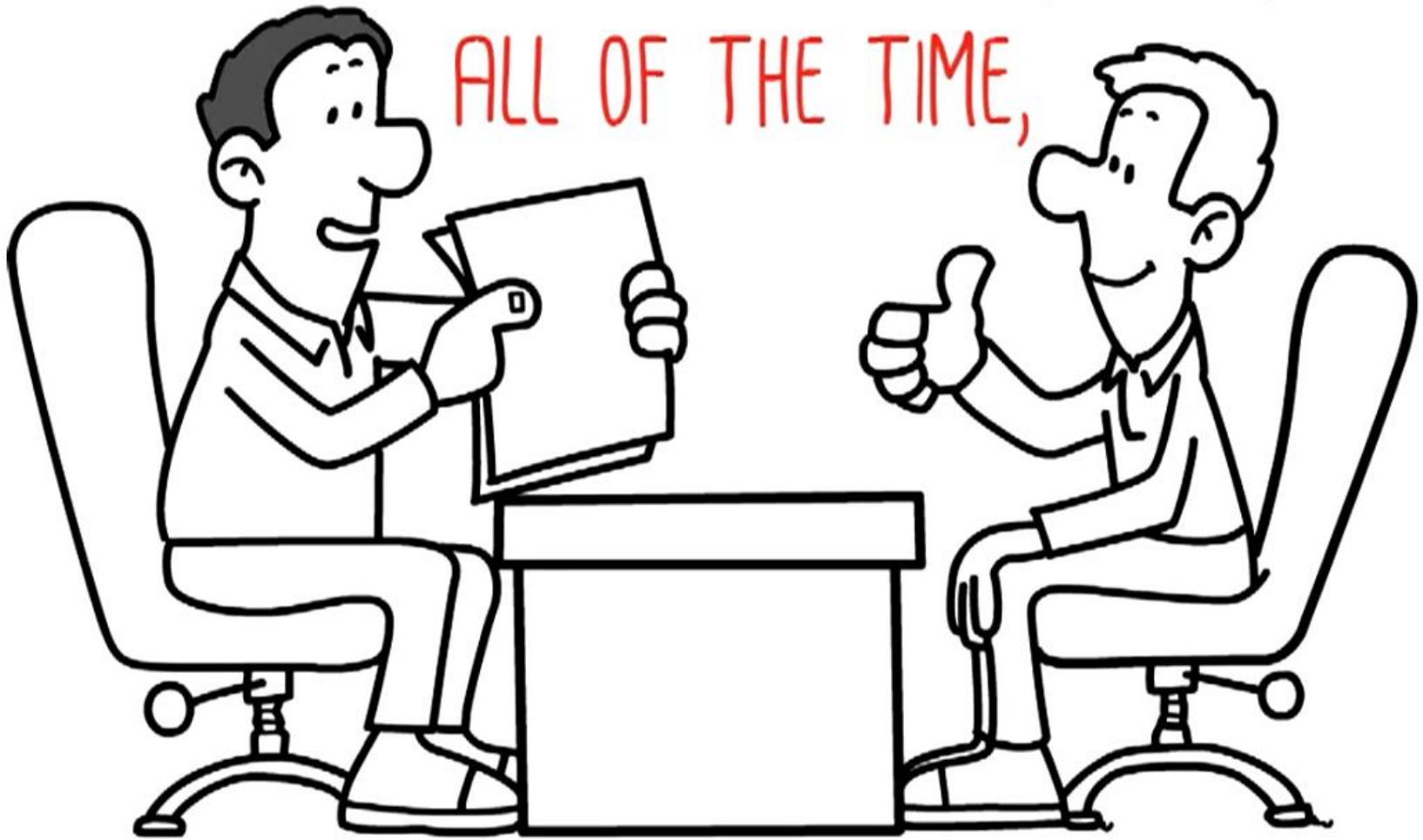
Behaviour Economics

Traditional Economics assumed

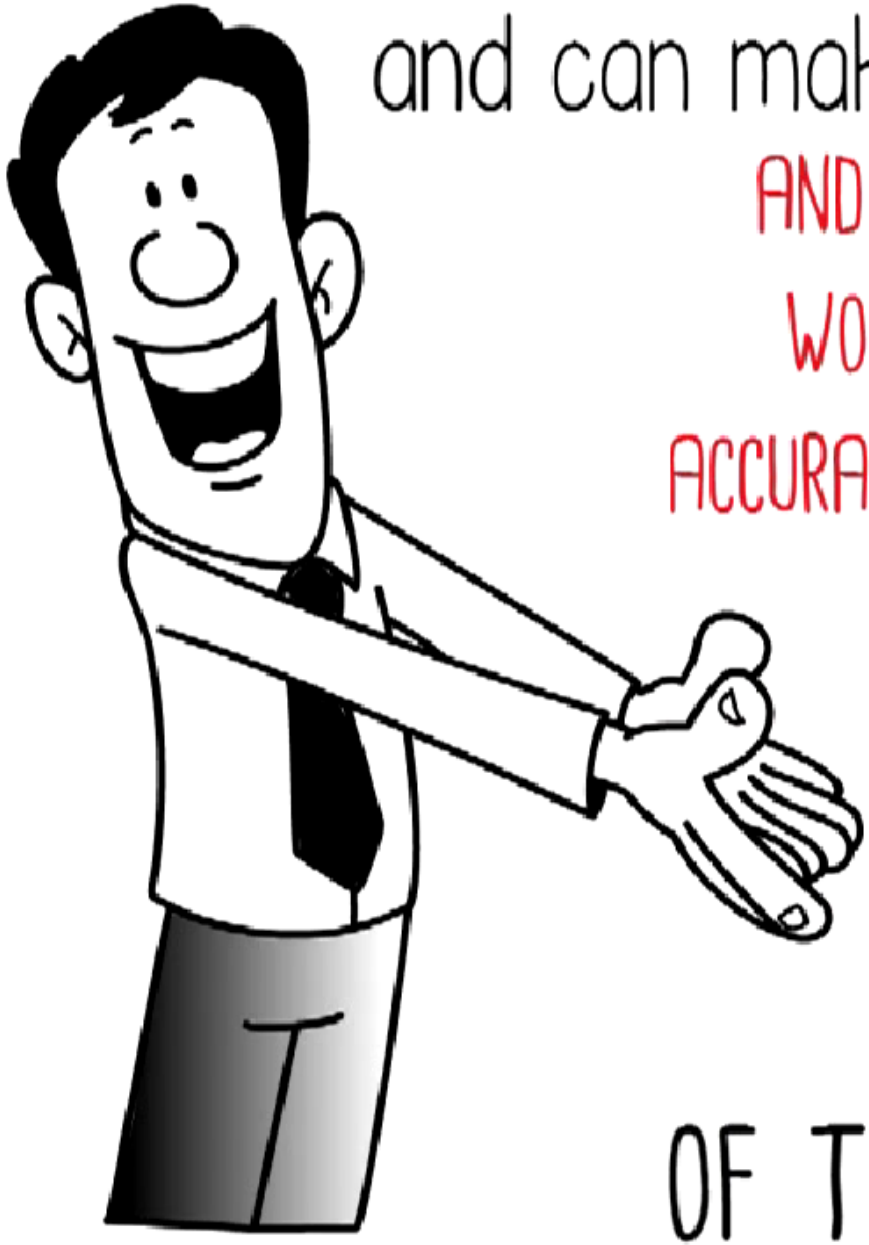
the consumer that behaves completely rationally

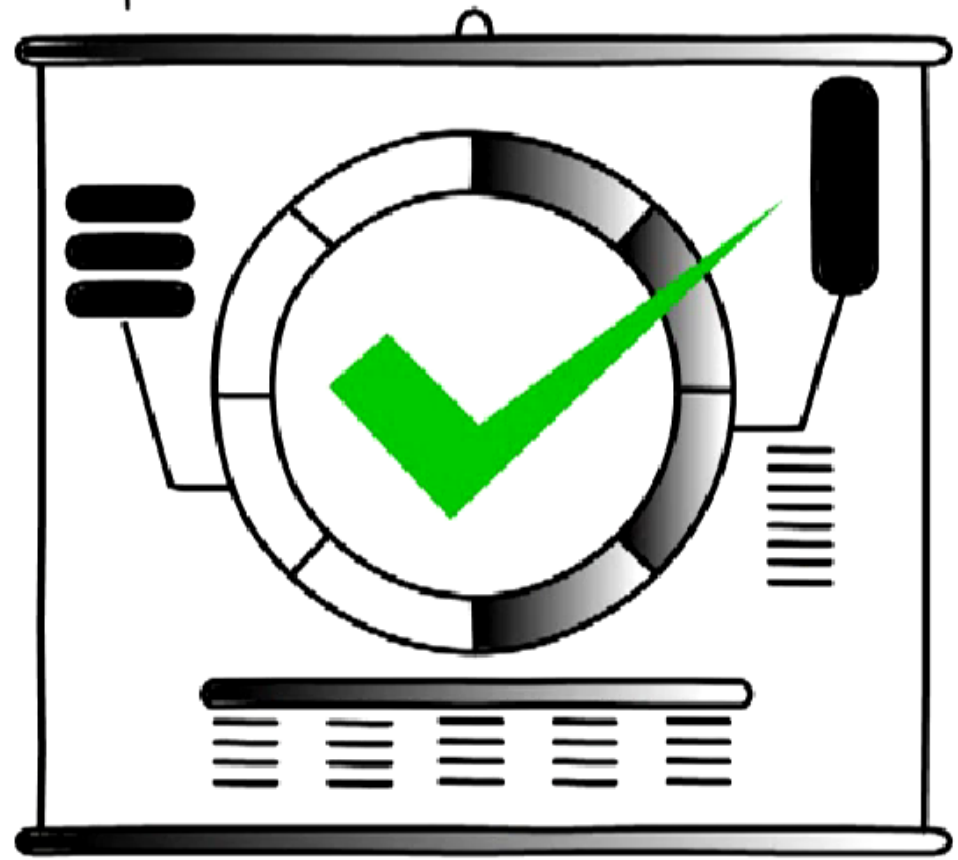


HAS PERFECT INFORMATION

and can make wonderfully accurate forecasts

AND CAN MAKE
WONDERFULLY
ACCURATE FORECASTS





OF THEIR FUTURE WANTS AND DESIRES

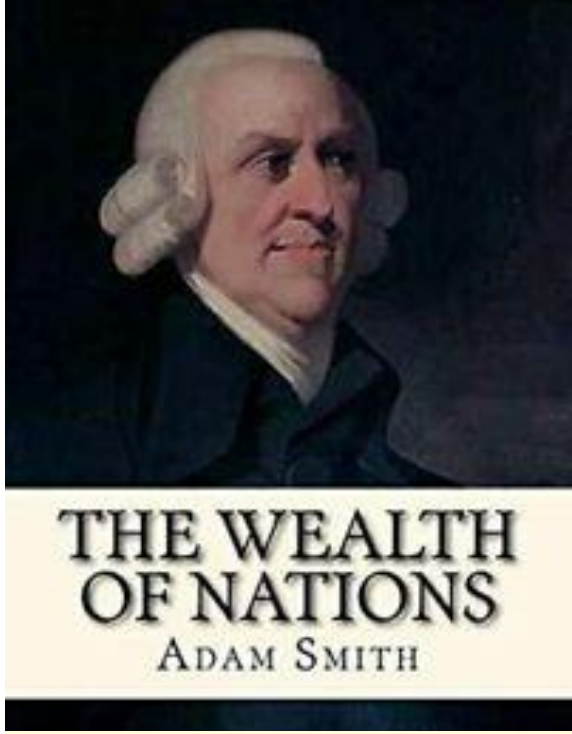
Recall: Rational economic decision-making

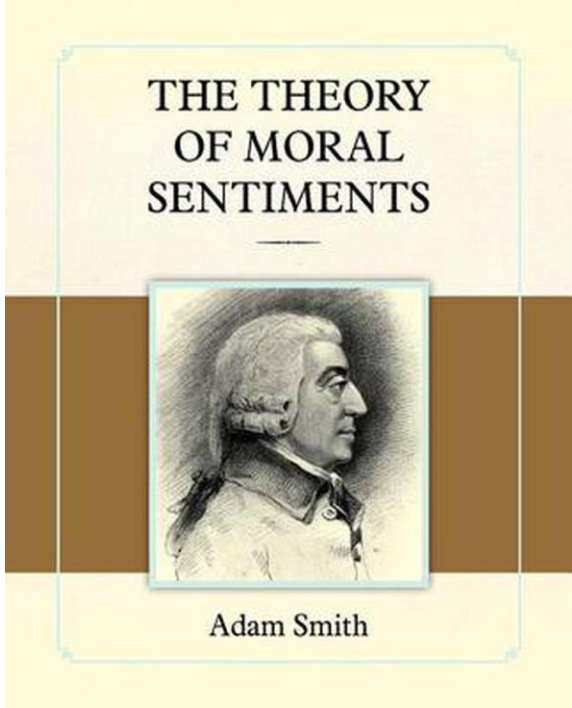
Individuals are assumed to act in their best self-interest, trying to maximize the satisfaction they expect to receive from their economic decisions.

a. Producers try to maximize the profits
b. Workers try to secure the highest possible wage when they get a job
c. Investors in the stock market try to get the highest return
d. ··· etc.

Rational consumer choice

1. **Consumer rationality**
   - The consumer is able to rank goods according to his/her preferences
     A>B or A<B or A=B (completeness assumption)
   - Preferences among alternative choices are consistent
     A>B and B>C → A>C (transitivity assumption)
   - The consumer always prefer more of a good to less.
     100 pieces of A > 80 pieces of A (non-satiation assumption)
2. **Perfect information**: the consumers have at their disposal perfect information about all their alternatives, so that there is no uncertainty.
3. **Utility maximization**: consumers buying the combination of goods and services that results in the greatest amount of utility for a given amount of money spent. (based on the two assumptions above)





Behavioural economics

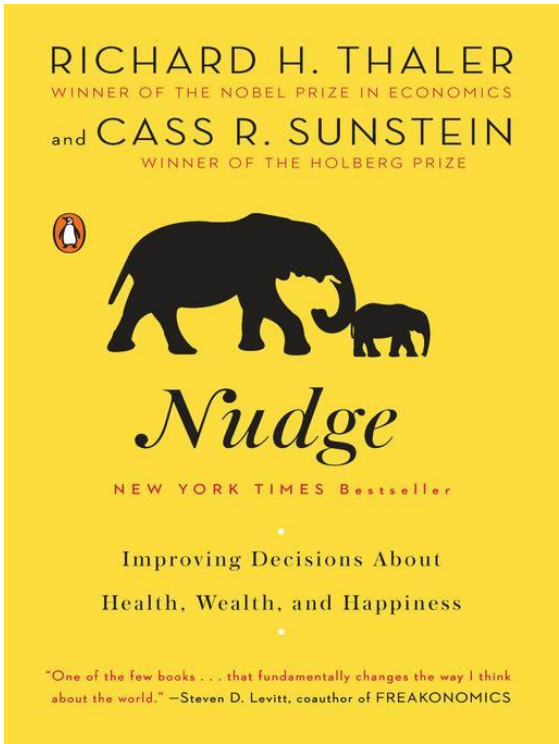
Behavioural economics – A relatively new branch of economics strongly influenced mainly by psychology, but also by sociology and neuroscience based on the idea that **human behavior is far more complex than the assumption of rationale consumer choice**.

➡ Criticize of consumer rationality and utility maximization.

Richard H.Thaler

–Received the 2017 Nobel prize in Economics

<misbehaving><Nudge><The winner's curse>



Limitations of the assumptions of rational consumer choice

1. **Biases**
   - Rules of thumb
   - Anchoring
   - Framing
   - Availability
2. **Bounded rationality**
3. **Bounded self-control**
4. **Bounded selfishness**
5. **Imperfect information**

Biases

Behavior Economics thinks that human behavior is far more complex than consumer rationality assumes.

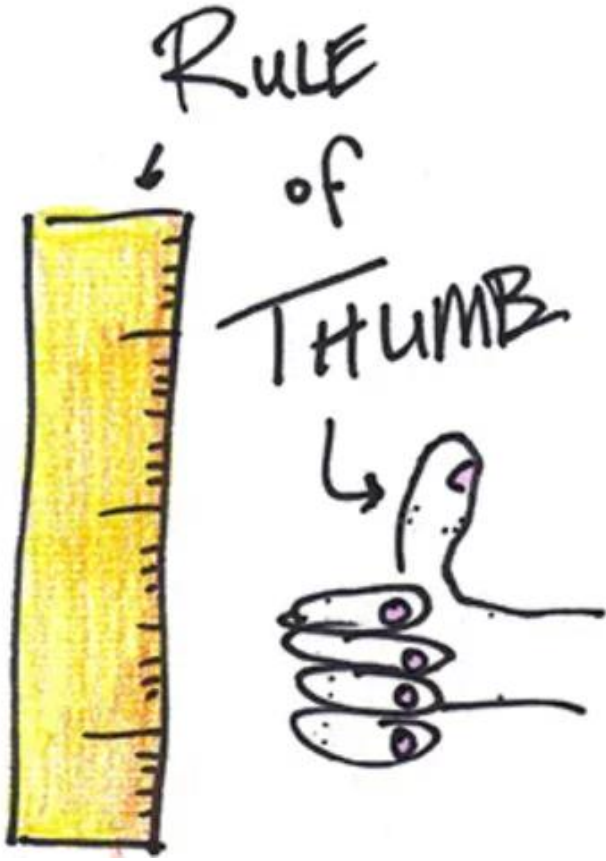
Biases (cognitive bias) – a term from psychology that refers to systematic errors in thinking or evaluating.

1. **Rules of thumb**
2. **Anchoring**
3. **Framing**
4. **Availability**

1. Biased - Rule of thumb

- simple guidelines **based on experience and common sense**, simplifying complicated decisions that would have to be based on the complex consideration of every possible choice.

- A rule of thumb is a heuristic guideline that provides **simplified advice or some basic rule-set** regarding a particular subject or course of action
- As a rule of thumb, people tend to stick to their default choice. E.g.:
  - Children tend to stick to the same choice of food in McDonald's.
  - Drivers often go into 'auto pilot' mode and drive a particular route to and from their workplace.



1. Biased - Anchoring

Anchoring involves the use of **irrelevant information to make decisions**, which often occurs due to its being the **first piece of information** that the consumer happens to come across. → Anchors create a bias in favor of a particular choice.

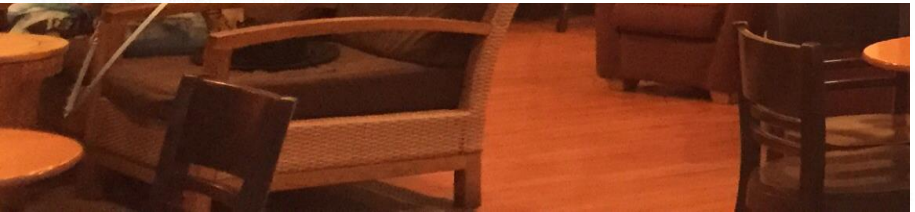
Anchoring is a cognitive bias in which the use of an **arbitrary benchmark** such as a purchase price or sticker price carries a disproportionately high weight in one's decision-making process.

- Anchoring can be used to advantage in sales and price negotiations where setting an initial anchor can influence subsequent negotiations in your favor.
- market participants with an anchoring bias tend to hold investments that have lost value because they have anchored their fair value estimate to the original price rather than to fundamentals.


STARBUCKS COFFEE


¥27
¥ 30
¥ 33
TALL
354ml
GRANDE
437ml
VENTI
591ml


Deliciously familiar



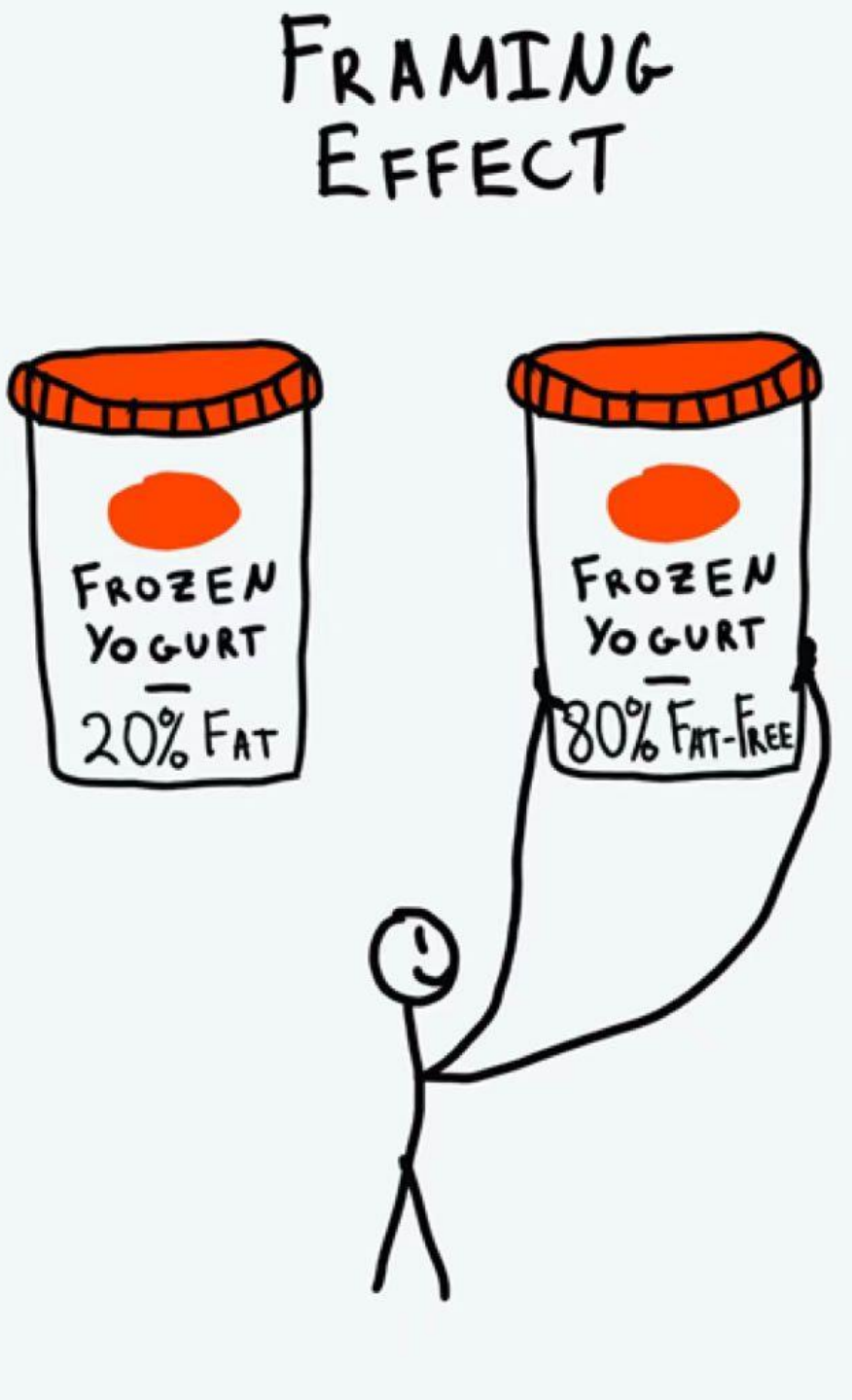
杯型	大小	价格	感知	每百毫升价格
Tall(中杯)	12盎司（354 毫升）	27元	感觉有点贵	7.63元/100ml
Grande(大杯)	16盎司（437 毫升）	30元	比中杯多83ml，贵3元，83ml是5.69元，划算。	6.86元/100ml
Venti(超大杯)	20盎司（591 毫升）	33元	量太大，喝不了，剩下了就浪费。	5.58元/100ml

1. Biased - Frame effect

Framing deals with how choices are presented (framed) to decision-makers.

The framing effect is a **cognitive bias** where people decide on options based on whether the options are presented with positive or negative connotations;

e.g. as a loss or as a gain. people prefer a “sure thing” when it comes to a potential gain (avoid risk) but are willing to take a chance if it involves avoiding a loss (seek risks)



Gasoline price: ¥5.6/gallon
if you pay by cash
You will get a discount of
¥0.6/gallon

Gasoline price: ¥5/gallon
if you pay by credit card
You will need to pay additional
¥0.6/gallon

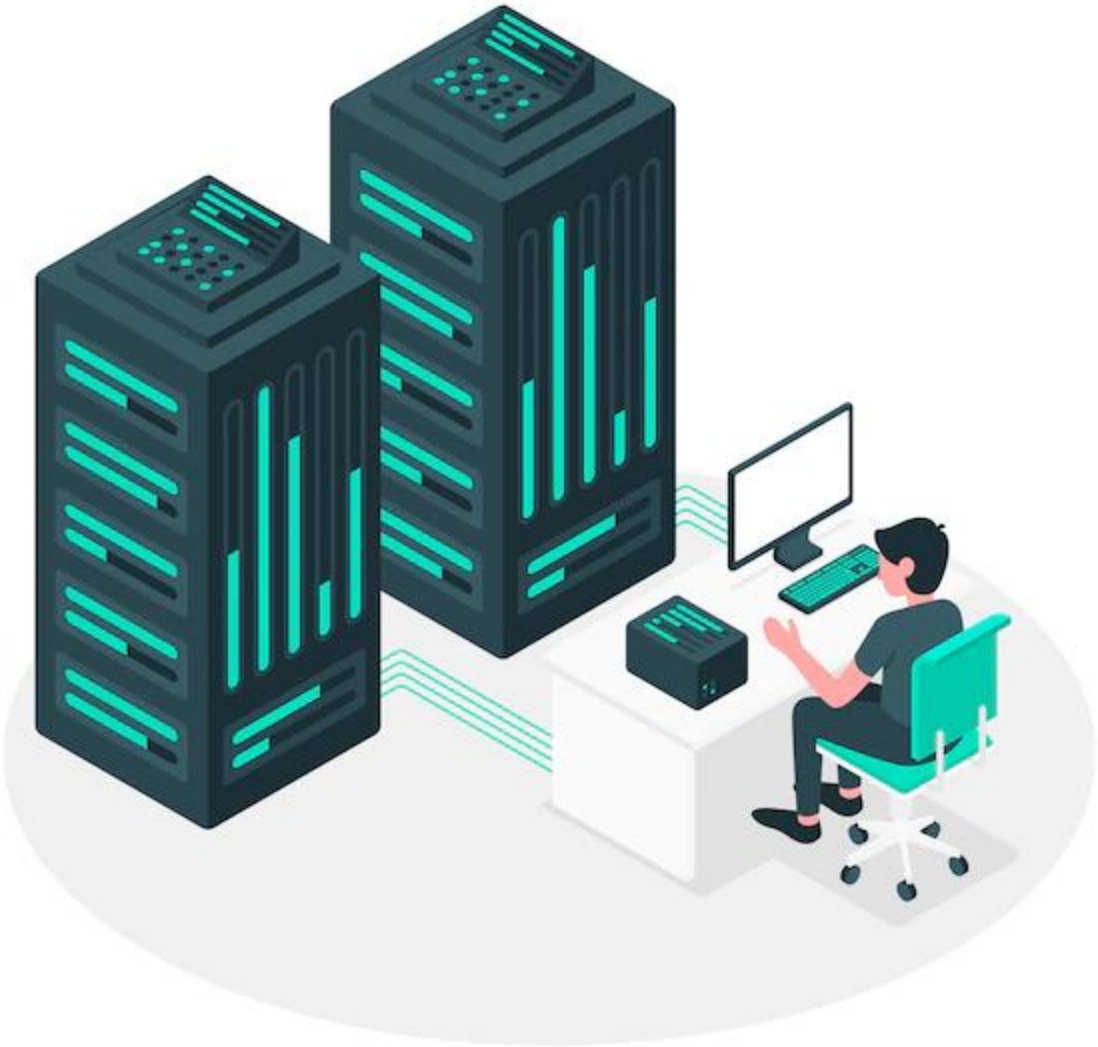
Gasoline price: ¥5.6/gallon
if you pay by cash
You will get a discount of
¥0.6/gallon

Gasoline price: ¥5/gallon
if you pay by credit card
You will need to pay additional
¥0.6/gallon

1. Biased - Availability bias

Availability: People tend to heavily rely on information that is most recently available. People remember recent events or information more readily than older events or information. E.g.:

- When you shop in the supermarket, you may select the goods that you have seen the advertisement before.
- People tend to overestimating the likelihood of shark attacks or aircraft accidents.
- More people catch the bus after reports of a train accident.



2. Bounded rationality

(Herbert Simon, Nobel Prize in economics, 1971)

- People do not have an unlimited capacity to process information and that searching for information needed to maximize utility is itself a costly process.

→Rationality is bounded by people's thinking capacity, the availability of information and time.

- Limited time/ Vast number of available choices/ limited information
- Consumers seek a **satisfactory outcome** rather than an optimal(best) one. (consumers follow heuristics to make satisficing decisions)

3. Bounded self-control

- People in reality exercise self-control only within limits.
- People may lack the self-control to think for themselves and to make a rational choice. Instead, they conform to **social norms and group preferences and pressures**, which may not match their own preferences.
- Some brands will create strong marketing messages to appeal to their target audience and finding the right emotional appeal to attract customers.

4. Bounded selfishness

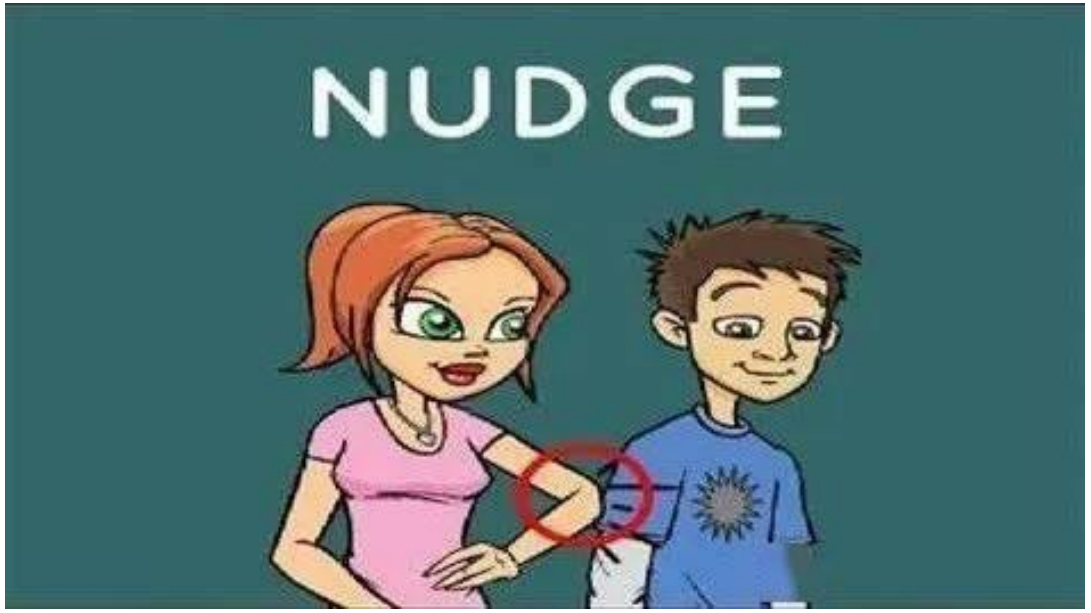
- People are selfish only within limits.
- People's altruistic and charitable behavior.
- Individuals:
  - Helping strangers without expecting anything in return
  - Donating money to charity
  - Giving food and water to homeless people
  - Random acts of kindness towards others
  - Organ donations
  - Doing voluntary work
- Firms: not firing workers in recession, public donations, etc.

5. Imperfect information

- Consumer cannot possibly have full access to the information. They are unable to maximize utility as they make choices based on faulty and incomplete information.

Behavioural economics in action

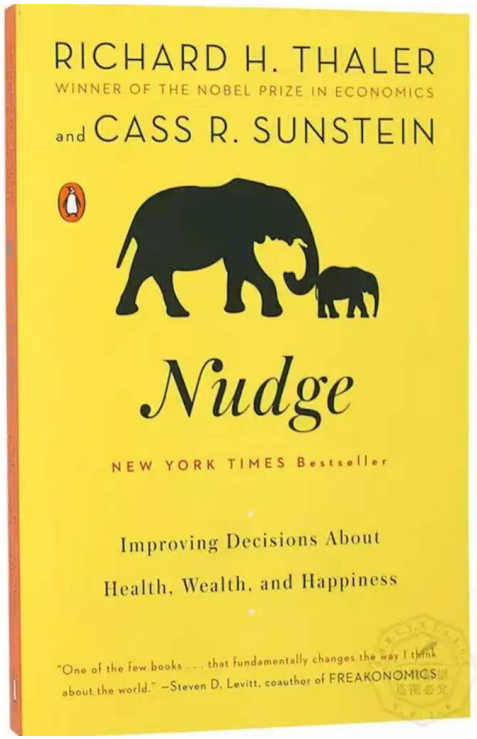
1. Choice architecture
2. Nudge



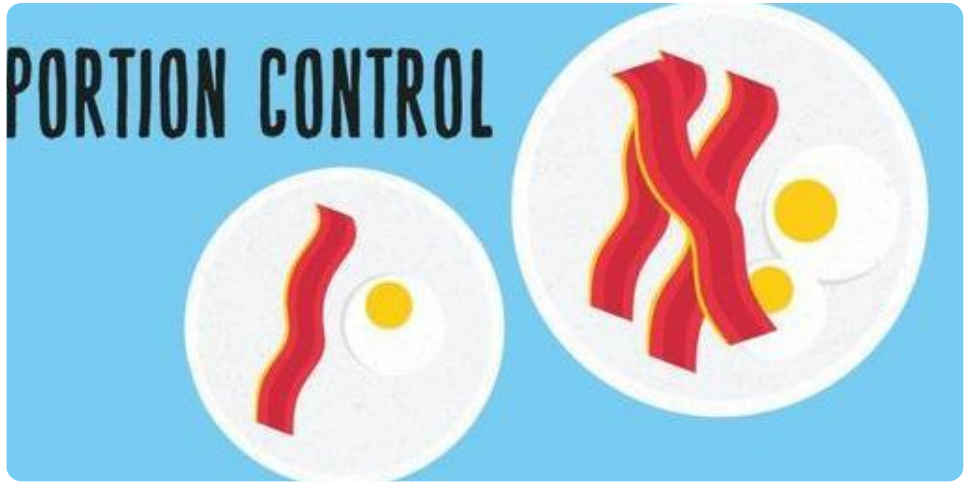
1. Nudge theory

- “Nudge” means poking someone gently to get attention.
- **Nudge:** a method designed to influence consumer's choices in a predictable way, without offering financial incentives or imposing sanctions, and without limiting choice.
- People respond favorably when nudged to perform actions that they might not otherwise be inclined to do.

Richard H. Thaler



Examples of nudge



- **Creating a psychological anchor.**
  - A psychological anchor is an initial piece of information that people rely on strongly when making subsequent judgments and decisions.
  - E.g., a charity soliciting donations can create a psychological anchor by telling donors that “most people donate $20”, in order to nudge people to donate more money than they would otherwise.
- **Changing the ease of choosing certain options.**
  - This can involve either making a good option easier to choose, or a bad option harder to choose.
  - E.g. To encourage people to eat healthier, a cafeteria can place healthy foods in convenient locations and unhealthy food in less convenient locations.

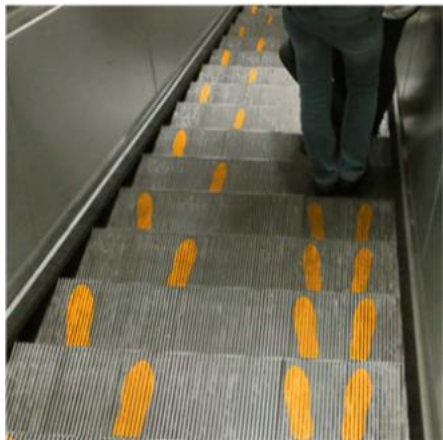
Examples of nudge

- **Changing the salience of certain options.**
  - This can involve either making a good option more noticeable, or a bad option less noticeable.
  - E.g., to encourage people to save more money, a workplace can design relevant forms in a way that visually attracts people's attention to the available saving program.
- **Informing people.**
  - Informing people of things such as the benefits or dangers of certain options can influence their behavior.
  - E.g., giving people a simple flyer with information about their employer's retirement savings plan can lead people to contribute more to it.
- **Reminding people of information they know.**
  - Reminding people of information that they already know can influence people's behavior, similarly to informing them of things that they didn't know.
  - E.g., reminding doctors about the problem of antibiotic resistance in society can reduce the amount of unnecessary antibiotics that they prescribe to patients.

Examples of nudge

- **Reminding people to do something.**
  - Reminding people to do something that they need to do can prompt them to take action.
  - For example, sending people a reminder that they need to schedule a doctor's appointment can increase the likelihood that people will do so when necessary.

- **Getting people to slow down.**
  - Encouraging people to slow down their decision-making process can help them make better decisions.
  - For example, on social media, encouraging people to wait a short while between the moment they submit a post and the time when it's actually posted can lead people to edit and cancel posts that they would have otherwise regretted making public.



2. Choice architecture

- Consumers make decisions in a particular context and that **choices of decision-makers are influenced by how options are presented to them.**
- If refers to the deliberate design of different ways of presenting choices to members of society, and the impact of these methods on decision-making.
  - The layout of supermarkets
  - Calories counts on restaurant menus
- Choice architecture is related to libertarian paternalism and nudge theory, which proposes that positive reinforcement and implicit suggestions can influence behavior.

Choice architecture

1. **Default choice**: It is a choice that is made by default, which means doing the option that results when one does not do anything.
   - people often make choices by default due to habit or lack of interest in taking a deliberate action. Consumers buy the 'easiest' option. Often this is the option that they have used to buying. It minimizing costs of choosing and deciding what to buy.
   - E.g., making people organ donors by default can increase the rate of organ donations, compared to requiring people to opt-in in order to become donors.
2. **Restricted choice**: a choice that is limited by the government or other authority.
   - Speed limits, voting age, recycling regulation, smoking prohibitions and social norms like shaking hands.
3. **Mandated choice**: choice between alternatives that is made mandatory (compulsory) by the government or other authority.
   - It is a free choice, but it is compulsory to make that free choice.

→ They are different types of nudges within choice architecture that are intended to work toward influencing people's choices in a direction held to be socially desirable.

Examples of choice architecture

- **Opt-in/ Opt-Out.** If people have to opt-in, many stick with the default option of not opting in. But, if you have to opt-out, many more will take the scheme.
  - E.g., if donation are opt-in, take-up rates may be low. But if donation become opt-out, then take-up rates have been shown to increases.
  - company pensions. Making them opt-out significantly increases take-up rates.
- **Reduce the consumption of demerit goods**
  - In the UK, Recently cigarettes are hidden from view – meaning consumers have to make an extra effort to buy the good.
  - Highlighting health costs. In the UK many firms now highlight how much sugar/fat is in a product, with the % of daily recommended amounts. If consumers see a packet of doughnuts contains 40% of the daily recommended intake of sugar, this may discourage them from consuming.
- **Increase the consumption of merit goods**
  - vaccination is very beneficial if everyone takes it, but people may not want to bother. The government can introduce mass vaccinations in schools and only if parents object, can someone avoid it.
  - The government make it very easy and cheap for students to stay on and continue higher education rather than leave at the age of 16.

Evaluating behavioural economics and economic policy (AO3)

Potential advantages:

1. Relatively simple/low cost way to influence people's behavior to act in socially desirable way.
2. Future potentials on various areas.
3. Offer freedom of choice to consumers without forcing them to do/not to do anything.
4. Help to explain the inconsistencies and seeming irrationality of actual consumer behavior.
5. The policy based on reliable psychology theories.
6. The development of policies is based on trials, indicating the use of a flexible trial-and-error method of discovering policy measures that can work in achieving desired results.

Evaluating behavioural economics and economic policy (AO3)

Potential disadvantages:

1. The body of knowledge is unable to lead to a systematic and unifying theory of how consumers behave with general applicability.
2. The resulting unsystematic approach(different policies for different situations) limited the applicability of the policies being developed over time and across social, economic and cultural groups.
3. Risks of using psychological principles to manipulate consumers.
4. Risks of being used as substitutes for necessary but politically costly economic policies.
5. Less effective than traditional economic policies.
6. Working as camouflage of government regulation.
7. The affected choices may not be a reflection of their true preferences.