

# The Customer Cannot Choose

Bas Donkers



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**The Customer  
Cannot Choose**

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# **The Customer Cannot Choose**

Address given in shortened form at the occasion of  
accepting the appointment as Endowed Professor of Marketing Research  
at the Erasmus School of Economics, Erasmus University Rotterdam, on behalf of  
Vereniging Trustfonds EUR, on Friday, April 12, 2013

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## Samenvatting

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### De klant kan niet kiezen

Mensen kunnen kiezen en ze maken veel keuzes iedere dag. De meeste mensen zijn zich echter niet bewust van de invloed van hun omgeving op de keuzes die ze maken. In zijn rede gaat Bas Donkers in op de impact van wat mensen zien (en wat ze niet zien), van wat mensen ervaren (en wat ze juist niet ervaren) en meer algemeen de impact van de meest opvallende kenmerken van de beslissingscontext op de uiteindelijke keuze. Bewijs zal worden geleverd aan de hand van een aantal toepassingen die variëren van online consumentenzoekgedrag tot aan het voorschrijfgedrag van huisartsen. De lessen die hieruit moeten worden getrokken door marketeers en beleidsmakers worden geïllustreerd op het gebied van de waardering van gezondheidstoestanden en van pensioensparen.

## Abstract

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The customer cannot choose

People can choose and they make many choices each and every day. However, most people are unaware of how strong their environment influences the choices they make. In his inaugural address, Bas Donkers highlights the impact of what people see (and what they don't see), what people experience (and what they don't experience), or more general, the impact of salient decision characteristics. Evidence will be provided in a number of applications that range from online consumer search behavior to physician prescription behavior. The lessons to be learned from this for marketers and policymakers are highlighted in the context of pension savings decisions and health state valuations.



# Content

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<b>Samenvatting</b>	<b>4</b>
<b>Abstract</b>	<b>5</b>
<b>Content</b>	<b>7</b>
<b>Introduction</b>	<b>9</b>
<b>An example: Choosing a holiday home</b>	<b>13</b>
<b>Empirical evidence</b>	<b>15</b>
<b>Policy implications in a retirement savings context</b>	<b>19</b>
<b>Policy implications for choice based QALY estimation</b>	<b>25</b>
<b>Can students value what they learn?</b>	<b>29</b>
<b>Conclusion</b>	<b>31</b>
<b>Appendix. Overview of holiday homes in the example</b>	<b>33</b>
<b>Erasmus Research Institute of Management - ERIM</b>	<b>35</b>





## Introduction

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*Dear Rector Magnificus,  
dear colleagues,  
dear friends and family,  
dear distinguished guests.*

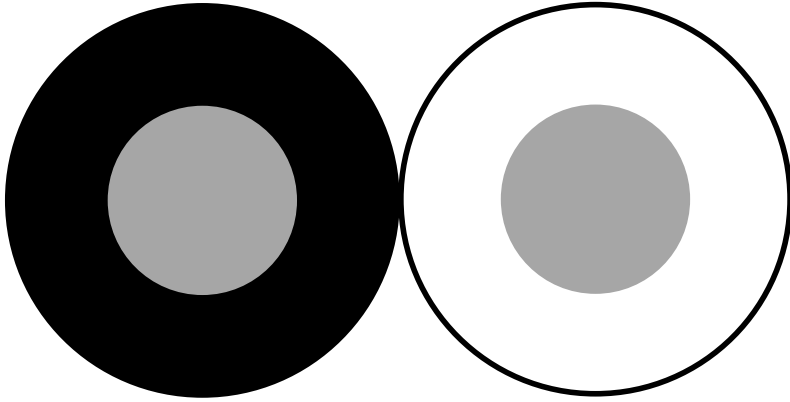
Thank you for being here today. Let me start by admitting that the title of this address is, of course, not literally true. People can choose and they make plenty of choices every day. I'm also very pleased that you have all chosen to be here today.

So, if the title is not literally true, I should start by clarifying what I mean by the title "The Customer Cannot Choose". It is not about whether we choose or not. It is about what we choose and what determines these choices. Many people believe that when they choose, they properly take into account all the relevant features of the alternatives they can choose from. In addition, all kinds of irrelevant features should not affect the choice that is made. This is what I would like to call a good decision: a decision that is based on all relevant information and is not affected by irrelevant information.

The title of my address refers to the fact that when people choose, they do not always make good decisions. As such, our choices are not what we think they are. In today's presentation, I will focus on a number of systematic differences between the choices we typically make and good decisions. As most people believe they make good decisions, this highlights differences between what people think they do and what they actually do.

An important source of this problem is the fact that our brain is somewhat capable of making comparisons between things. However, our brain is very poorly equipped in assigning absolute scores to things. Let me give you a simple example that shows that our evaluations are driven by the context in which things are presented.. Consider the two grey circles on the screen. One is surrounded by a darker shaded circle, the other by a circle that is lighter. This is easy for all of us to see. These easy and direct comparisons, however, make it difficult to correctly assess which of the two grey circles is the darkest. Even though our brain tells us that the circle on the right is darker, both circles actually have the same shade of grey. Our brain cannot ignore the easy comparison with the circles surrounding the grey circles.

Figure 1. Two grey circles: Are they the same?



This local contrast effect is one of the difficulties we face when we want to make a good decision. I have listed a number of characteristics of a choice problem that tend to affect our choices more than they should. These include what we see, which is the thing that is easily accessible for our brains to process. It is also rather clear and precise, at least when we compare it to what we cannot immediately observe, so we have to think about it and retrieve it from memory. Also, when we evaluate a number of options sequentially, the options that we have evaluated so far affect our evaluations of the next options. As an example, I entered a clothing store thinking I would not buy a pink shirt. Being offered a very pink shirt, which I rejected, I actually seriously considered a shirt that was a little bit pink. I would have rejected this pink shirt if it had been offered to me as a first option, because it was too pink. I now rejected the shirt because it was not as pink as I wanted it to be.

What we experience right away or what we can easily imagine also plays a larger role in our decisions than the things that are more distant, more difficult to imagine, or that need to be evaluated in a different context. On a day like today, when the sun is shining, it is easy to imagine how much one would enjoy a cold glass of beer. At the same time, it is now more difficult to assess the joy of drinking a cup of warm chocolate when it is freezing outside than it was a couple of weeks ago.<sup>1</sup> As I will discuss later, this also applies to spending money today, which is easy to think about, versus spending money 20 years from now, which is much more difficult to assess.

1 As context really does matter, the weather conditions on the day of the inaugural address might require this example to be reversed. The default text might be affected by an optimism bias.

In general, the context in which we make a decision affects our evaluations and our decisions. This makes it hard to make good decisions, as it requires us to pay attention to all relevant aspects and to ignore the irrelevant ones. Context should not play a role. In the example of the shades of grey, this requires us to ignore the surrounding circles.

In the next 30 minutes I will guide you through a simple example, I will briefly present empirical evidence on the existence of context effects and I will discuss the implications of these findings for policymakers.



## An example: Choosing a holiday home

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In the example, we are going to choose a holiday home for a two-week summer holiday. As context matters, please keep my personal situation in mind. During my summer holidays, I want to relax a bit and the kids should have a great time.

The descriptions of the holiday homes include several aspects. The most important ones are the price, the size of the home, the available facilities, the swimming pool and the weather. If we compare the two holiday homes above<sup>2</sup>, they are both fairly similar, except for the price. The one on the right one-third lower in price. On the other dimensions I have to give in a bit. As the price difference is very big, I prefer the one of the right.

As I continue searching, I find another interesting option, which I compare to my preferred option above. What I really like about this new option is that it has much more space than the other option, so if it rains, we won't be cooped up in a small home with the kids. Again, I have to compromise on the other aspects, but there is no deal breaker here. I decide to keep the new one in mind, and continue my search.

The next holiday home that draws my attention is very luxurious and will create a real holiday experience. The kids have a TV in their bedroom, so they won't bother us in the morning. We have our own sauna and in the morning the kids can go and get us some fresh croissants. I decide that this is what my holiday should look like. Still, I decide to look a bit further to check whether this is really the best option available.

The next attractive holiday home is in a different location. The resort has an amazing swimming pool, with water slides, waves, and so on. The kids will really love this. This is in sharp contrast with the other location, which does not have a swimming pool. As I know that I will only enjoy my holiday if the kids are happy, I decide to give up the sauna, accept slightly smaller bedrooms, and pay a bit more. By now I have looked at so many homes that I decided to stop my search. I booked the holiday home on the right and am convinced I chose the best available option from the ones that I found during my search.

However, what I did not realize is that I was actually making a very bad decision. Here you see the first holiday home that I did not even like and the one that I eventually booked. This does indeed look like a very stupid choice. I will be

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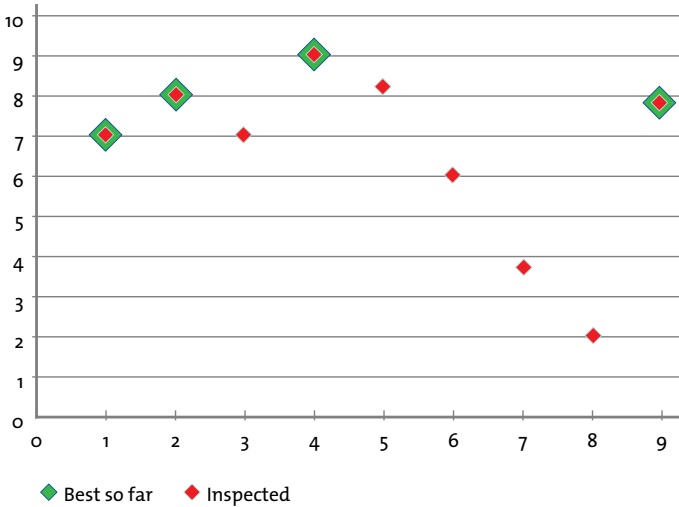
2 The holiday homes that are being compared are listed in the appendix.

paying 50 Euros more to get about the same experience in worse weather conditions. So what happened? Each time I focused on an aspect that made the holiday seem a lot more enjoyable, I sacrificed something on the other aspects. All these small changes that I took for granted, however, should have received more attention in my decision.

# Empirical evidence

This was just an example. However, in the work that I have done with Benedict Dellaert and Gerald Haubl, we asked people to go through a similar search process. Each time the participants had to select a new option from a list. They then had to indicate whether the current option was the best option they had encountered so far. One participant started with an option that was fairly attractive, say 7 on a 10-point scale. This was obviously the best product encountered so far. This is indicated by the green square around the red one. The next option was better and the participant marked this option as the best one so far. The third option was worse, so the participant did not mark this one as the best alternative. There is no green square around the red marker.

Figure 2. Local versus global search



The fourth option was very attractive and he marked this one as the best so far. After this, the participant inspected a series of worse alternatives. The ninth alternative that was inspected, however, was again fairly attractive, even though objectively speaking it was not as good as the fourth alternative. Still in many cases like these, participants marked the last option as the best alternative. This participant also decided to stop searching after inspection of this particular alternative. Again, we find that individuals do not end up choosing the best product overall. This research showed that the absolute attractiveness of the alternative affected the choice, as it should. However, how attractive the current option was relative to the product that was inspected just prior to this one, also



affected the perceived attractiveness. This is similar to the shades of grey example, where the immediate surroundings have a considerable impact on our evaluation. In short, the context of an alternative affected its attractiveness.

Ok, so this might be true, but should we really care? Is this not just the result of a group of scientists who are playing around with an online survey? Should we really care about the choices of people in some online panel? They are asked to make hypothetical choices about holiday homes that have no consequences whatsoever. While I was tricked into choosing the wrong holiday home, it could well be that most people are smarter and capable of making perfect decisions.

In another study that I conducted with Nuno Camacho and Stefan Stremersch, we studied the choice behavior of highly educated individuals. More important, these choices could have serious consequences. We studied the prescription behavior of physicians to patients who receive treatment for chronic asthma. For our research, we obtained prescription records of 22 physicians in the Netherlands. Here the analysis is far less trivial. Physicians should care about the feedback of their patients. It informs them about the degree to which symptoms are relieved and about possible side effects of the treatment. This then enables them to learn about the quality of each of the treatments. In addition, treatment quality can also vary across patients. What works well for one patient might not be the best treatment for another patient.

The good thing is that physicians are actually educated in how they should learn about drug quality, which is using Bayesian updating. We, therefore, know how much weight patient feedback should get in the physician's learning process. The question we asked ourselves is whether a physician is also not unduly affected by experiences that are more vivid and easier to remember. Having to switch a patient from one type of medication to another type of medication might be an example of a vivid and memorable experience. We therefore tested whether a physician's prescription behavior was more affected by the patient's feedback when he had to switch the patient to another medication than when he did not have to do so. Our conclusion is that physicians are also human and, as might be expected, their choices are affected too much by these salient events.

So at this point I would like to reiterate that the context in which we make decisions affects our choices much more than we think it should. This applies to what we see, what we just saw, what we experience, and to the things that lack experience. In general, all the things that are easy to observe, vivid or memorable

will have the largest impact on our decisions. When even physicians, who have received special training on how to make good decisions, are still overly sensitive to the specific context of their decisions, I think we should take this into account when designing policies in areas where people's choices play an important role. As such, this applies to virtually all policy decisions.



## Policy implications in a retirement savings context

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Now I would like to give you some examples of the implications this has for both marketers and for policymakers. Given the limited amount of time available, I cannot discuss all aspects of policy issues. I will put on blinders, just like these horses, and highlight the consequences of context effects for policymakers. Let me start with an example on pension saving behavior, followed by an example on the valuation of health states in medicine.

When we consider retirement saving behavior of the younger generations, it is often feared that they are not saving enough to ensure a comfortable lifestyle after retirement. Many of the current retirees have enjoyed substantial financial gains from increasing real estate prices, especially higher house prices. Their pensions are at a reasonable level and have usually been adjusted for inflation due to high investment returns for pension funds. As a result, as was recently stated by Diederik Samsom, there are quite a few wealthy people among retirees.

For younger generations, wealth levels might be substantially lower, due to stabilizing or declining house prices and low returns on financial assets. Even more important might be the declining replacement ratio, that is, the ratio between income after retirement and income before retirement. One of the underlying factors is that people are getting older, so they have to receive their pension income for a longer period of time. We are also currently going through a prolonged period of low economic growth and low returns for pension funds. As a result, pensions will no longer be fully indexed to inflation.

Most people think that the pension funds have promised to pay them about 70% of their last salary. This has also always been communicated. However, this is a promise for an income in nominal terms that is, before adjusting for inflation. The real income levels that have been promised by the pension funds are therefore quite a bit lower. 70% of my current income as a pension today might be nice. Thirty years from now, however, this income might have lost half its purchasing power. As a result, actual pension income levels might end up being very disappointing for many people.

This last sentence: “actual pension income levels might end up being very disappointing for many people” contains two reasons why making good decisions on retirement savings is very, very difficult. First, things might end up being disappointing after retirement, but for most people retirement is

somewhere in the distant future. Second, it applies to many people, but not to all. The consequences are that it is all fairly vague and in fact, it might not even apply to me. Maybe I shouldn't spend too much time thinking about this.

Of course, if everybody thinks like this, it is quite likely that many people will eventually be disappointed. Research by Hal Hershfield, Dan Goldstein, one of my co-authors, and others shows that we can solve these two issues, at least to some extent. First, they changed the decision context so that the pros and cons became more personal. Second, they made the impact of the decision on one's future self more salient. When they did this, it turned out that people decided to save more for their pension. As I think these types of instruments might be very useful in improving decision quality, I want to show you what they did in more detail.

In essence, the decision to save for retirement is a decision about shifting income between today and the future. This decision therefore affects one's current self and one's future self. First, to make things personal, they added a picture of the person who had to make the decision. Now the decision is clearly mine. This ensures that the person really sees the decision is about him or herself. Of course, it is not that difficult to think about the short-term consequences of saving more for my retirement. I know that I will have to spend less on holidays if I want to save more for retirement. The really great thing about this research is that the researchers also made the future more personal. As this is somewhat too confronting to do for such a big audience, I will continue illustrating someone else's decision. Let's call him Hal because that is his real name.

So, Hal is in the same situation that I am in and he has to decide how much to save for his retirement. Of course, if Hal decides to save a lot, his retirement income might go up from 60% to 80% of his last wage, but this comes at a substantial cost in terms of his current income. As you can see, this does not make Hal particularly happy. He can easily imagine the pleasure he would have from the things he will no longer be able to do if he decides to save more.

On the other side, Hal can decide to save a lot less. He can enjoy life now and just see what life brings when he is retired. He will have to manage with an income that is only 50% of his current income level. For sure, life today feels a lot better. It is easy for him to imagine the benefits. He can go on holiday more often, enjoy a few more fancy dinners and many more of the pleasures that life can bring.

The short-term benefits of saving less and the short-term sacrifices that need to be made when saving more are easy to imagine. We can so to speak see them and even experience them to some degree. These are two of the things that make sure that our current self gets all the attention it deserves in our decision on how much to save for retirement.

In order to make a good decision, however, Hal should take all relevant aspects into account. While his current situation and hence his current self receives ample attention, it is much more difficult for him to have a clear picture of the benefits of saving for retirement. Of course, having a higher income level after retirement is a good thing, but it is very difficult to imagine this in detail. As such, it is very hard to visualize the benefits of saving more, let alone to experience them. The usual decision context makes it easy to think about the short-term consequences, while there is a strong tendency to pay less attention to the future benefits.

To improve the quality of Hal's decision, we could support him by encouraging him to devote more equal attention to both his current self and his future self. So what did this team of researchers do? They made Hal's future very personal. They showed both an image of Hal the way he looks today, but also an image of Hal the way he might look when he is retired. You can see this on the current slide. They used age progression software. So I think you now all understand why I prefer to talk about Hal and not about myself.<sup>3</sup> Changing the context, such that one's future self is present during the decision process might increase the attention paid to the future. Still, it only helps to visualize the future but doesn't really help to experience it.

These researchers, however, also facilitated the experiential part of the future consequences of the savings decision. They modified the facial expressions of the current and future selves to highlight the feelings that correspond to a decision. Saving a lot makes the current self less happy, saving very little makes the future self less happy. Showing that not saving for retirement will have consequences such that YOU will feel worse in the future triggers the experiential element in the decision context. This further increases the attention paid to the future consequences. Saving little for retirement looked liked an attractive option to Hal as it made him feel happy now. Realizing that he will suffer from this in the future affects his behavior. Supporting people to pay more attention to their future self considerably increased their stated saving intentions. Given the low saving rates, especially in the US, these changes would certainly be economically meaningful.

3 An age progression tool is made available online by Bank of America: <http://faceretirement.merrilledge.com/>. This tool also age progresses the cost of living, showing the impact of inflation on the value of money.

So what can marketers and policymakers learn from this? The most important thing is that to ensure high quality decisions, all relevant aspects should be made equally salient in the decision process. When this concerns pension savings, this means that more attention should focus on one's future self. However, the many psychological biases we suffer from generally tend to favor our current self. This research shows that policymakers can modify the context of the decision to ensure a more balanced attention to all consequences. This will improve the quality of these decisions.

Another example is the lack of complete information about the relevant trade-offs in the decision to invest pension savings in risky assets versus risk free assets (to the degree that they exist). I don't need to argue here that lower risk or uncertainty in pension incomes is a desirable thing, keeping all other things constant. This is also the main spirit of the public debate on risk taking by pension funds. Also in decisions like these, all relevant aspects should be taken into account. When money is invested in risky assets, this obviously leads to more risk in the final amount of money that can be used to pay pensions to the pension fund members. Assuming history repeats itself to some degree, however, risky assets can be expected to have higher returns on average.

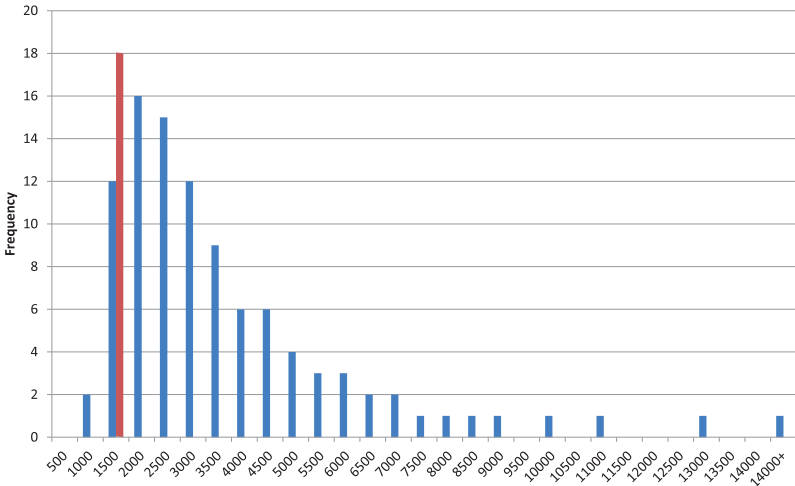
Without drawing conclusions, I would like to show you a more complete picture on the decision to invest pension money in risky assets or not. I can put the money in a savings account, as long as I don't care about inflation. For simplicity, I'll use the example of a 37-year old who wants to save 1000 Euros for his retirement. If the pension fund puts his money in a savings account at a 2% interest rate per year, this money will grow to be 1811 Euros at the age of 67. This might not sound bad at all.

One could also consider investing at least part of this money in the stock market. Although there has been a lot of discussion on the distribution of the returns of risky assets, I think I am making reasonable assumptions here. I use an equity premium of 4% per year and a standard deviation of the asset returns of 16% points per year. The graph illustrates the distribution of the amount of money at the age of 67 if the pension fund invests half of this money in the stock market and puts the other half in a savings account.

How should we read this graph? On the left, we find a 2% probability of having a pension of only 1000 Euros. Next to that, we find a 12% probability of getting 1500 Euros. At the next level, we find a 16% probability of getting about 2000 Euros. A more detailed analysis reveals that in total, there is a 16%

probability of ending up below the wealth level that the savings account provides. In other words, in 1 out of 6 possible scenarios, you end up worse off than if you choose the safe option. There is, however, also a large upside potential. For example, there is also a 1 in 6 chance of having more than 5500 Euros, which is three times as much as you would get if the pension fund puts all your money in a savings account.

Figure 3. The returns to investing in risky versus risk free assets for 30 years



As I said before, people do not have to weigh all aspect of a decision equally, but they should be sufficiently aware of all the consequences of a decision. Marketers and policymakers should strive for decisions that are based on a complete representation of all the relevant aspects in the decision.

Together with Benedict Dellaert, Carlos Lourenco and Dan Goldstein, I am working a tool called the distribution builder. This tool provides users with a more balanced view on the risks and the corresponding returns of pension investment decisions. This tool also supports making good decisions as it helps them to see the relevant trade-offs. Once people receive more complete and more experiential information, I think quite a few of them would prefer a risky pension rather than a certain pension, as the latter tends to be a low pension.



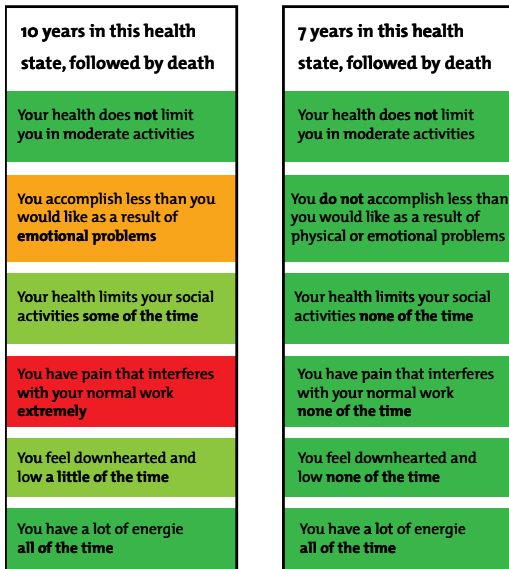


# Policy implications for choice based QALY estimation

Medicine is another field of research where context effects play an important role. Treatment decisions are often based on the gain in health that can be obtained through the treatment. However, as a society we simply cannot afford to provide all treatments that ensure some health gain independent of the associated costs. A trade-off has to be made between the costs and the benefits. The medical field can properly establish what the benefits of a certain treatment are in medical terms. The translation of these medical benefits to their value for society still needs to be made before policymakers can make a decision.

One measure of the value of a specific health state is the corresponding quality-adjusted life- year value. The idea is that a year in perfect health is more valuable than a year in poor health. There also is a recent trend to use choice-based conjoint, also called discrete choice experiments, to measure QALYs. This technique has been developed as part of the marketing research toolbox in the context of new product development. In the marketing context, choice-based conjoint is used to determine how different features of a product affect the value of that product. This idea can be extended to a health state as the product and a patient as the consumer.

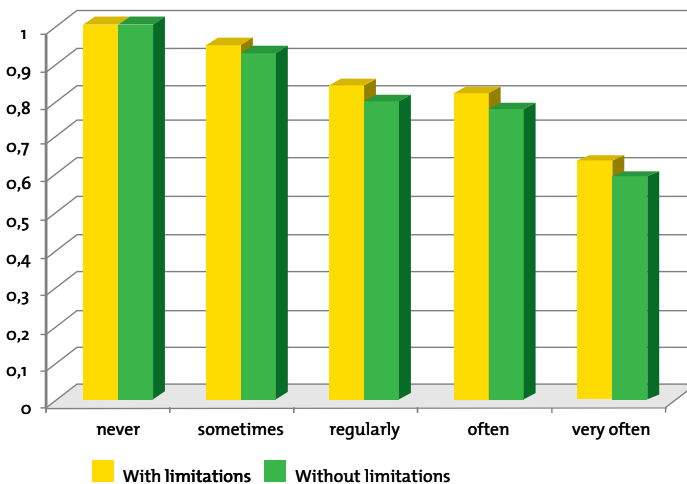
Figure 4. A sample question of the discrete choice experiment



In choice-based conjoint, people are asked to choose their preferred option from a set of available alternatives. To value the attributes of a health state, one such choice set could contain the following two options. The first option is seven years in perfect health, followed by death. The other is a worse state of health in which you are frequently in pain that limits your ability to work, and your health also affects your social life. However, you do get to live longer, ten years instead of seven.. Of course a choice like this is not really a fun choice. Still, these are the kinds of choices that doctors often have to deal with, and also the choice a patient might face.

As an example, I will show you the estimated quality of life years from such a conjoint study. The figure shows how quality of life gets worse when people are more and more limited in their daily activities as a result of pain. This measure is relative to the value of a year of life where pain is never a limiting factor, which is on the left and is set at 1. We see that “sometimes being in pain” lowers the value of a year of life by about 6%, so the value is 0.94. The results also show that “regularly” and “often” are about the same, at least in terms of their impact on the value of a life year. Finally, when pain limits one’s daily activities very often, quality of life is reduced by about one-third.

Figure 5. The value of a year of life: the impact of limitations due to pain

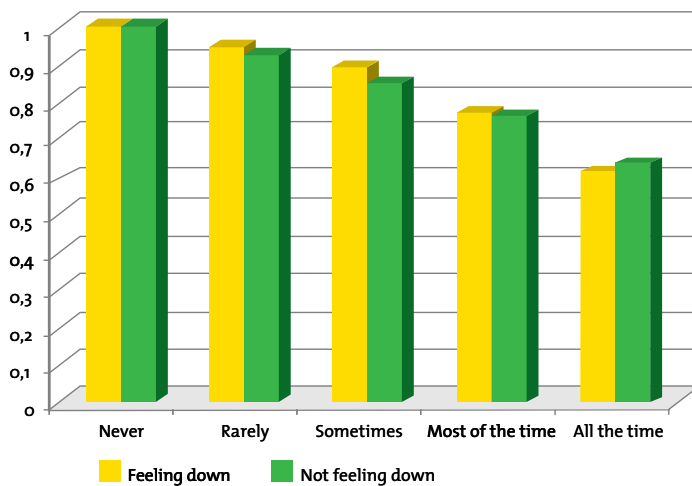


However, in the choice-based conjoint study, choices are driven by the evaluations people have of the various health states. Also in this setting, it is very well possible that people value the things they experience differently than those

that they don't experience. As a healthy person, it might be very difficult to imagine what life would be like, for example, if you were in a lot of pain every day. Someone who has experienced this health state would really know this and would probably be able to value this much better. Only if people have the right anticipations about their quality of life in all health states, even for those they have never experienced, can we use average valuations to assess the quality of life in all possible health states.

We investigated whether people indeed have the right anticipations. To do so, we compared the impact of being in pain on the quality of life for those who are never limited in their daily activities due to pain and all those who are at least regularly limited due to pain. The value of a life year of people who are never limited due to pain is in green. The yellow bars indicate the value of a life year for people who are at least regularly limited due to pain. What we find is that these valuations are not the same. The green bars tend to be lower than the yellow bars. This tells us that people who are never limited by pain, the green bars, assign substantially lower values to health states in which they would be limited in their daily activities due to pain compared to people who actually experience those worse health states, the yellow bars. It seems that people can cope with pain better than they anticipate when they are healthy. In terms of policy implications, people who are regularly limited due to pain, the middle category, would gain 25% less quality of life when they would be relieved from their pain than what people anticipate when they are not in pain.

Figure 6. The value of a year of life: the impact of feeling down



What should policy makers now use when deciding on treatments, in this case a treatment that affects pain levels? People who actually are in pain, are assigning a lower value to being cured than what one would infer at the population level. This suggests that if we take their preferences seriously, we can lower the priority of such treatments compared to the priority based on the current, population preference based valuation studies. More difficult is the question when it comes to preventive medicine. This is relevant for healthy people who might end up in a condition where they are in pain. If we take their current preferences seriously, we should spend more on preventive treatments than on curative treatments. At the same time, we also know that they will find out that life is not as bad as they thought it would be.

Does this really matter for the final decisions on the treatments that are to be funded and those that are not? If people underestimate their ability to cope with their limitations equally for all types of treatments, not much will change. This is, however, unlikely to be the case. We did the same analysis for the impact of one's mental health status. Again we compare the valuations of people who never feel down, the green bars, with those of people who at least sometimes feel down, the yellow bars. Here we see much smaller differences. The effect is even reversed for those who feel down all the time. Once one starts feeling down, the value of a life in the state of feeling down all the time is actually lower than the value assigned to it by people who never feel down. This is clearly different from the results obtained when studying the consequences of pain. Healthy people seem to underestimate their ability to cope with pain, but tend to overestimate the quality of life when their mental health starts deteriorating.

The fact that health state valuations are dependent on the patient's actual health state obviously complicates matters for policymakers who have to decide on treatments that are covered by the various types of health insurances and hospital budgets. In the debate on euthanasia, it might even become a matter of life and death. A thorough analysis of the way in which patient preferences are changing might be required to properly guide this debate. However, this is still lacking.

This again shows that context matters. Our current health situation affects our valuations for this and other health states. So far, this has been ignored by policy makers. While some improvements in treatment decisions are easily obtained, others might not. For example, differentiating between curative and preventive treatments might raise ethical concerns.

## Can students value what they learn?

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Getting closer to where we are today, one of the important activities that we perform here at the university is preventing our students from partying too much, making sure they study and that they understand the complicated things they have to learn. Again all these activities have an immediate impact on the life of our students and they are well aware of this. We don't do this to make life of our students as miserable as possible. No, we aim to provide them with the knowledge they need and to train their skills and thinking styles. This should help them to generate smarter ideas and better judgments in the situations they will encounter in their jobs. At the end of each course,, we ask our students whether they liked it. In these evaluations, students tend to overvalue the easily observable characteristics of the course which are on the left-hand side. It is simply very difficult for them to assess what they learned and how valuable this is. It is even more difficult for them to know what they could have learned and whether that would have been better.

I don't blame students for these biased evaluations. I can't see how we can help them to know what they could have learned and how important what they did learn will be for their career ten years from now. The problem is that we evaluate our faculty based on these biased evaluations that are driven too much by the short-term benefits. Our teachers therefore get a clear incentive to focus on the easily observable aspects, potentially at the cost of the performance of less salient aspects. The banking system, where short-term gains were also highly valued, has shown that this can be a dangerous thing, especially when company incentives are aligned with those of the employees. Fortunately, all of my colleagues have an intrinsic motivation to educate our students well. As a result, I don't think the university system will collapse, but there is clearly room for improvement for the university's incentive system.



## Conclusion

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To conclude, the context in which we make a decision has widespread consequences for the outcomes of that decision. Sometimes, this makes it very difficult for us to make good decisions. This, in itself, does not have to make us unhappy. In fact, if everybody makes the same mistakes, we will probably never even know that a better decision could have been made.

For policymakers, the presence of context effects is both a curse and a blessing. Context effects open up a road for them to improve the quality of the decisions that are made by people, for example, by highlighting the consequences of pension savings on future happiness. There is also a large field of research studying “nudges” such as setting specific default options, which intervene more directly in the choice process. This is a subject I haven’t even touched upon today

The complicating factor is that when choices are driven so strongly by context effects, how can we then learn what people really want? By learning about the specific shifts in preferences that are the result of various context effects, we could aim for governments to support decisions and implement policies that are utility maximizing in a context that is as neutral as possible. One of my ongoing research projects indeed studies how we can debias preference measurements. In addition, we study how we can ensure that people are willing to accept advice based on such debiased preference measures. This will not be trivial, as the advice might go against the choices the individual wants to make him or herself.

We already know a lot, but as a researcher it is also reassuring to know that there is more to be learned.

The fact that I am standing here makes me a happy person. The choices that led me here were highly influenced by the context I have found myself in. I would like to thank a number of people for providing this context.

First, I would like to thank Arthur van Soest for allowing me to experience what it means to be a researcher. This has clearly shifted my preferences towards doing a PhD, something I had not really considered before. I would also like to thank Arthur and Bertrand Melenberg for being my supervisors during my PhD at Tilburg University. It was an environment that was stimulating and relaxing at the same time.



I would like to thank Philip Hans Franses for many things. First of all, he hired me as a young researcher in the marketing department at ESE. He did so, despite the fact that I was late for both meetings due to problems with public transportation, which I think did not affect the context of this decision in a positive way. He has supported me during all these years at ESE. As Dean of the Erasmus School of Economics, he was instrumental in the process that led the way to my position today in this location. I have also really enjoyed working with him on a number of projects.

Coming from a very different background, I learned a lot from Peter Verhoef about the field of marketing. We were both at the start of our career when I arrived in Rotterdam. I have enjoyed growing up as academics together, first as roommates and neighbors, but always as a colleague and friend.

I would like to thank Benedict and Stefan for their strong policy mix. On the one hand, they are very demanding in terms of performance, and on the other hand, they are also very supportive. This is one of the key drivers of the strong and stimulating environment of our department. I also want to thank all my other colleagues for being part of this.

My last words here today are in Dutch – to make sure that all those involved really understand what I would like to say to them.

Lieve ouders, ik wil jullie bedanken voor de steun die ik altijd heb gehad en voor de stimulans om mij te ontwikkelen op de gebieden waar ik goed in was. Ik hoop dat jullie trots zijn op het resultaat.

Tijn, Jip en Pien, mijn lieve kinderen. Jullie zijn werkelijk onmisbaar in mijn leven. Er is zo veel leuks met jullie te beleven. Hoewel ik er niet altijd tijd voor heb, kan ik er gelukkig wel vaak tijd voor maken.

Als laatste, en dat is in dit geval de belangrijkste positie, wil ik Cynthia bedanken. Waarvoor? Dat is eigenlijk te veel om op te noemen. Ik kan het het beste samenvatten als volgt: Jij maakt alles mogelijk!

Now, it's time to enjoy a drink outside. I briefly considered restricting the assortment to only plain water. However, I'm sure that you are all smart enough to make choices that will give you more enjoyment. Good luck choosing!

I have said.

## Appendix.

### Overview of holiday homes in the example

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#### Home A

- 750 euro
  - Small bedrooms
  - TV in bedrooms, breakfast service
  - All facilities pool
  - 28 degrees
- 

#### Home B

- 500 euro
  - 1 bedroom short
  - Breakfast service
  - Kids pool and water slides
  - 26 degrees
- 

#### Home C

- 600 euro
  - Large rooms
  - Plain swimming pool
  - 24 degrees
- 

#### Home D

- 700 euro
  - Regular rooms
  - TV in bedrooms, sauna, breakfast service
  - No swimming pool
  - 22 degrees
- 

#### Home A

- 750 euro
  - Small bedrooms
  - TV in bedrooms, breakfast service
  - All facilities pool
  - 28 degrees
- 

#### Home B

- 500 euro
  - 1 bedroom short
  - Breakfast service
  - Kids pool and water slides
  - 26 degrees
- 

#### Home C

- 600 euro
  - Large rooms
  - Plain swimming pool
  - 24 degrees
- 

#### Home D

- 700 euro
  - Regular rooms
  - TV in bedrooms, sauna, breakfast service
  - No swimming pool
  - 22 degrees
- 

#### Home E

- 800 euro
  - Small bedrooms
  - TV in bedrooms, breakfast service
  - All facilities pool
  - 22 degrees
- 

#### Home E

- 800 euro
  - Small bedrooms
  - TV in bedrooms, breakfast service
  - All facilities pool
  - 22 degrees
-



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People can choose and they make many choices each and every day. However, most people are unaware of how strong their environment influences the choices they make. In his inaugural address, Bas Donkers highlights the impact of what people see (and what they don't see), what people experience (and what they don't experience), or more general, the impact of salient decision characteristics. Evidence will be provided in a number of applications that range from online consumer search behavior to physician prescription behavior. The lessons to be learned from this for marketers and policymakers are highlighted in the context of pension savings decisions and health state valuations.

Bas Donkers obtained his doctorate in econometrics from the University of Tilburg in 2000. He works in the marketing section of the Department of Business Economics at Erasmus School of Economics. Bas Donkers is member of ERIM and the Tinbergen Institute and a fellow of Netspar and CentER.

Bas Donkers' research aims at a model-based analysis of consumer behavior. He combines insights from economic theory and the more behavioral disciplines, and empirically quantifies these influences. The insights gained can be used by companies, not-for-profits and policymakers. In addition, Bas Donkers studies techniques to quantify consumer preferences, either directly inferred from their behavior or by more specialized preference elicitation techniques. This research aids in improving market offerings, for example, in healthcare and financial services, or in facilitating product search, specifically in online environments. His research has appeared in top international journals such as *Marketing Science*, *Journal of Marketing Research* and *Econometric Theory*.

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