be noted.

Reinforcing Social Norms
The primary concern regarding this intervention is the assumption that the historical desire to own a home is both socially desirable and will be continued with the current generation of youth. What is the benefit to Dutch society to have everyone who wants their own home locked into a mortgage? Recent trends show significant change in American youth in this regard: millennials are showing a pronounced tendency to forgo the "American dream" of a house with a yard for an apartment in the city.

Resource Constraints
Nibud is an advisory organization with limited resources or ability to enforce action on market participants. The product design would have to be implemented by banks, employers, or government institutions.

Intensive Study Design
The experimental set-up envisions a two-year longitudinal study. We have included intermediate indicators to monitor progress and 'early-wins', but those are imperfect measures of savings behavior.

Big-Hammer Approach
The product design includes multiple embedded behavioral insights. The experimental set-up only allows for measurement of the cumulative effect and the variance in enrollment mechanism. We will be unable to assert the effectiveness or interaction of any particular behavioral insight(s).

Privacy
The product design envisions personalized recommendations based on existing customer profiles. Initial conversations with bank executives suggest that customers may find this overly intrusive. We would recommend an alternative study design that suggests savings pattern based on age-based national averages.

Crowding Out
Another major concern is these efforts to place a high priority on saving for homeownership might crowd out more important saving, such as the buffer money for emergencies.

Sample and Collection Error
The sample will be affected by the exclusive use of technology to deliver the product and inherent skews in the customer set of the bank selected to implement the study. The data

collection on savings increases may be distorted because of inability to access savings at other institutions or financial instruments.

Additional Intervention Possibilities

PIN savings
PIN savings would be an "Acorns" style spare change option on the customer's debit card that automatically rounds each purchase up to the nearest dollar/euro and deposits the difference in a homeowner's savings account.

Saving through employer
Nibud could seek the cooperation of employers in order to catch young adults in the transition from student to employee. In this case it should be possible, when the newly employed signing their first labor contract, to make automatic transfers from their salary to an earmarked savings account. This idea is based on the save more tomorrow program and could also include increased savings at salary raises (Benartzi & Thaler, 2004). In this case it's possible to overcome the problem of loss aversion, because the newly employed will almost certainly face an increase in income when they start working.

Use of secondary employee benefits
In the Netherlands, most of the employees receive the so called "vacation money" and/or the "thirteenth month". Both are secondary benefits included in the employee's contract and both are worth around one month's salary, this extra income could be used to help employees save. Instead of paying this money as salary, these secondary benefits could be transferred into the savings account of the employee.

Combine saving with live events
In order to make the event more meaningful, one could tie the decision to open a homeowner's savings account to a life event, e.g. graduation, wedding, birthday, or new job. The banks could also solicit parents and grandparents to deposit a gift into the newly opened account. To ensure that the gift is used properly, as a commitment device, the individual could only withdraw money with the permission of the parent/grandparent.

Education
Nibud could help increase awareness among young adults by hosting a day-long personal finance program in schools. The program could cover various important concepts to Dutch young people, including the new regulations and the opportunity to sign up for a home savings account.

Cellular Phone Application
A smartphone app could be developed that reminds and encourages home savings via text message reminders and rewards badges.

Nibud website
Nibud could utilize its website to not only display knowledge, but to also utilize other nudges such as face-aging technology and direct links to the banks that implement the home savings accounts.

Appendix A: Behavioral Theories used in the Nudge

Social Norm
It is shown by Elster (1989) that the behavior of an individual is influenced by others across cultures, sectors, and countries. Social norms guide our behavior and create awareness of what other people do by means of descriptive norms. The Behavioral Insights Team (BIT) found that there was an increase in tax payment rates when including factual statements in the tax bill statements about how the majority of people had already paid (Hallsworth et al., 2014). According to Allcott (2011), comparing the energy use of a household with that of a neighbor can have a similar effect in reducing energy usage. Furthermore, Ruefenacht et al. (2015) found that social norms have a positive effect on the perceived importance of long-term savings.

The BIT described three principles to keep in mind when incorporating social norms: (1) show that people perform the desired behavior, (2) use the power of networks, (3) encourage people to make commitments (Service et al., 2014). These principles can be applied to the case of savings by stating the social norm to guide individuals towards the desired behavior.

Simplification
People often encounter an action or goal that is overly complex and/or difficult; and this complexity prevents them from acting. As shown by literature, reducing the complexity of an action can affect the behavior. This can be done by making forms or letters easier to read (BIT, 2012) or providing better information (Bettinger et al., 2009). The BIT identified five main lessons about simplification: (1) the key message should be presented early (preferably in the first subject line or sentence), (2) the used language should be simple, (3) recommended option should be specified, (4) a single point of contact for responses has to be provided, and (5) all information that is not directly necessary for undertaking the action should be removed (Service et al., 2014).

Personalization
According to Service et al. (2014) it can be predicted that individuals are more likely to do something that attracts their attention. This can be achieved by using personalization, as our attention is quickly and effortlessly drawn to our own name (Newman, 2005). Personalizing letters (Kling et al., 2011), text messages (Castleman & Page, 2013) and emails (BIT, 2012) has proven to be effective in increasing response and/or payment rates.

Commitment
A field experiment conducted by Brune et al. (2011) in Rural Malawi examined whether commitment devices could encourage savings amongst Malawian farmers. They offered ordinary savings accounts and commitment saving accounts to the farmers. The commitment accounts restricted money access until a designated date, while the control group was not offered any special account. Only the commitment accounts had significant impacts on savings. Furthermore,

Ashraf et al. (2006) found that a commitment-financial product increased savings by 81% over one year. However, this effect disappeared over time and is reduced to a 33% increase in 2.5 years (Ashraf et al., 2006). Generally, different forms of commitment features can be set up on both the deposit and withdrawal side. For the deposit side, the commitment could be via automatic transfers or automatic increases; and for the withdrawal side, a withdrawal fee, delayed withdrawals or peer monitoring could serve as commitment devices (Ashraf et al., 2003).

Default

Pichert and Katsikopoulos (2008) hypothesized that people use the kind of electricity that is offered to them (i.e. the default). They conducted two natural studies and two experiments to support their hypothesis, finding that making 'green utility' the default increased the take-up of it. Furthermore, Madrian and Shea (2001) found that a default in a savings program is incredibly sticky both in terms of how many people do not opt out of it and how many people stick with the automatic savings rate. The 'save more tomorrow' program by Benartzi and Thaler (2004) confirmed these findings. The savings rate for program participants increased from 3.5% to 13.6% over the course of 40 months while savings rates remained stagnant in the other two conditions.

Salience

The term 'salience' is used by behavioral scientists to describe the way in which individuals are more likely to respond to stimuli which are simple, novel and accessible. (Service et al., 2014). In other words, if our attention is drawn towards something we are more likely to do it. According to the BIT (2012) people can be encouraged to do the right thing by highlighting key messages. This draws people's attention to important information or required actions. Furthermore, highlighting key information can help to induce what Kahneman calls 'cognitive ease', this helps to make it easier and simpler for people to process and understand information (BIT, 2012).

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