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Richard Thaler's Nobel Prize in Economics

Bella Brown

On October 9th, 2017, the Nobel committee awarded the Sveriges Riksbank Prize in Economics Sciences in Memory of Alfred Nobel to Richard Thaler.

Thaler built his work upon three major themes that the Nobel committee recognized as significant: human's limited rationality, social preferences, and lack of self-control. His research explores the consequences of these themes on both individual and market behavior, and found systematic ways that human psychology diverges from rationality, impacting economic and financial decision-making. Thaler's realistic understanding of human behavior is leveraged in public policies implemented by organizations all over the world, including the World Bank and the governments of Canada, Israel, the Netherland, the UK, and the US.

Thaler began researching human irrationalities early in his career, and created games and models to study economic decision-making. In a 1986 paper entitled *Fairness as a Constraint on Profit Seeking: Entitlements in the Market* (The American Economic Review, 76(4)) Thaler and co-authors Jack Knetsch and 2002 Nobel winner Daniel Kahneman found evidence that community notions of fairness constrain the way that firms set prices and wages, and the way consumers make purchasing decisions.

In 1991, Thaler and the same co-authors wrote *Anomalies: The Endowment Effect, Loss Aversion, and Status Quo Bias* (The Journal of Economic Perspectives, Vol. 5, No. 1). The paper documented evidence of human failings of rationality, and said not only that irrationality exists, but that it occurs in observable and predictable ways. Evidence was found to support an "endowment effect" of people placing a higher value on an object once it is in their possession, as well as a "status quo bias," determined by people maintaining old patterns even if they are clearly not in their best interest. Thaler et.al. linked these irrationalities to loss aversion, or the fact that humans place value on the negative feeling of a loss more strongly than they do the positive feeling of a gain of the same value. The paper was influential because these anomalies differed greatly from what standard rational choice theory would predict. Thaler continued to apply these irrationalities to explain human behavior, and how these flawed influences on decision-making can affect larger markets...

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The Economics of the Airline Industry

Kjersti Anderson

Last summer, I had the amazing opportunity of interning at Alaska Airlines in their revenue analysis department. Through this internship, I gained invaluable experience in the field of data analytics, and even got the chance to forecast Alaska Airlines ticket sale revenues for my final project. Compared to the "perfect" markets that we often learn about in school, one of the most interesting aspects of the airline industry is how irregular it is. These unique intricacies of the industry made my experience more challenging, but all the more fun on the job. Here are a few of my favorite irregularities in the market for airline tickets:

1) Supply is absolutely fixed

Despite the hub-bub surrounding overbooking, airlines must essentially assume that supply is fixed. This creates difficult optimization problems. Regardless of whether there are more people who want to fly out at a certain time and day, there are only a certain number of seats.

2) Demand can be elastic or inelastic

Whether or not demand is elastic or inelastic has a huge influence on price. If the flight is made up primarily of business travelers, this could mean that prices might not fluctuate that much far out from departure. There may be a lot of people flying from San Francisco to Seattle for business, but there probably aren't that many flying from Hawaii to Seattle for business. That could change the way prices are changed in different markets as it gets closer to departure day.

3) Demand isn't always what you think it is

When faced with this challenge, do you wait to sell your tickets in the hopes that you attract people who are willing to pay more closer to departure day? Or do you sell now to avoid flying a plane with empty seats? This is another difficult optimization problem that creates a lot of complexity in the airline industry.

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… In 2008, Thaler summarized many of his findings in *Nudge: Improving Decisions about Health, Wealth, and Happiness* (Yale University Press, 2008), co-authored with Harvard Law Professor Cass Sunstein. *Nudge* explains observed human biases and fallacies that stray from the assumption of rationality. One bias is the "availability heuristic," which causes humans to guess how frequently an event will occur based on how easily an example can be brought to mind. This can have negative effects on business and in government policies, causing people to overstate risks or creating programs to solve memorable problems instead of more important ones.

Similarly, Thaler and Sunstein showed evidence of a "representativeness heuristic," in which people use available data to predict the probability of a hypothesis. A classic example, known as "hot hands," was presented by Thaler and Selena Gomez in *The Big Short*, a 2015 movie about the 2008 financial crisis. Gomez and Thaler explain that gamblers tend to continue betting while winning, despite the fact that the chances of them winning each round do not depend on their past winnings. The same problem can be seen in basketball when fans incorrectly assume players that successfully make a series of shots are more likely to make their next shot.

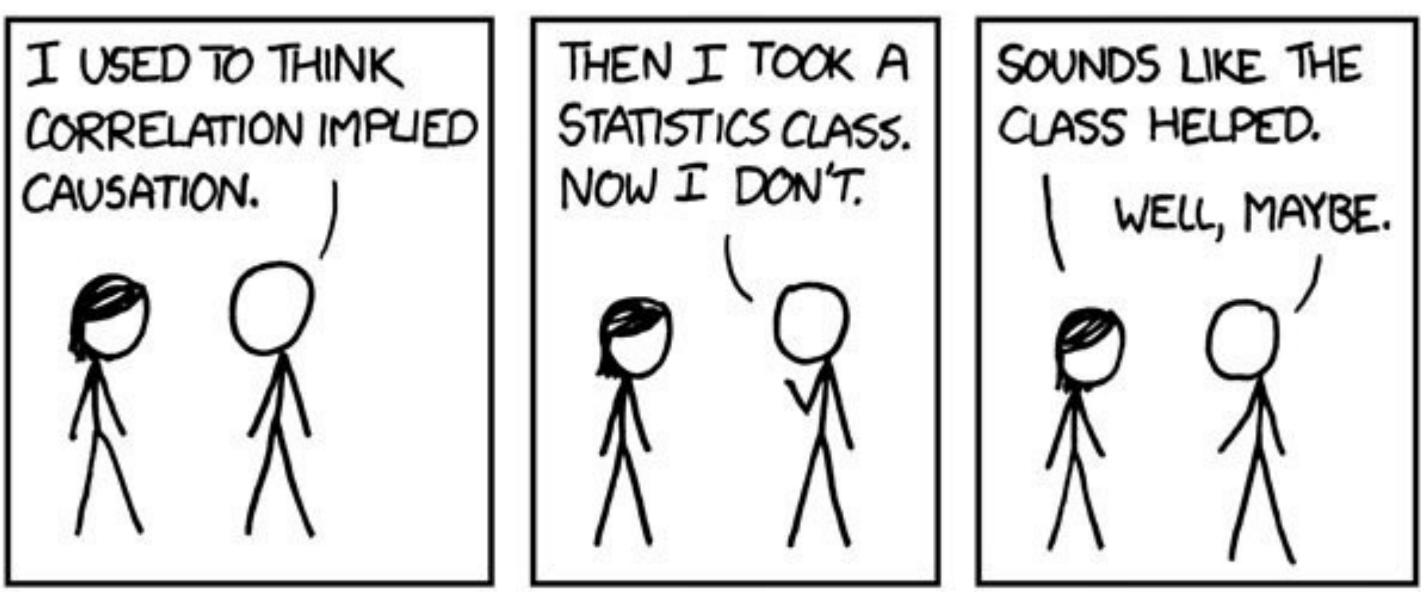
Thaler's research did not just show these observable instances of human irrationality, but also introduced a solution: the idea of a choice "that alters people's behavior in a predictable way without forbidding any options or significantly changing their economic incentives" – in other words, a "nudge" towards a certain behavior or decision. Nudges are not required behaviors, but rather, they make the "right" decision easier to make. The "right" decision may be enrolling for a social security program, and the nudge may be default enrollment with the option to opt out at any time (you may recognize the status quo bias as important with this one). If the "right" decision is to eat healthy foods instead of junky alternatives, a nudge would be to place apples and bananas at eye level in cafeterias while putting Lays and Chips Ahoy! on a lower shelf. This is called choice architecture, or building or manipulating the way that a decision is presented in order to influence the decision-maker towards a more ideal outcome without taking away individual choice.

Some classical economists have pushed back on the inclusion of psychological aspects into models, arguing that agents are rational and human psychology only adds noise to market analysis. Choice architecture as a concept has also led to criticisms. If human beings are incapable of being rational, who deserves the power to nudge others towards what they see is the best outcome? How should nudges be presented to decision-makers to allow transparency and individual choice?

Despite these critiques, governments and organizations all over the world have implemented "nudges" in their policies. Some companies automatically enroll new employees in 401(k) programs, with an opt-out anytime option. The World Bank has a special department called the Mind, Behavior, and Development Unit (eMBeD), which uses a behavioral science lens when working with governments to solve problems. Two successful instances (of many) include a 20.8% increase of tax compliance in Poland after sending behaviorally informed letters to taxpayers, and the significant increase of test scores in Peruvian middle-schoolers who were "nudged" with presentations about intelligence being malleable and improvable over time. The World Bank also reports "nudge units" being utilized in Canada, Israel, the UK, US, and Netherlands to test policies influenced by behavioral economics.

Thaler's work in behavioral economics has led to actionable policies throughout the world, and laid the foundation along with other economists for a thriving field of research. The 2017 Nobel Memorial Prize recognizes the importance and the possibilities of human psychology influencing economics, and Thaler's win reflects a growing consensus that not only do human flaws influence decisions and markets, but that the flaws can be manipulated through choice architecture to create more optimal outcomes..

Sources for information in this article can be provided upon request



Bike Sharing: Greater Efficiency for Transportation

Zihao Zhou

Despite a general increase in the amount of public transportation options available, public transportation modes are still riddled with inconveniences. One of the most prominent of these inefficiencies is what is known as the "last mile" problem, which is the inconvenience caused by large distances between transportation hubs and popular passenger destinations. As a result, many companies have attempted to alleviate these problems by introducing bike sharing: a system where consumers borrow 'shared' bikes for a short period of time. After arriving at their destination, riders can drop off their bike wherever they want, making the system incredibly convenient for its users. Due to rapid technological development, people can now also unlock the bikes via their mobile devices.

As students, we have all felt the sheer size of UW campus during the 20 minute walks to and from certain lecture halls. For students in a time crunch, where the distance to their destination is too long to walk but too short to take a bus, bikes provided by bike share are the perfect means of transportation to fill this gap. From a broader perspective, people can also use the bikes to shorten their travel time to subway or bus stations, which hopefully should reduce the severity of the city's traffic jams during rush hour.

Examples of companies that specialize in this service include Ofo and Mobike, which have taken China by storm, and have also expanded their operations all over the world. Although Ofo just expanded their service to Seattle, we can already see the service in action through the many bikes parked outside the residence halls. Since the market for bike sharing is not fully saturated, most of the companies already in the market are heavily investing to expand their market share. Since the market for bike sharing is in theory a perfectly competitive market, the demand for bikes is very elastic, and passengers are very sensitive to prices. With all these companies essentially offering the same service, there are no distinguishable features for bike sharing companies to mark up their price. In this way, offering attractive prices and discounts can provide strong incentives for people to use their services. During promotional periods, because bike sharing companies are typically backed by big investors and venture capitalists, companies usually have a greater ability to gain market shares. Nevertheless, having a well-established consumer base is the only way to ensure these companies a solid foundation for future cash flow. The ability of earning cash in the future can assure investors that these companies have high return to their capital.

From an economic perspective, especially in terms of optimum social resources allocation, bike-sharing companies are improving the efficiency of public transportation. This type of service has effectively prevented the overcrowding of buses and car lanes, while bike lanes are still relatively empty. Although bike-sharing services have great potential, we still cannot ignore the downsides, which include users dropping off their bikes in inconvenient locations (it is very obvious that public spaces are being misused). As time goes on, it is becoming more obvious that there are popular locations where bikes are being dropped off, such as outside residence halls, offices, and shopping malls. Considering this, one potential solution to the problem of improper disposal of bikes would be to work with local authorities to improve the spaces available for 'returning' shared bikes. Nevertheless, on a grand perspective, bike-sharing companies have monumentally improved the expediency of public transportation by basing their service around consumer convenience.

Sources for information in this article can be provided upon request

Paul Heyne Seminar: The EUB will be hosting its quarterly Paul Heyne seminar on Wednesday , November 29th. The topic of the seminar is Data Science, and the lecture will be hosted by Affiliate Professor and Amazon Principal Economist Gregory M Duncan. See the EUB website for more details.

Economics Tutoring: The EUB offers free tutoring every weekday at various times every quarter! Check the schedule on the EUB website to see tutoring times. If you need help with an upper level class, however, make sure you check the website to see

Jerome Powell: Trump's Nominee for Fed Chairman

Joseph Damitio

On November 2, 2017, President Donald Trump officially announced Jerome Powell as his nomination for the Chairman of the Federal Reserve Board, who, if confirmed by the Senate, will succeed Janet Yellen when her term expires February 3, 2018. He selected Mr. Powell from a group of five finalists for the position that included Mr. Powell, current chairwoman Janet Yellen, Stanford economist John Taylor, former Fed governor Kevin Warsh, and chief economic advisor Gary Cohn. This is a highly anticipated, high profile appointment for a position whose current holder, Janet Yellen, was ranked by Forbes as the world's sixth most influential person in 2016, sandwiched between Pope Francis and Bill Gates. This position yields immense influence on the direction of monetary policy and the US banking system, and yet over 75% of Americans don't know who the current chair is.

So who is Jerome Powell, and what does his appointment mean for the future of monetary policy in the United States?

Jerome Powell grew up the second of six children just 5 miles from D.C. in Chevy Chase, Maryland, where he still lives today. His father was a lawyer; his mother worked part-time for the Republican National Committee. After high school, Mr. Powell received an A.B. in politics from Princeton University, then attended Georgetown Law School, where he served as editor-in-chief of the Georgetown Law Journal and earned a law degree in 1979.

In this aspect, Mr. Powell does not fit the blueprint of recent Fed Chairs. He is not an economist by trade; he will be the first Fed Chair since Paul Volcker (1979-1987) without a Ph.D. in Economics, and the first since G. William Miller (1978-1979) without a degree in Economics at all. But he makes up for this lack of formal education with an impressive résumé that includes robust experiences in public policy roles. Appointed to the Fed by President Obama in 2012, he has served five years on the seven-member Board of Governors. Prior to this appointment, he had extensive experience in both the public and private sectors. Out of college he worked as a lawyer and investment banker until 1990, when he returned to Washington to serve in George H.W. Bush's Treasury Department as Assistant Secretary for Domestic Finance. After Bush left office years later, Mr. Powell returned to the private sector, this time working in private-equity investment until 2010, when he joined the Bipartisan Policy Center as a visiting scholar, employed at a salary of $1 per year. It was from this position that he was appointed to the Fed by President Obama in 2012.

In choosing Mr. Powell over other candidates for the job such as Stanford economist John Taylor, former Fed governor Kevin Warsh, and his chief economic advisor Gary Cohn, Mr. Trump has shown a desire for continuity and consistency at the Fed. He has praised Ms. Yellen as "a wonderful woman who's done a terrific job", but in the end decided against her re-nomination in favor of Mr. Powell, a close Yellen ally who largely shares her views of the role of the Fed, its chairman, and the direction of Fed policy. This marks the first time since 1979 that the chair of the central bank has not been reappointed.

Mr. Powell will take the helms in the midst of a delicate macroeconomic environment. Economic indicators such as GDP growth and unemployment have reached levels that traditionally necessitate the raising of rates to prevent the economy from overheating, but stubbornly low inflation has some economists worrying about whether the Fed might raise rates too quickly. The situation is this: raising rates too slowly could lead to high inflation well above the Fed's 2% benchmark, or could stoke an economic bubble that could suddenly burst and drive the economy into another deep recession. On the other hand, raising rates too fast could unnecessarily impede a thriving economy. There is a fine line that reconciles these two outcomes, and Mr. Powell's Fed will oversee this process in the upcoming years.

Along with managing the rise of its benchmark interest rate, Mr. Powell's Fed in the upcoming years will be tasked with unwinding its $4.5 trillion bond portfolio. This is also a delicate process that, if not done measuredly and deliberately, could lead to volatility in long-term interest rates like those for 10-year Treasury notes and mortgages. The Fed has maintained this portfolio since it's multi-step quantitative easing program in the wake of the 2007-2008 financial crisis, which involved purchasing longer-term bonds and other financial assets in an effort to keep long-term interest rates low. But now that the economy has stabilized, the Fed wants to shrink this portfolio by around half, and this process will be largely executed by Mr. Powell's Fed.

Because Mr. Powell has similar views to Ms. Yellen on the trajectory of monetary policy and the role of the Fed chair in the decision-making process, his appointment isn't likely to bring about sweeping changes to the Fed or its policy, and his meticulous, open-minded, and "remarkably undogmatic" personality further reinforce this. It seems ironic that an appointment to a position as prestigious and influential as Chairman of the Federal Reserve Board is expected to have little effect on the direction of our country, but Mr. Powell probably doesn't mind, nor do the markets. In the two days since the announcement on November 2nd, the Dow Jones Industrial Average went up over 75 points, or .3%.

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