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Pathways to your own financial provision

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Abstract

Many people are not particularly good at making long-term financial decisions and then sticking to them consistently. Behavioural economists and psychologists have shown ways of getting around a high time preference. One innovative approach relies on visualising the "future self".

Zusammenfassung

Viele Menschen sind nicht besonders gut darin, langfristige finanzielle Entscheidungen zu treffen und diese dann konsequent durchzuhalten. Verhaltensökonominnen und Psychologen haben Wege aufgezeigt, wie man eine hohe Zeitpräferenz umgehen kann. Ein innovativer Ansatz setzt auf Visualisierung des „zukünftigen Ichs“.



The marshmallow test was carried out with four-year-old children in the early 1970s. A child sat at a table and saw a marshmallow on a plate in front of him. The experimenter told the child that he would leave the room for a while and could be called back at any time by ringing a bell. As a reward, the child received the marshmallow when the bell was pressed. However, if the child waited until the experimenter returned by himself, in the experiment after 15 minutes, the child was promised a reward of two marshmallows (Mischel, 2015).

This test was used to measure the ability to control impulses. Around 30% of the children managed to hold out for the entire 15 minutes. 25 % reached for the bell in less than a minute (Aeberhand 2020). In follow-up observations in the early 1980s, Mischel found that those children who were able to endure the reward deferral were also more successful later on. They had better grades at school and more harmonious relationships. Presumably they also started to make financial provisions for their old age in good time.

Pension provision is the "XXL marshmallow test" in real life, with a significant impact on the quality of life of older people and on the welfare of society as a whole. Many people are not particularly good at making long-term financial decisions and then sticking to them. Economic theory recognises the problem of *hyperbolic discounting* (Laibson 1998). Although this is often assumed in economics, most people do not discount the future linearly with a constant discount factor. Hyperbolic discounting means that in an intertemporal comparison, a benefit between today and tomorrow is discounted more heavily than between tomorrow and the day after tomorrow. In plain language: positive events are brought disproportionately into the present, negative events are delayed as long as possible or not undertaken at all. (Laibson 1998). Short-term rewards are preferred to behaviour that is recognised as correct in the long term. Countless failed New Year's resolutions and diets provide vivid examples. Behavioural economists regard this temporal inconsistency, triggered by hyperbolic discounting, as irrationality that causes inefficiencies. This diagnosis can be used to justify costly and paternalistic interventions that patronise citizens, particularly in the area of old-age provision. From the "pay-as-you-go" system of statutory pensions to the legal structure of occupational pensions and the high level of regulation for private financial investments, the state has a fundamental mistrust of its citizens' ability to make their own financial provision. A British pensions commission expressed it as follows:

"Most people do not make rational decisions about long-term savings without encouragement and advice. But the cost of advice, and of regulating to ensure that it is good advice, in itself significantly reduces the return on saving, particularly for low earners." (UK Pensions Commission 2004)



State paternalism itself is an additional cause of hyperbolic discounting. If the state takes care of old-age provision, the individual has less to worry about. Due to demographic developments, however, the current state-controlled system of old-age provision is reaching its limits. Private pension provision will inevitably become more important in the future. A virtue could emerge from this necessity.

Behavioural economists and psychologists have not only diagnosed hyperbolic discounting, they have also come up with suggestions on what to do about it. The most common suggestion is voluntary self-commitment. For example, to avoid having to decide each month what to put aside for later, people should agree a savings plan that collects the money before it can be spent on consumption. (Thaler and Benartzi, 2004).

A second suggestion focuses on the joy of future rewards. For example, you could visualise spending your retirement with a comfortable financial cushion or in your own home. This idea motivates greater savings efforts in the present (Nenkov, Inman and Hülland, 2009).

A third suggestion is even less well known, but could be an effective way for many people to make more provision for old age. It is known from neuroscience that people primarily aim with their eyes (Balectis 2021). Eyes and brain are closely linked. Visual perception and motivation have a direct influence on each other. For example, athletes who focus on a visual goal in a race are not only more likely to reach the finish line, but also perceive the effort less intensely (Balectis, 2021). This finding is consistent with the "goal-gradient effect". The closer a person is to a goal, the greater their efforts. Motivation depends on the perceived distance. The American psychologist Hal Hershfield has therefore suggested that missing long-term financial goals can be understood as a lack of literal visibility of one's own future.

In his experiment (Hershfield, 2011), he used an elaborate computer simulation to confront participants either with themselves or with a thirty-year-old avatar of themselves in a virtual reality. Those who met their "future selves" were then significantly more willing to save for the future than the control group.

In a second experiment, students on a financial literacy course were regularly confronted with the aged avatars over the duration of the course. Here, too, it was shown that those participants who saw themselves as old saved more. Students who interacted with their "future selves" performed more successfully in the financial knowledge tests (Sims, Bailenson and Carstensen, 2015). Not only the effort to save, but also the interest in dealing with the topic increased.



While the first and second suggestions have long since found their way into practice, Hershfield's insight could be utilised even more in financial advice. If the core of the problem of hyperbolic discounting lies in the lack of a relationship with the "future self", then visualisation can be used to bridge this time gap. Although the experimental environment of the laboratory is not easy to reproduce, technological development promises a remedy. With the rapid development of AI and virtual reality, the hurdles to meeting your "future self" are getting lower and lower. If in doubt, a quick trip to the app store is enough to generate a self-portrait that is thirty years older. Targeted use in investment advice could raise awareness of retirement provision. In the USA, a financial services provider has already used the visualisation of the "future self" for a television commercial.¹ In it, a passenger on an aeroplane meets his older self, who advises him to approach the topic of financial provision correctly.

There will always be people who want the marshmallow right away. And there will always be people who do not have sufficient financial provision. For these people, there are ways to get round their high time preference. As personal responsibility for retirement provision will become more important in the future, methods that encourage people to make a greater effort to save are gaining in importance. Behavioural economists and psychologists have shown various ways in which people can combat their irrational impulses without being patronised by the state. One innovative approach is the visualisation of the "future aged self".

¹ See: <https://www.youtube.com/watch?v=i34XRMIm9N0>



Literature

- Aeberhand, Pia (2020) *Who can wait can do it? How marshmallows serve as an indicator of our success*. Lucerne University of Applied Sciences and Arts, URL: <https://hub.hslu.ch/business-psychology/marshmallow-experiment-1/> (last accessed on 03/07/2024).
- Balcetis, Emily (2021) *Clearer, Closer, Better - How Successful People See the World*, New York: Penguin Random House.
- Hershfield, Hal, et al. (2011) Increasing saving behaviour through renderings of future self. *Journal of Marketing Research*, 48, pp. 23-37.
- Laibson, David, et al. (1998) Self-Control and Saving for Retirement, *Brookings Papers on Economic Activity*, 1, pp. 91-196.
- Mischel, Walter (2015) *Der Marshmallow-Test: Willensstärke, Belohnungsaufschub und die Entwicklung der Persönlichkeit*, Munich: Siedler Verlag.
- Nenkov G., Inman J., Hulland J. (2008) Considering the future: The conceptualisation and measurement of elaboration on potential outcomes. *Journal of Consumer Research*, 35, pp. 126-141.
- Sims, T., Bailenson, J., Carstensen L.L. (2015) Connecting to your future self: Enhancing financial planning among diverse communities using virtual technologies. *The Gerontologist*, 55, pp. 311 - 330.
- Thaler, R., Benartzi, S. (2004) Save More Tomorrow (TM): Using behavioural economics to increase employee saving. *Journal of Political Economy*, 112(1), pp. 164- 187.
- UK Pensions Commission (2004) *Pensions: Challenges and Choices - The First Report of the Pensions Commission*, URL: <https://image.guardian.co.uk/sys-files/Money/documents/2005/05/17/fullreport.pdf> (last accessed on 03/07/2024).



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