Expert Views

Life Insurance Consumer Preferences - Income or Lump Sum Benefits Payments?

Behavioral Insights on Life Insurance Product Design

SCOR
The Art & Science of Risk

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Executive Summary

A consumer's life insurance purchase journey is often lengthy, complex, and multi-faceted, presenting significant challenges for insurers. In recent decades, behavioral science has become increasingly acknowledged as an effective way to shed light on the mindset of consumers and identify what influences their decisions to proceed or hesitate when it comes to buying insurance policies.

SCOR's Behavioral Science team, in partnership with the Université Paris Nanterre, began a research initiative in 2021 based on the Discrete Choice Experiment (DCE) method to look deeper into the mechanisms of how and why people make specific decisions when it comes to purchasing life insurance. This article, the last report of this study series, focuses on which insurance benefit payment method - income or lump sum - consumers prefer and why.

Key findings:

- Overall, the majority (80%) of participants showed a strong preference for the lump sum benefits payment over the income payment stream option. This preference is evident across all panels, employment types, genders, age groups, health perceptions, and risk attitudes.
- The 20% of participants who preferred the income payment stream over the lump sum payment were typically individuals with children, more concerned about the future and more open to taking risks.
- Several potential reasons explain why the overwhelming majority of people prefer a lump sum payment over an income stream payment. This article suggests three main reasons: present bias, distrust of insurance companies, and default options and loss aversion.
- Insurers have a potential opportunity to develop new products with income stream payment options marketed to the demographics who prefer this type of benefit payment over the lump sum payment method.



Background and Research Methodology

In 2021, SCOR's Behavioral Science Team partnered with researchers from the Université Paris Nanterre to investigate the determinants of insurance demand. This research took the form of a Discrete Choice Experiment, a method used to measure individuals' preferences among discrete (i.e., mutually exclusive) options as well as the tradeoffs between these options they are willing to consider.

The study involved more than 1,000 people from France, who were categorized into three groups - the general population, self-employed individuals, and the policyholders and potential policyholders of a French insurance company. Each participant was presented with a series of 12 different choices between two hypothetical insurance contracts (Policy A and Policy B). Each pair of contracts showcased different combinations of six attributes. An example of one of these choice pairs can be seen in Figure 1.

Figure 2 (on the next page) details the six attribute categories of the insurance contracts and the different levels possible in each category.

For each choice pair, participants were asked to indicate whether they would prefer to purchase Policy A, Policy B, or neither. By varying the different levels in each category across choice pairs, the DCE methodology allows for the calculation of overall preferences for each possible level in each category.

This article examines the results for the Benefit Payment Method category, as highlighted in Figure 2. What do the DCE results tell us about individuals' preferences in terms of how they wish their benefits to be paid? How can behavioral science help us make sense of these results and the possible reasoning behind them?

Figure 1 – Example policy choice pair

INSURANCE POLICY ATTRIBUTES	POLICY A	POLICY B
Benefit Payment Method	Lump sum payment	Income payment stream
Health Information	No information	Declarative questionnaire
Prevention Program	No prevention program	Personalized prevention program
Additional Benefits	No additional benefits	Payment of a daily fee for hospitalization (€50)
Survivors' Benefits	Financing of funeral expenses	No benefits
Premium	€48	€37



Figure 2 – Attributes & levels

Attribute	Levels
Benefit Payment Method	Specifies how benefits are paid. Two cases are possible: • **Lump sum:** the beneficiary receives a single payment of €100,000 at the time of death • **Income:** the beneficiary receives a payment of €10,000 plus interest each year following the death for 10 years
Health Information	Indicates the health information that is requested when subscribing to the contract. Three cases are possible: • **No information** • **Declarative questionnaire:** You must give information about your state of health, your family history, your chronic conditions and diseases, your consumption behaviours (tobacco, alcohol, ...) • **Medical examinations and medical tests:** You need to do blood tests, urine tests and an electrocardiogram
Prevention Program	Specifies the type of prevention program included in the contract. Three cases are possible: • **No prevention program** • **Annual medical check-up:** offered every year for the duration of the contract • **Personalized prevention program:** This program is accessible through a health and wellness application that offers personalized information and recommendations.
Additional Benefits	Indicates the additional benefits that you or your beneficiary can receive during the 20 years of the contract. Three cases are possible: • **No additional benefits** • **Payment of a daily fee for hospitalization (€50)** if you are hospitalized for more than 3 days • **In case of death by accident, payment of an additional €100,000** to the beneficiary. This amount is paid in addition to the amount provided for in the contract.
Survivors' Benefits	Indicates the additional benefits that you or your beneficiary can receive after the end of the contract (20 years) if you are alive. Three cases are possible: • No benefits • **Reimbursement of 50% of the premiums paid:** They are reimbursed to you if you are alive once the 20 years have elapsed. • **Financing funeral expenses:** €5,000 will be paid to your family at the time of your death to finance the funeral expenses
Monthly Premium	Gives the amount you need to pay to the insurance company every month. Three cases are possible: • **€26** • **€37** • **€48**



Overall Results

In the study, participants were given the choice between two benefit payment options:

- **Option 1:** The benefit could be paid as a single lump sum of €100,000 at the time of death.
- **Option 2:** The beneficiary could receive a payment of €10,000 plus interest each year for 10 years after the policyholder's death.

While the income payment stream represents a smaller upfront payment, it comes with other advantages. For instance, it may be more in line with the reason that many people buy insurance – to replace lost income upon death. It also removes the burden on the beneficiary of having to invest a lump sum to ensure it lasts long enough after the time of death.

Which option would you choose, and which one do you think was more popular among participants?

Despite the advantages income payment offers, most participants (80%) showed a preference for the lump sum option over the income option. This preference spans across all panels, employment types, genders, age groups, health perceptions, and risk attitudes. This raises an important question: why do so many people prefer to take the lump sum payment instead of the income payment stream?

Analysis of the Results by Group

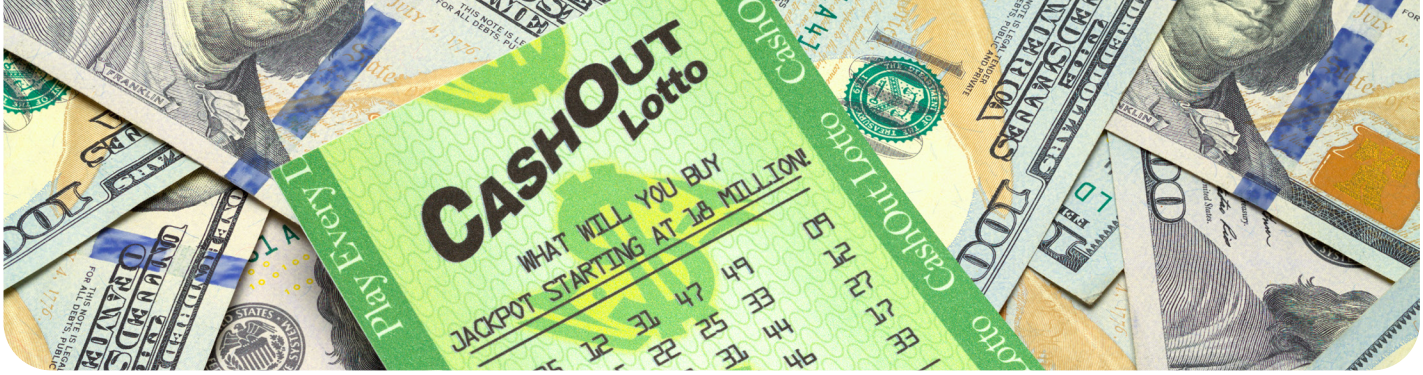
In order to understand why most people prefer the lump sum payment option over the income payment stream, it is helpful to begin by examining the differences between this majority group who chose the lump sum option and the smaller group (20%) who did not.

We found that the 20% of participants who preferred the income stream were more likely to have children, to be concerned about the future, and to be more open to taking risks. This group tended to be younger and have less previous experience with the insurance market.

The differences between the needs of the two groups could help explain their preferences.

For example, older participants may prefer a lump sum payment as it better fits their needs. It is possible that older policyholders plan to use their insurance benefits as inheritance for their family (which could be given most easily in a lump sum manner), while younger policyholders expect to use their insurance benefits to replace their regular income.

Those with children were more likely to prefer benefit payments in the form of income. This group might have been thinking about providing for their children's future needs over an extended period, and an income stream may match this need better than a lump sum that would need to be managed appropriately by the beneficiary.



Comparison with the Lottery Winners' Payment Choices

Interestingly, there is another setting where individuals commonly have to choose between lump sum payments and income payment streams – lottery winnings. In the US, for example, winners of the Powerball lottery must decide whether to take their winnings as a single payment at the time of their win or as a series of payments spread over some longer time period, typically 30 years, with payments increasing each year to account for interest and inflation. Financial researchers Edward A. Dyl and Deborah W. Gregory analyzed the history of Powerball lottery payouts and found that the total amount paid out from the income payment stream is usually much higher than the lump sum cash payment.[1]

Although the income payment stream is "generally financially advantageous," Dyl and Gregory showed that from 2003-2009, more than 93% of Powerball lottery winners chose to take the lump sum payment instead of the income payment stream.[2] This is similar to the pattern of results found in the DCE experiment.

Clearly, the context of lottery payments differs from that of insurance benefits. Individuals deciding on a policy option are not in the same emotional state as lottery winners. Insurance also involves making choices about how benefits will be paid out to someone other than the individual making the decision, instead of to that individual personally, as in the case of the lottery.

However, with these differences in mind, several of Dyl and Gregory's proposed theories about the seemingly contradictory preferences of lottery winners also shed light on individuals' preferences for lump sum payments in the insurance context. So why do people choose lump sum payments over income payment streams? We suggest three possible reasons.

Potential Reason 1: Present Bias

The first possible explanation involves the concept of present bias, in which individuals place outsized importance on benefits and pleasures in the present. Present bias has been observed in various contexts and leads many people to prefer smaller present rewards over larger rewards in the future.[3] This seems a reasonable explanation for the pattern observed among lottery winners – they are given the chance to receive a present reward and cannot resist this temptation, even if the future rewards of the income payment stream would ultimately be larger.

Could the concept of present bias explain the DCE results, too? One difference we have here from the lottery winners is that both of the benefit payment options offered to the study participants were to happen in the future, i.e. at the time of the policyholder's death. Therefore, present bias should not have as much effect on participants in this study as it might on lottery winners, who are faced with immediate rewards. The effect should also be lessened by the fact that the insurance policyholder chooses the benefit payment type on behalf of the beneficiary rather than choosing for themselves.

It is possible that something in the contrast between payment "at the time of death" and payment over 10 years after death made the lump sum payment seem more immediate and therefore more valued. Our study found that those who were concerned about the future were more likely to prefer the income payment stream than the average participant. This group of individuals who are more future-focused are less likely to be impacted by present bias, highlighting that present bias may be somewhat at play for those who selected the lump sum.



Present bias may also explain the difference in preferences between age groups. Older participants have a significantly stronger preference against the income payment method than younger participants. For older participants, the time of their death is presumably closer to their present situation. This may make it more likely for them to evaluate the benefit payment method options as if they were receiving the benefit now, activating present bias and increasing the likelihood that they would choose the lump sum payment.

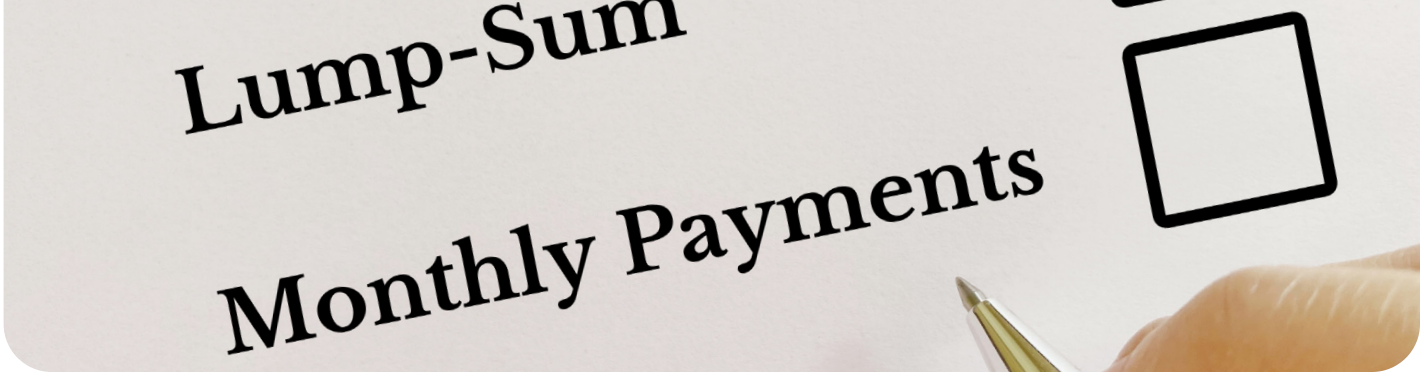
Potential Reason 2: Risk Aversion Due to Consumers' Distrust of the Insurance Industry

Another reason proposed by Dyl and Gregory that explains why lottery winners take the lump sum payment is that winners do not trust the US government, the Powerball lottery's facilitator, to pay out the promised amount of the income stream over 30 years. Under this explanation, lottery winners see the income payment stream as a gamble, which might result in a higher overall payout but might instead result in a loss of almost all of the winnings if the government fails to keep its promise. Winners prefer to avoid the risk of future nonpayment and receive a lump sum payout now, even if this amount is ultimately smaller than what they might have received from the income stream method.[4]

This instinct to prefer a smaller, certain payment over the possibility of a larger but risky gamble is known as risk aversion.[5] Similar to present bias, risk aversion is a well-documented and widely observed phenomenon. Could this tendency also be at work in insurance decision making?

One fact in support of this comes from the results of those participants who were risk-seeking – those who would prefer a smaller, riskier gamble over a larger, certain payment, because they enjoy the thrill of the risk itself. If the income payment stream is seen as a gamble, we would expect to see that these participants are more likely than the average participant to prefer the income stream – and that is indeed what the results show. Although risk-seekers, like all groups, overall prefer the lump sum payment method, they are more likely than average to prefer the income stream payment, perhaps because they appreciate the risk.

If risk aversion explains the preference of most participants for the lump sum payment method, it suggests that participants see the income stream payment as a risky gamble – taking the risk that the insurance company will keep its promise and make the payouts over 10 years. This aligns with the results from consumer surveys, which consistently find a lack of trust in the insurance industry among many consumers.[6]



Potential Reason 3: The Power of Default Options and Loss Aversion

A final possible explanation for the preference for lump sum payments involves the influence of expectations, default options, and loss aversion. Behavioral science research has consistently shown the importance of default options – the option that is presented as normal and which will take effect if the decision-maker does nothing. Behavioral economists Richard H. Thaler and Cass R. Sunstein describe default options as "ubiquitous and powerful," noting that "if...there is a default option...then we can usually expect a large number of people to end up with that option..."[7]

There are many proposed explanations for why default options are so influential, but one important factor is loss aversion. This is the concept that humans feel the pain of losses more intensely than they feel the joy of gains. Because of this, choosing against the default option, which may feel like a loss of what an individual would have gotten had they not made the choice, can be very painful. This instinct to avoid losses leads many individuals to stick with the default option.

In our DCE study, there was no explicit default option presented to participants. In each scenario, active choice was required, with neither the lump sum payment nor the income payment stream presented as the "normal" option.

However, in most markets, lump sum payments are the norm for real-world life insurance contracts. This means that participants with any experience of the insurance market may have seen the lump sum payment as the normal, expected option, making it an implicit default. If this is the case, then the option of the income stream payment may have felt like a loss of the expected $100,000 lump sum payment. Loss aversion would then explain why this option felt painful and was avoided by many participants.

This line of reasoning is further supported by the fact that those who were already clients or potential clients of a French insurance company were even more inclined to prefer the lump sum payments than the general population panel. These individuals likely had the most experience in the insurance market, making them more likely to see the lump sum payment as the expected, normal default option.



Conclusion

Our study revealed that the lump sum benefit payment method was the overwhelming choice of participants. Multiple possible reasons for this from a behavioral perspective include present bias, risk aversion, and loss aversion. Ultimately, further research is needed to determine which of these concepts, if any, most accurately explains the preferences observed.

Results of our DCE study provide valuable insights for those interested in understanding consumers' needs and behaviors regarding insurance purchases. We found a strong and widespread preference for lump sum payments among nearly all groups of participants. This clear finding should guide the development and marketing of insurance contracts.

However, it is also important to recognize and understand that a significant minority of participants did prefer the income stream payment option, showing that this is not always an inferior option. Since this choice is not currently available or widely advertised in most markets, there is potential for innovation.

Insurance companies can and should explore the possibility of having a specific product with income stream payments to target this section of the market, designed with their needs and preferences in mind. In particular, our study suggests that this product could be marketed toward younger consumers with children and less experience in the insurance market, as these groups were among those that showed the strongest preference for the income stream payment option.

Endnotes

1. Dyl, E. A., & Gregory, D. W. (2011). Lottery jackpots: Selecting the rational payout in the face of irrationality. Advances in Behavioral Finance and Economics: The Journal of the Academy of Behavioral Finance, 1(2), 1-16. https://www.aobf.org/wp-content/uploads/2020/06/1.-Dyl-Gregory.pdf
2. Dyl & Gregory, p. 5.
3. Thaler, R. H., & Sunstein, C.R. (2021). Nudge: The final edition. Penguin Books.
4. Dyl & Gregory.
5. Thaler & Sunstein.
6. Edelman. (2023). 2023 Edelman trust barometer: Insights for financial services. https://www.edelman.com/sites/g/files/aatuss191/files/2023-05/2023%20Edelman%20Trust%20Barometer%20Insights%20for%20the%20Financial%20Services%20Sector.pdf.
7. Thaler & Sunstein. p. 108.

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