

Status Quo Bias—A Research on Its Applications and the Correlating Mechanism

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After several former studies on the cognitive heuristics and correlating economical influences, the explanatory effectiveness of Status Quo Bias perspective is explained by multiple empirical scenarios. Hence, this essay will focus on three applications in which the Status Quo Bias perspective, correlating models, and research methods would provide insightful opinions. After reviewing the former attempts on the original model and early researchers' empirical examination on the Status Quo Bias, this essay will concentrate on Status Quo Bias and technology resistance among the public sector employees, Status Quo Bias and medical insurance outcomes, Status Quo Bias and shoppers' mobile website purchasing resistance respectively. For each application, research methodology will be explained and be integrated into the Status Quo Bias perspective through the research question. Through researching on these applications' methodology and main studies, discussing cognitive biases existing in the empirical scenarios, the present study could approach to the efficiency of the explanation from Status Quo Bias perspective.

Keywords: literature review, Status Quo Bias, technology resistance, quantitative study, behavioral economics

Introduction

Status Quo Bias (SQB) is a non-rational or biased preference for the current way of doing things (Samuelson & Zeckhauser, 1988). It provides an endogenous method of picking a choice as fast as possible in a complex decision making progress. Status Quo Bias, like other simplified decision procedures, can help the decision maker with reducing the time and energy which a choice would take. However, in some conditions, it has been found that Status Quo Bias could not help with improving the efficiency. For instance, a plate of salad is a healthier, cheaper, and tastier choice, but due to the Status Quo Bias, an individual is of no possibility to go to try that plate of salad. This essay will choose three scenarios and attempt to discover the Status Quo Bias in these different circumstances and the mechanism about how Status Quo Bias affects on individual behaviors.

Literature Review

SQB was first proposed by Samuelson and Zeckhauser in 1988 and they demonstrated its existence through a relatable example. They discussed a colleague who, for many years, always chose the same sandwich for lunch, never deviating from this choice. In their study, Samuelson and Zeckhauser (1988) conducted an experiment with participants to illustrate the general applicability of SQB. The experiment included two different treatments. In

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Treatment 1, participants were informed that they had inherited money and were given four investment options. In Treatment 2, participants were also informed about the inherited money, but were further told that their uncle had already invested it in one of the options. Interestingly, participants in Treatment 2 were more likely to choose the preselected option. To explain this bias, Samuelson and Zeckhauser (1988) categorized three different explanation approaches: cognitive misperception, rational decision making, and psychological commitment. These categories provide insights into the underlying mechanisms of SQB and help to understand why individuals tend to stick with the status quo even when presented with alternative choices.

Original Components of the Status Quo Bias Perspective

Cognitive Misperception

The concept of loss aversion, initially established by Kahneman and Tversky (1979), is primarily referred to by Samuelson and Zeckhauser (1988). In their experiments, Kahneman and Tversky demonstrated how individuals' perception of value, as a part of prospect theory, is heavily influenced by potential losses. They found that people tend to give up significant gains because they fear even minor losses. Moreover, individuals tend to view potential losses associated with change as disproportionately large, leading them to prefer sticking with the status quo, as highlighted by Samuelson and Zeckhauser (1988).

Rational Decision Making

SQB is a strategy that helps individuals minimize uncertainty and the costs associated with making a transition. Uncertainty costs arise from not knowing the value of a product or service in advance. Consequently, people tend to stick to brands or vendors they have had positive experiences with rather than venturing into the unknown. This is because transitioning to a new brand or vendor would require investing time and effort in conducting research and due diligence. However, these costs have already been incurred when opting for the current choice. Therefore, it is often considered a sensible decision to maintain the status quo. In this context, it can be argued that individuals make similar choices when faced with comparable options, regardless of the potential benefits that might outweigh the costs of uncertainty and transition. Thus, conventional decision-making cannot fully explain why people tend to remain with the status quo.

Psychological Commitment

The aspect of SQB is often referred to as the sunk cost effect, which occurs when individuals are more inclined to continue with a particular course of action after having invested money, effort, or time into it. This behavior is often justified by individuals so as to avoid appearing wasteful. Sunk costs can also pertain to skills that individuals may lose when there is a shift in the way of working. For instance, the time spent on training for the current method may become irrelevant when a new technology is introduced. The researchers additionally discovered that the influence of friends and colleagues, as well as the level of control individuals have, also has an impact on SQB. The latter factor, in turn, can be attributed to the user's confidence in understanding and adapting to change.

SQB and Resistance Against Technology Among Public Sector Employees

Background on Technology Resistance Among the Public Sector Employees

The use of technology in government has significantly increased in recent decades and has now become the

standard rather than the exception. The level of digital advancements at the local level depends on how employees in the government accept or resist technology. Many existing theories do not address the reliable factors that determine technology usage or the cognitive biases of users. This study fills that gap by taking into account the perspective of Status Quo Bias. Researchers conducted a study involving three German municipalities and developed a comprehensive theoretical model to understand how employees resist technology.

Theoretical Model and the Correcting Process Based on Quantitative Studies

Before the main study, researchers firstly conducted theoretical analysis according to the three original categories of Status Quo Bias (Samuelson & Zeckhauser, 1988) and an organizational and social influence category that consists of influencing factors which do not belong to the Status Quo Bias perspective. An integrated theoretical model is proposed as follows:



Figure 1. Theoretical model of the technology resistance among the public sector employees.

After the initial investigation, the researchers conducted a trial study with a group of 161 individuals. These participants, who were public sector employees, used a modified version of a questionnaire developed by Kim and Kankanhalli (2009). The questionnaire utilized Likert scales consisting of seven points, with participants indicating their agreement with the statements. The scale ranged from one (representing "strongly disagree") to seven (representing "strongly agree"). The researchers then performed a comprehensive analysis of the collected data to identify significant correlations and cause-effect relationships. Their aim was to gain a better understanding of the resistance to technology exhibited by public sector employees. In order to refine the theoretical model, the researchers conducted a multiple linear regression analysis. Through this analysis, they examined the regression coefficients (beta) and the corresponding t-values for each coefficient. The researchers presented the results in a table, which displayed the level of correlation between user resistance and each influencing factor. The outcomes revealed that Hypotheses H1, H2, H4, H7, H8, H9, H10, H11, and H12 were supported, while Hypotheses H3, H5, and H6 were not supported.

Sverview of Hypomesis and Results								
Results			Adjusted R-square					
H1	Switching benefits	Supported	0.156					
H2	Transition costs	Supported	0.037					
H3	Uncertainty costs	Not supported	Null					
H4	Perceived value	Supported	0.365					
H5	Loss aversion	Not supported	Null					
H6	Anchors	Not supported	Null					
H7	Efforts to feel in control	Supported	0.064					
H8	Sunk costs	Supported	0.253					
H9	Organizational support	Supported	0.098					
H10	Management as a role model	Supported	0.073					
H11	Colleague opinions	Supported	0.065					
H12	Value for others	Supported	0.145					

Overview of Hypothesis and Results

Table 1

Note. A non-significant result indicates no effects at the 5% level.

Discussion on the Corrected Model and Cognitive Biases' Explanation Efficiency

Aftermath, researchers corrected the theoretical model and acquired an evidence-based model which is examined by the empirical study.



Figure 2. Evidence-based model of the technology resistance among the public sector employees.

By conducting a mixed-method study in German municipalities, the researchers identified the factors that impact participants' resistance to technology and proposed effective interventions. The study revealed that the main reason for public-sector employees' resistance to technology is their perception of its value, sunk costs, potential benefits from switching, and value for citizens.

SQB and **Insurance** Outcomes

Review and Former Research on the Relationship Between the SQB and Insurance Outcomes

Status Quo Bias refers to the tendency for an individual's choice to be influenced by the initial situation,

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rather than just the available alternatives. This goes against the fundamental principles of rational decisionmaking, such as the invariance and independence of irrelevant alternatives (Tversky & Kahneman, 1986). Status Quo Bias has been observed in various contexts, including consumption, organ donation, vaccination rates, as well as in laboratory experiments involving stock trading and contributions to a public good. The research in this field suggests that decisions with a default or status quo option significantly impact the choices people make. Every decision has a default position, which is the outcome that occurs in the absence of an active choice. In the public domain, policymakers have the opportunity to promote more rational market outcomes by setting appropriate defaults. This involves defining which alternative will be implemented if an individual fails to make a choice. Therefore, it is worth investigating whether Status Quo Bias affects decision-making regarding health insurance policies in laboratory experiments, and if the effect can be mitigated through experience.

Data Collection and Analysis on the Insurance Outcomes

Researchers initially conducted an online experiment to examine the relationship between health insurance policy and the Status Quo Bias. This experiment involved determining the risk preferences of subjects using a multiple price choice task, which is a commonly used method for measuring risk preference (Harrison, List, & Towe, 2007) and similar to that introduced by Holt and Laury (2002). The task consisted of presenting subjects with 10 different situations where they had to choose between two lotteries: one being riskier and the other being safer. The decisions were presented on a single screen, and the probabilities of winning were represented using colored balls in urns. Table 2 provides a visual representation of all the decisions made by the subjects during the experiment.

Table 2

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Decision situation	ons				
Situation 1					
	Lottery A		Lottery B		
Probability	10%	90%	10%	90%	
Payoff	5,000 ECU	0 ECU	3,000 ECU	1,000 ECU	
Your choice					
				·	
Situation 2					
	Lottery A		Lottery B		
Probability	10%	90%	10%	90%	
Payoff	5,000 ECU	0 ECU	3,000 ECU	1,000 ECU	
Your choice					
Situation 3					
	Lottery A		Lottery B		
Probability	20%	80%	20%	80%	
Payoff	5,000 ECU	0 ECU	3,000 ECU	1,000 ECU	
Your choice					

An	Example	of the	Online	Test for	Risk	Preferences

Situation 10								
	Lottery A		Lottery B					
Probability	100%	0%	100%	0%				
Payoff	5,000 ECU	0 ECU	3,000 ECU	1,000 ECU				
Your choice								

Table 2 to be continued

In the second and main part of the research, researchers conducted a study in a controlled laboratory environment to examine the impact of a default option known as status quo. They compared the health insurance choices made by two groups receiving different treatments with the choices made by a control group. In one treatment group, the default option was a full coverage insurance policy, while in the other treatment group, the default option was a full coverage insurance requirement. The control group had no specific default option. The laboratory experiment involved individual decision-making tasks over four periods. In each period, participants were presented with five different health insurance options (A to E) with varying co-insurance arrangements that required them to pay different percentages (ranging from 0% to 50%) of their medical expenses. All participants faced the same decision parameters throughout the study. The likelihood of falling ill and the costs of medical care varied across the different periods (see the table followed)

Table 3

Data	Collected	From	the .	Main	Study	on ti	he .	Insurance	Decision
					~				

		Cost (ECU)	Premium (ECU)							
			Risk premium (ECU)							
Period	Probability of		Expected value (ECU)							
	miless		Policy A	Policy B	Policy C	Policy D	Policy E			
			0% co-insurance	20%	30%	40%	50%			
Period 1	0.4	400	192	144	128	104	88			
			32	16	16	8	8			
			1,808	1,824	1,824	1,832	1,832			
Period 2	0.2	800	200	160	136	112	88			
			40	32	23	16	8			
			1,800	1,808	1,816	1,824	1,832			
Period 3	0.1	1,500	187.5	150	127.5	105	82.5			
			37.5	30	22.5	15	7.5			
			1,812.5	1,820	1,827.5	1,835	1,842.5			
Period 4	0.03	3,000	112.5	90	76.5	63	49.5			
			22.5	18	13.5	9	4.5			
			1,887.5	1,892	1,896.5	1,901	1,905.5			

Discussion on the Insurance Outcomes Research

Status Quo Bias exists in health insurance choices, meaning individuals have a tendency to prefer the default option or stick with their current choice rather than switching. However, the bias diminishes as individuals gain more experience and make repeated decisions. The researchers suggested that non-binding defaults in health insurance, such as making co-insurance the default option, can help facilitate more rational choices and help contain health care expenditure. Further investigation and confirmation of these results on a larger scale and in a real-life decision environment are recommended. Additionally, it was mentioned that capitalizing on Status Quo Bias or supporting consumers in becoming more experienced in choosing health insurance policies could be alternative means of overcoming the drawbacks of Status Quo Bias.

SQB and Shoppers' Mobile Website Purchasing Resistance

Rethink on the SQB Perspective and the Retailer Market Economical Phenomenons

The topic of resistance to purchasing products on a retailer's mobile website has been discussed by behavioral economic researchers. The use of mobile websites for purchasing is often a source of resistance for many online shoppers, and the reasons behind this resistance are not well understood. The researchers aim to bridge the knowledge gap by investigating the influence of Status Quo Bias theory on this resistance. Two hypotheses are proposed that address the relative impact of desktop purchasing inertia on attractiveness perceptions and cognitive effort perceptions in mobile website purchasing. The study focuses on clients who only use the desktop website for purchasing and is aimed at exploring the role of cognitive dissonance and switching costs to understand their resistance behaviour.

Former Study-Based Questionnaire Design and Data Analysis

The aim of this study was to investigate the hesitancy of online shoppers in utilizing a retailer's mobile website for purchasing products. Researchers employed a cross-sectional research design to gather data from customers who exclusively used the desktop website for their purchases. The study sample included customers aged 18 and above who had never before made purchases through the mobile website.

The researchers created a survey to collect information from customers regarding their reluctance to purchase mobile websites. The survey contained questions about factors such as resistance to purchasing mobile websites, the attractiveness of alternative options, the cognitive effort involved in purchasing, the perceived advantages of mobile websites, and customers' desktop purchasing habits (see the table followed). A total of 484 clients participated in the online survey and met the selection criteria.

Table 4

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Questionnaire Design Which Was Used in the Main Study

Construct	Source	Items
Mobile website purchasing resistance	Schierz et al. (2010)	3
Mobile website purchasing perceived alternative attractiveness	Bansal et al. (2005)	4
Mobile website purchasing perceived cognitive effort	Wang and Benbasat (2009)	4
Mobile website purchasing perceived relative advantage	Lu et al. (2011)	4
Desktop purchasing affective-based inertia	Polities and Karahanna (2012)	3
Desktop purchasing behavioral-based inertia	Polities and Karahanna (2012)	3
Desktop purchasing cognitive-based inertia	Polities and Karahanna (2012)	3
Desktop purchasing habit	Limayem and Cheung (2008)	4
Desktop purchasing sunk costs	Polities and Karahanna (2012)	4
Mobile website purchasing perceived economic risk costs	Burnham et al. (2003)	5
Mobile website purchasing perceived learning costs	Burnham et al. (2003)	3
Mobile website purchasing perceived evaluation costs	Burnham et al. (2003)	4

In order to analyze the data, the researchers employed statistical methods such as confirmatory factor analysis to determine the validity of their measurement model. They also evaluated the convergent and discriminant validity (Liang, Saraf, Hu, & Xue, 2007). Based on the collected data, a structural model was created and hypotheses were tested through hypothesis testing. The analysis plan considered the impact of desktop purchasing Status Quo Bias behavior on resisting purchases from mobile websites (Blumberg, Cooper, & Schindler, 2008).

The findings of the study revealed several insights into the factors contributing to resistance in using a retailer's mobile website. The study identified the influence of perceptions, inertia, and cognitive dissonance in shaping customers' resistance behavior. The researchers concluded that perceptions of the relative advantage of mobile website purchasing and desktop purchasing inertia had the strongest positive influence on resistance to using the mobile website. This research contributes to filling a gap in the existing literature and provides insights for retailers to develop strategies to reduce resistance to mobile website purchasing.

Discussion on the Mobile Website Purchasing Resistance Phenomenon

The research discovered that the aversion to buying products through a retailer's mobile website is affected by the status quo and cognitive misperception. Customers who exclusively used the desktop website were critical of the appeal of purchasing through the mobile website and believed it required more mental effort. The study highlighted that the belittlement of mobile website purchasing is caused by perceptions of its comparative benefits. The reluctance to utilize the mobile website was greatly influenced by the inertia of purchasing through the desktop site, meaning customers were accustomed to using the desktop site and resistant to change. Retailers can utilize this study to create strategies that can decrease opposition to purchasing through the mobile website.

Conclusion

Some of the studies mentioned earlier may be included in any change effort, but having a clearer understanding of their specific cause-and-effect relationships could enhance the success of decision-making processes. The significance of Status Quo Bias lies in its capacity to provide an extra standpoint. Through this perspective, researchers are able to explore different aspects and connect seemingly unrelated observations, thus contributing to a more comprehensive understanding of phenomena related to change.

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