

# What's love got to do with it ? Behavioral economics

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**Abstract:** Behavioral economics is about bringing reality into economic analysis. It borrows from psychology, sociology, politics, and institutional economics (which focuses on the rules of the economic game) to describe and explain human behavior and economic phenomena. Behavioral economics builds upon conventional economics, offering more tools for understanding why people behave the way they do when it comes to income, wealth, ethics, and fairness. It uses prospect theory to describe the choices that the typical person makes. Let's try to find out what decides about our choice. We are living in exciting, overturning times. We take for granted search engines, e-commerce, blogging, wikipedia, broadband internet, social networks, apps, iphone, ipad... When people say "I like my iPhone, or I hate my Nokia" what makes them say that, what makes them to make a choice. Is it a feeling or need? Is it the Love or Hate? I believe this is hard to say and this is worth to study. There is no consistency between consumers, furthermore there is no consistency even the same consumer chooses differently on different occasions. What always prevails? We should also discuss what Prefrontal Cortex – part of the brain responsible for executive functions choice – good / bad, right wrong, better-best, etc. makes with our brain when choosing between brands or/and marketing offers and try to find out answers what decides...

**Keywords:** behavioral economy, love, like, consumer

## 1 We live in exciting times

May you live in interesting times! This is an ancient Chinese proverb – some say a curse. In the original language, the word for "interesting times" is the same as the Chinese word for crisis that is commonly interpreted to mean both danger and opportunity. Scholars tend to agree on the "danger" half of the word, but suggest the meaning of the other half is closer to "a critical point in time" [1] than to "opportunity." Living in interesting times may be either a blessing or a curse. Regardless, we most certainly are living in "interesting times" today.

These are times President Obama described as times of "gathering clouds and raging storms" in his inaugural address. We are at a critical point in time, he said, when we must "reaffirm our enduring spirit" and "choose our better history." Not return to our darker history of exploitation, irresponsibility, and global imperialism, but to our better history of equality, responsibility, and mutual respect. In times of crisis, we must listen to our "better angels." [2]

### 1.1 The rapid advance in Internet and Cellphone technology over the last decade

The rapid advance in Internet and cellphone technology coupled with its deep market penetration has also given wings to the cliché, *we live in interesting times*. The technology exposes a cellphone user's position within feet relative to the nearest cell tower. Just decade ago we started to use the words like search engine, e-commerce, blogging, Wikipedia. Does the average citizen understand that by acquiring the cellphone there is a quid pro quo to be considered? John Citizen enjoys the convenience of being *connected* but a blip appears on Big

Brother's radar. Recently in the United Kingdom, the largest search engine Google is alleged to have been caught with its hand in the cookie jar. *The search engine giant mapped every wireless internet connection in the country and now uses the data to make money. Google staff in specially adapted cars collected the signals from inside residents' homes as they toured the country for the company's Street View project. They were able to record the location of every router and wireless network without telling anyone because wi-fi signals spill out from inside homes on to the street.*

The implication for John Citizen is explained...*if someone is walking down the street carrying a mobile phone, software inside the phone can pinpoint the user's location by detecting nearby wi-fi networks and triangulating the position using Google's records.* And not only by Google. Who could expect that in 2013 we would have more eyes of Big Brother watchin us through broadband internet, social networks, apps, iphone, ipad, Facebook , Viber or Skype.

The alleged mapping of routers and wireless networks owned by private citizens by Google means the blip on Big Brother's radar can become even more accurate in locating John Citizen when operating a mobile handset. It seems John Citizen is prepared to trade privacy to own the ubiquitous cellphone.

## **2 Consumer behaviors**

### **2.1. Mobility everywhere anytime**

Mobile technology is radically changing the way people live their lives. Mobility is a cultural revolution, an unstoppable wave of change. Almost two-thirds of British adults now own a smartphone and use a variety of apps every day in their personal lives. But new research commissioned by my company, EE, shows businesses are lagging dangerously behind this mobile revolution. People have mobility in their personal lives and they expect it at work as well, yet only one in five employees in large businesses are equipped to work away from their desks, while 41 percent of respondents said the mobile devices they use for work are old and not fast enough. And just 18 percent of organizations provide mobile apps to employees, despite the business and productivity benefits. For example, UNITE, a leading UK operator of purpose-built student accommodation, introduced an app for its facilities maintenance team, allowing them to update and view information about maintenance jobs. The app increased the number of completed jobs by 30 percent.

### **2.2. Multi-ip devices**

Internet service provider hands us a single Internet Protocol address and our router shares it amongst all the connected devices in our homes. This actually violates the end-to-end principle, which the Internet was designed around. However, there are only so many IP addresses to go around – we're running out. Public IP Addresses Are a Limited Resource - There are less than 4.2 billion available IPv4 IP addresses. In other words, there are more connected devices on the planet than there are unique, public IP addresses for them. The Internet is running out of IPv4 addresses, even though we're rationing them. Rather than our Internet service provider assigning a unique public IP address to each device in our home – we would need an additional IP address every time we

bought a new computer, tablet, smartphone, game console, or anything else – our ISP generally assigns us a single IP address.

### **2.3. Cloud**

Cloud computing, or something being in the cloud, is an expression used to describe a variety of different types of computing concepts that involve a large number of computers connected through a real-time communication network such as the Internet. Cloud computing is a term without a commonly accepted unequivocal scientific or technical definition. In science, cloud computing is a synonym for distributed computing over a network and means the ability to run a program on many connected computers at the same time. The phrase is also more commonly used to refer to network-based services which appear to be provided by real server hardware, which in fact are served up by virtual hardware, simulated by software running on one or more real machines. Such virtual servers do not physically exist and can therefore be moved around and scaled up (or down) on the fly without affecting the end user—arguably, rather like a cloud.

## **3. Where we felt in love?**

### **3.1. Difference between Love and Like**

LIKE - People are rational and respond to incentives.

LOVE - People are irrational and do not respond to incentives.

Anthropologists, sociologists, and public-health officials . . . believe that cultural differences—differences in how entire groups of people think and act—account for broader social and regional trends. AIDS became a disaster in Africa, the thinking goes, because Africans didn't know how to deal with it. Economists don't trust that argument. We assume everyone is fundamentally alike; we believe circumstances, not culture, drive people's decisions, including decisions about sex and disease" How is it that economists "assume everyone is fundamentally alike" but also have different beliefs about how people think and act than "anthropologists, sociologists, and public health officials"? That is, how can every be fundamentally alike (rational) if economists have different beliefs than everyone else, and are therefore fundamentally not like everyone else? Gelman thinks the answer is economists like to associate themselves with rationality, because rational is "good", or what economists might call high status. They do this by celebrating the rationality of people and by patting economists on the back for their rationality. He says "both are ways of associating oneself with rationality. It's almost like the important thing is to be in the same room with rationality; it hardly matters whether you yourself are the exemplar of rationality, or whether you're celebrating the rationality of others". People are rational a lot of the time. But the reason is not some inherent rationality, but because being irrational costs them. So when we are talking about why movie theaters charge so much for candy, it's likely they are being rational because irrational pricing would cost them money.

But when people have no cost to irrationality they may embrace it because they have preferences over beliefs. For instance, when we're talking about what someone believes about repugnant ideas, they don't have any monetary incentive to have rational beliefs, and so they don't. [3]

### **3.2. How do we make a choice?**

Every day, we face thousands of decisions both major and minor — from whether to eat that decadent chocolate cupcake to when to pursue a new romantic relationship or to change careers. How does the brain decide? Study suggests that it relies on two separate networks to do so: one that determines the overall value — the risk versus reward — of individual choices and another that guides how we ultimately behave. “Cognitive control and value-based decision-making tasks appear to depend on different brain regions within the prefrontal cortex,” Cognitive control is what keeps this network in check. “To be able to get to the checkout counter with what you planned, you need to maintain a goal in mind, such as perhaps only buying the salad you needed for dinner,” “That’s your cognitive control network maintaining an overall goal despite lots of distractions.” Understanding how the brain parcels out specific decision-making tasks can offer insight into conditions in which such networks go awry, such as in the case of psychiatric disorders. Depressed people, for example, clearly have difficulty with value-based decision making: because nothing feels good or seems appealing, all options appear equally bleak and making choices becomes impossible. Hoarding disorder, in contrast, may involve overvaluation of certain possessions and impairment of the cognitive control needed to shift one’s attention away from them. That explains why hoarding becomes more important than other life goals like maintaining relationships. (4)

## **4 Value in economics**

Economic value is one of many possible ways to define and measure value. Although other types of value are often important, economic values are useful to consider when making economic choices – choices that involve tradeoffs in allocating resources. Measures of economic value are based on what people want – their preferences. Economists generally assume that individuals, not the government, are the best judges of what they want. Thus, the theory of economic valuation is based on individual preferences and choices. People express their preferences through the choices and tradeoffs that they make, given certain constraints, such as those on income or available time. The economic value of a particular item, or good, for example a loaf of bread, is measured by the maximum amount of other things that a person is willing to give up to have that loaf of bread. If we simplify our example “economy” so that the person only has two goods to choose from, bread and pasta, the value of a loaf of bread would be measured by the most pasta that the person is willing to give up to have one more loaf of bread. Thus, economic value is measured by the most someone is willing to give up in other goods and services in order to obtain a good, service, or state of the world. In a market economy, dollars (or some other currency) are a universally accepted measure of economic value, because the number of dollars that a person is willing to pay for something tells how much of all other goods and services they are willing to give up to get that item. Producers of goods also receive economic benefits, based on the profits they make when selling the good. Economic benefits to producers are measured by producer surplus, the area above the supply curve and below the market price. The supply function tells how many units of a good producers are willing to produce and sell at a given price.

#### 4.1. What's the value of love?

#	Category	Brand	Brand Value 2012 (B\$)	#	Category	Brand	Brand Value 2012 (B\$)	#	Category	Brand	Brand Value 2012 (B\$)
1	Technology	Apple	182,951	26	Technology	HP	22,208	51	Personal Care	Colgate	14,948
2	Technology	IBM	115,985	27	Technology	ORACLE	22,529	52	Fast Food	Subway	14,843
3	Technology	Google	107,857	28	Cars	TOYOTA	21,779	53	Insurance	中国人寿	14,587
4	Fast Food	McDonald's	95,188	29	Financial	Bank of America	20,789	54	Financial	ID	14,561
5	Technology	Microsoft	76,651	30	Financial	HSBC	20,198	55	Technology	SAMSUNG	14,164
6	Soft Drinks	Coca-Cola	74,286	31	Financial	HSBC	19,313	56	Oil & Gas	BP	13,940
7	Tobacco	Marlboro	73,612	32	Luxury	Louis Vuitton	19,161	57	Personal Care	LOREAL	13,773
8	Telecoms	at&t	68,870	33	Personal Care	Gillette	19,055	58	Apparel	H&M	13,485
9	Telecoms	Verizon	49,151	34	Oil & Gas	ExxonMobil	18,315	59	Technology	Intel	13,317
10	Telecoms	中国移动通信集团	47,041	35	Baby Care	Pampers	18,299	60	Financial	Commonwealth Bank	13,083
11	Conglomerate	三星	45,810	36	Retail	TESCO	18,007	61	Financial	中国工商银行	12,982
12	Telecoms	中国移动	43,033	37	Technology	Tencent 腾讯	17,992	62	Retail	Walmart	12,968
13	Financial	ICBC	41,518	38	Financial	中国建设银行	17,867	63	Financial	ICICI Bank	12,665
14	Financial	Bank of China	39,754	39	Oil & Gas	Shell	17,781	64	Retail	eBay	12,662
15	Financial	VISA	38,284	40	Financial	渣打银行	17,225	65	Cars	Volvo	12,647
16	Logistics	UPS	37,129	41	Telecoms	movistar	17,113	66	Apparel	ZARA	12,616
17	Retail	Walmart	34,436	42	Fast Food	McDonald's	17,072	67	Soft Drinks	pepsi	12,598
18	Retail	amazon.com	34,077	43	Entertainment	Disney	17,056	68	Oil & Gas	BP	12,105
19	Technology	Facebook	33,233	44	Apparel	Nike	16,255	69	Alcohol	Heineken	11,838
20	Telecoms	Deutsche Telekom	26,837	45	Technology	accenture	16,118	70	Logistics	FedEx	11,723
21	Luxury	Louis Vuitton	25,920	46	Cars	BMW	16,111	71	Telecoms	airtel	11,531
22	Technology	IBM	25,715	47	Telecoms	docomo	15,981	72	Financial	US Bank	11,488
23	Cars	BMW	24,623	48	Beer	Heineken	15,882	73	Technology	SIEMENS	10,676
24	Financial	中国建设银行	24,517	49	Technology	Intel	15,633	74	Financial	SBERBANK	10,649
25	Technology	Baidu	24,326	50	Telecoms	orange	15,351	75	Oil & Gas	PETROBRAS	10,560

top brands

How much is this LOVE worth to a brand.? The Royalty Relief approach of Brand Finance, an independent brand valuation consultancy, is based on the assumption that if a company did not own the trademarks that it exploits, it would need to license them from a third party brand owner instead. This method involves estimating likely future sales, applying an appropriate royalty rate to them and then discounting estimated future, post-tax royalties, to arrive at the brand value. The difference between being #1 and #22 according to their work is \$61B, which is almost exactly the difference in the market caps of Coca-cola and Pepsi (\$60B as of 6 April).

#### 4.2. Brand impact

	Customer Acquisition		Customer Retention		Profit Margin	
	Stand. Coeff.	t value	Stand. Coeff.	t value	Stand. Coeff.	t value
<b>Components of BE</b>						
Differentiation	-.058	-2.16	-.127	-4.76	.36	5.97
Relevance	.089	1.94	-.028	-.61	.17	1.73
Esteem	-.035	-.72	.101	2.10	-.16	-1.52
Knowledge	.162	4.53	.349	9.76	.18	2.13
<b>Marketing Activities</b>						
Advertising	.099	3.45	.066	2.31	-.12	-1.74
New Model Launches	.009	.74	-.012	-1.05	-.01	-.56
Price Promotions	.042	3.62	.014	1.19	.01	.34
Market Presence	.288	4.79	.336	5.59	.32	2.69
Price	-.058	-1.50	-.014	-.35		
Intercept Acquisition/Retention	.133	3.33	-.256	-6.39		
R <sup>2</sup>		.95			.91	

\* Note: The values of the estimated fixed effects are not shown in the table.

The Brand Equity components: Differentiation, Relevance and Knowledge are significantly and positively related to Profit Margin.

On Marketing Activities: Market Presence is significant and positively related i.e. consistent with a social approval/endorsement effect.

## **5 Homo Economicus**

In economics, homo economicus, or economic human, is the concept in many economic theories of humans as rational and narrowly self-interested actors who have the ability to make judgments toward their subjectively defined ends. Using these rational assessments, homo economicus attempts to maximize utility as a consumer and economic profit as a producer.<sup>[5]</sup> This theory stands in contrast to the concept of homo reciprocans, which states that human beings are primarily motivated by the desire to be cooperative and to improve their environment.

The term "Economic Man" was used for the first time in the late nineteenth century by critics of John Stuart Mill's work on political economy.<sup>[6]</sup>

Homo economicus is a term used for an approximation or model of Homo sapiens that acts to obtain the highest possible well-being for him or herself given available information about opportunities and other constraints, both natural and institutional, on his ability to achieve his predetermined goals. This approach has been formalized in certain social sciences models, particularly in economics.

Homo economicus is seen as "rational" in the sense that well-being as defined by the utility function is optimized given perceived opportunities. That is, the individual seeks to attain very specific and predetermined goals to the greatest extent with the least possible cost. Note that this kind of "rationality" does not say that the individual's actual goals are "rational" in some larger ethical, social, or human sense, only that he tries to attain them at minimal cost. Only naive applications of the Homo economicus model assume that this hypothetical individual knows what is best for his long-term physical and mental health and can be relied upon to always make the right decision for himself. See rational choice theory and rational expectations for further discussion; the article on rationality widens the discussion.

## **6 Behavioral economics**

Behavioral economics and the related field, behavioral finance, study the effects of social, cognitive, and emotional factors on the economic decisions of individuals and institutions and the consequences for market prices, returns, and the resource allocation. The fields are primarily concerned with the bounds of rationality of economic agents. Behavioral models typically integrate insights from psychology with neo-classical economic theory; in so doing, these behavioral models cover a range of concepts, methods, and fields.<sup>[7]</sup>

## **7 How Behavioral economics does work**

### **7.1 Relativity**

Most people don't know what they want unless they see it in context. We don't know what kind of racing bike we want-until we see a champ in the Tour de France ratcheting the gears on a particular model. We don't know what kind of speaker system we like-until we hear a set of speakers that sounds better than the previous

one. We don't even know what we want to do with our lives-until we find a relative or a friend who is doing just what we think we should be doing. Everything is relative, and that's the point. Like an airplane pilot landing in the dark, we want runway lights on either side of us, guiding us to the place where we can touch down our wheels.

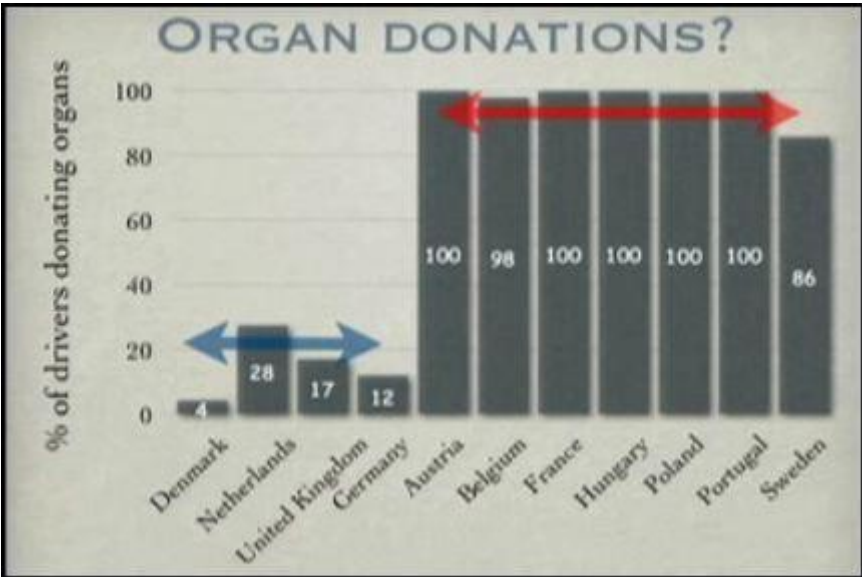
### 7.2 Default bias

The Default Bias is common human cognitive defect. It seems that to avoid the discomfort of complex choices, we humans usually opt for the default supplied to us. Thus many of our "choices" are not choices in any real sense. This is further evidence for the illusory notion of both free will and the reflective intentional life.

The Default Bias can be seen in religion. Greater than ninety percent of religious people belong to the religion of their birth — the default religion offered to them by the accident-of-birth. Heck, even later converters choose from only those right in front of their noses. But least self-righteous, hyper-rationalists dismiss the Default Bias as a uniquely theistic defect, let me illustrate this bias among largely atheistic Europeans.

When looking at organ donation rates in European countries, we see that the distribution is bimodal — high donators and low donators. Though people in these countries will object, the following pairs of countries are more similar than not and yet have opposite rates: Netherlands-Belgium, UK-France, Denmark-Sweden. Intuitively inspecting which country falls into which mode reveals no clear pattern. So what causes this difference?

Simple! The Organ Donation check box on their driver license applications differ. The low donating countries have the default as "I will NOT donate", where as high donating countries have "YES I will donate" as the default. [8]



### 7.3 Anchoring

Anchoring, or anchoring and adjustment, is the concept that unrelated cues impact our ability to make numerical estimates. When it comes to making money decisions, we all like to think that we are rational creatures

who will make the best decisions for our self-interests. Unfortunately, much more goes into any decisions we make than a simple cost-benefit analysis. Advertisers and retailers have long understood the irrational impulses that drive consumers, and economists are starting to catch up. That is where the (relatively) new field of behavioral economics comes in. Where classical economists were once baffled by apparently irrational money decisions, behavioral economists look at the psychology of decision-making and can help us to understand the psychological barriers to making good money decisions. One common way that our brain is fooled when making a financial decision is an effect called anchoring. An anchor is a price point that gives us an idea of how much something should cost.

At Norma's restaurant in Manhattan's Le Parker Meridien Hotel, the menu offers the Zillion Dollar omelette, which includes lobster and 10 oz. of American sturgeon caviar. It is priced at \$1,000 and according to their PR director, about 10 people buy it per year. But having this item on the menu makes their \$26 egg white shrimp frittata seem like a bargain.

#### **7.4 Paradox of choice**

Does our brain freeze when offered too many options? Do we put off repainting our bathroom because we can't bear to select among fifty shades of white (or, for the more adventurous, grey)? A famous experiment by psychologists Mark Lepper and Sheena Iyengar, published in 2000, suggests that you are not alone. In supermarket tests, they documented what's known as the Paradox of Choice. Customers offered an array of six new jam varieties were much more likely to buy one than those offered a choice of 24.

That makes no sense in the narrow sense of rationality often used in simple economic models. More choice should always lead to more sales, since the odds are greater that a shopper will find something they want. But it didn't. On those days, in those supermarkets, with those jams, more choice meant less buying.

#### **7.5 Regret avoidance**

A theory that says people anticipate regret if they make a wrong choice, and take this anticipation into consideration when making decisions. Fear of regret can play a large role in dissuading or motivating someone to do something.

In investing, the fear of regret can make investors either risk averse or motivate them to take greater risks. For example, suppose that an investor buys stock in a small growth company based only on a friend's recommendation. After six months, the stock falls to 50% of the purchase price, so the investor sells the stock at a loss. To avoid this regret in the future, the investor will ask questions and research any stocks that his friend recommends.

Conversely, say the investor didn't take the friend's recommendation to buy the stock, but the price increased by 50% rather than decreasing. Thus, to avoid the regret of missing out, the investor will be less risk averse and buy any stocks that his friend recommends in the future.



The Slovak national bill lottery brings everyone a chance to win 10k Euros just for registering any bill worth more than 1 Euro. People just can't miss opportunity to win in such an easy way. This lottery raises 50k Euros to its beneficiaries each month.

## **7.6 Scarcity**

The concept of scarcity leading to more interest predates the concept of BE. Was raised by Mark Twain in *The Adventures of Tom Sawyer* in 1876 (the centennial of Adam Smith's *Wealth of Nations* actually).

Scarcity is the fundamental economic problem of having seemingly unlimited human wants and needs in a world of limited resources. It states that society has insufficient productive resources to fulfill all human wants and needs. Alternatively, scarcity implies that not all of society's goals can be pursued at the same time; trade-offs are made of one good against others.

Modern BE has explored further and found the phenomena to be fairly robust and is seen as a cause of everything from hoarding to obesity and procrastination.

Apple realizes the value of scarcity, and plans their big product releases to stimulate demand to get these "hot" products. The shortages are not the result of poor demand forecasting or supply chain issues, but another piece of their marketing genius.

## **7.7 Endowment effect**

The endowment effect is a hypothesis that people value a good more once their property right to it has been established. In other words, people place a higher value on objects they own relative to objects they do not. In one experiment, people demanded a higher price for a coffee mug that had been given to them but put a lower price on one they did not yet own.

Tickets for Duke basketball are extremely scarce and highly prized by students. They sometimes have a lottery for high interest games, where student tickets are allocated by chance.

Posing as ticket scalpers, researchers probed those who had not won a ticket for the highest amount they would pay to buy one and received an average answer of \$170. When they probed the students who had won a ticket for the lowest amount they would sell, they received an average of about \$2,400. This showed that students who had won the tickets placed a value on the same tickets roughly fourteen times as high as those who had not won the tickets.

Once drivers are part of a gas station loyalty program, they are very reluctant to switch off and more highly value the benefits of premiere levels, even when they find the service poor and even though they could purchase many of these benefits relatively cheaply.

## **7.8 Abstraction**

People behave different around financial decisions depending on seemingly small changes in structure.

Casino chips, despite having the same monetary implications as cash, yields very different gambling behaviour.

And this abstraction is not just about casinos. A research was studying cheating behaviour and students. Students at MIT self-reported how many questions that they had answered and were paid for the number of questions answers. Half were paid in cash, the other half were paid in tokens that they exchanged for cash 12 feet away. The ones who were being paid in tokens were twice as likely to cheat.

...Zynga goes even further by using purchased credits to buy virtual goods.

## 7.9 Ownership effect

People like to own rather than rent. Ride to Vienna airport from Blava by our own car with a purchased price of 50,000€, + insurance, + maintenance will cost us 56,00€ day. Fuel for 50km distance can cost 6,00€. Parking at the Schwechat airport will cost us 2,5€ an hour, which sums at 64,50€ a ride.

How much would cost a limou with driver for the same route? 50,00€

How many of us goes for limousine?

## Conclusion

Behavioral economics is a collection of tools or ideas. Economists like to point out the natural division of labor between scientific disciplines, Psychology and Economy.

Common sense should always prevail.

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