

MICROECONOMICS

Course no. 2

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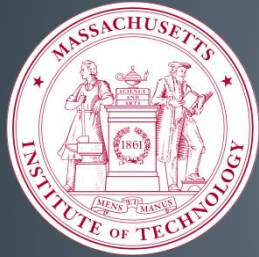
Opportunity cost

The marginal opportunity cost

10 Lesser Known Economic
dilemmas

Costul de oportunitate

- „ Cost is generally a measure of something that must be given up in order to obtain something else, either by purchase, exchange or production. Economists usually use the concept of opportunity cost, that is, the cost of measuring the value of all the things that have to be given up to get something else.”



The MIT Dictionary of Modern Economics

- The opportunity cost shows us the importance of the choices made by any consumer. This indicates what a consumer has to give up, in terms of economic goods, to be able to purchase an additional unit from a particular good. In this sense, each individual (consumer) is faced with a certain decision: what will be the good that he decides to purchase and at the same time what will be the quantity of each good that he decides to buy.

Opportunity cost

- A consumer must decide what good he will buy and how much of each good. At a certain time, with a limited income allocated for consumption, he will not be able to buy an additional unit of any good unless he gives up one or more units of other goods.
 - This renunciation is called opportunity cost and is the element that underlies decision making.
- The scarcity of resources makes saving indispensable, so consumers' incomes are limited and they will not be able to purchase an additional unit from a desired good only if they transfer a unit from another good, an action that in the economy bears the name of opportunity cost..

Opportunity cost

- The opportunity cost can be defined not only in terms of economic goods that any consumer decides at any time to purchase, but also in terms of time..



Cheile
Nerei
National
Park

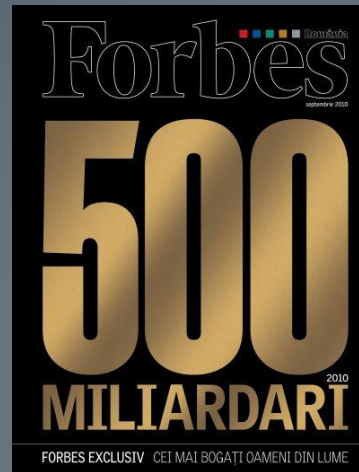
Costinești



One week spent in the Cheile Nerei National Park cannot be lived at the same time on the beach in Costinești.

Opportunity cost

Any businessman from the top of Forbes Romania faces the choice of how to use their money and time as efficiently as possible.



Even the inclusion of the richest Romanians does not exempt these people from choosing and they cannot have it all at once. Whether they are looking for a new business opportunity to invest in or choose a vacation on an exotic beach, they will still face the opportunity cost.

Orice consumator care se confruntă cu o decizie ar trebui să-și ridice următoarele întrebări:

Ce oportunități alternative are la dispoziție

Care este cea mai bună alternativă pe care o are la dispoziție

Ce are de câștigat dacă alege cea mai bună alternativă



Opportunity cost

- Opportunity costs represent the benefits an individual, investor or business misses out on when choosing one alternative over another. While financial reports do not show opportunity cost, business owners can use it to make educated decisions when they have multiple options before them. Bottlenecks are often a cause of opportunity costs.
- Because by definition they are unseen, opportunity costs can be easily overlooked if one is not careful. Understanding the potential missed opportunities foregone by choosing one investment over another allows for better decision-making.

Opportunity Cost Formula



$$\text{Opportunity Cost} = \text{Total Revenue} - \text{Economic Profit}$$

$$\text{Opportunity Cost} = \frac{\text{What One Sacrifice}}{\text{What One Gain}}$$

The cost of things we do not do

In everyday life we are used to calculating the cost of the goods or services we pay.



They are exact amounts. We know how much we got out of pocket to buy those things.

But another cost is less obvious: the cost of things we don't buy.

The cost of things we do not do

The cost of things that an economic agent has not done is the easiest to illustrate in the insurance market.



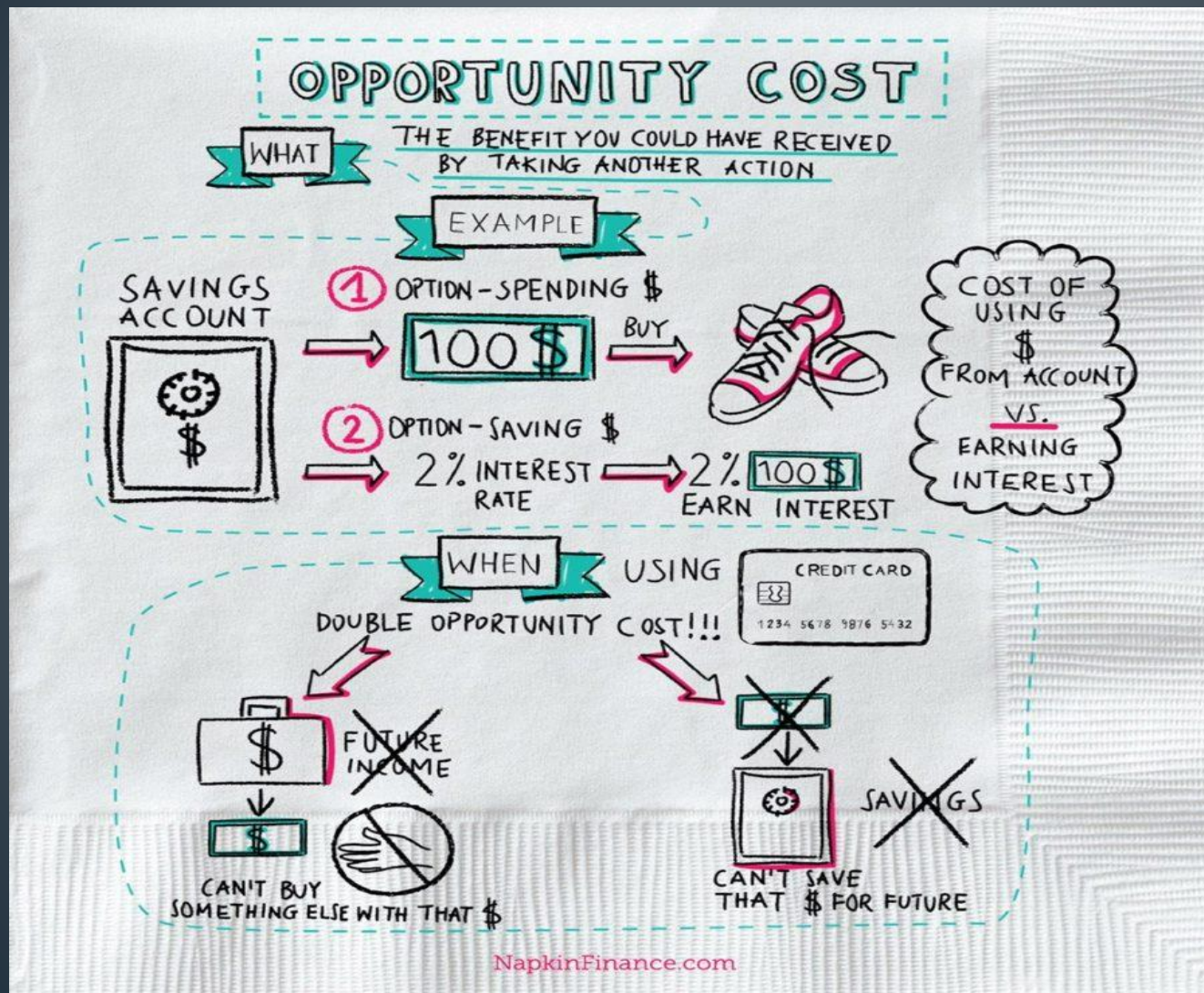
Maybe a car owner found a CASCO policy of 2,000 euros a year too expensive. A mofo.



But if he had an accident and the repair cost 4,000 euros, suddenly the CASCO policy was not so expensive.

The cost of the inaction, of the decision not to buy that policy, is as high as the so-called initial "saving" of the 2,000 euros.

The cost of things we do or we do not do



Opportunity cost

- Another example of opportunity cost, engineer facing two variants to travel between Timisoara and Bucharest.
- The engineer can make this trip by plane in one hour or he can go by personal car in 6 hours.
- The price of a plane ticket is 300 lei and the cost of diesel for the car 100 lei.
- Suppose the engineer earns 20 lei / hour
- Suppose the engineer earns 100 lei / hour

Opportunity cost

Cost total



Cost total



Cost de oportunitate



Cost de oportunitate



Income - 20 lei / hour

Costs (A)

- 400 lei

Potential losses (B)

- 20 lei x 1 hour =
20 lei

**Total costs (C) = (2) -
(1) = 420 lei**

Costs (A)

- 100 lei

Potential losses (B)

- 20 lei x 6 hours =
120 lei

**Total costs (C) = (2) -
(1) = 220 lei**

CO

= 420 lei - 220 lei =
200 lei

**Not the case, the
engineer decides to
travel by car**

Income - 100 lei / hour

Costs (A)

- 400 lei

Potential losses (B)

- 100 lei x 1 hour =
100 lei

**Total costs (C) = (2) -
(1) = 500 lei**

Costs (A)

- 100 lei

Potential losses (B)

- 100 lei x 6 hours =
600 lei

**Total costs (C) = (2) -
(1) = 700 lei**

**Not the case, the
engineer decides to
travel by plane**

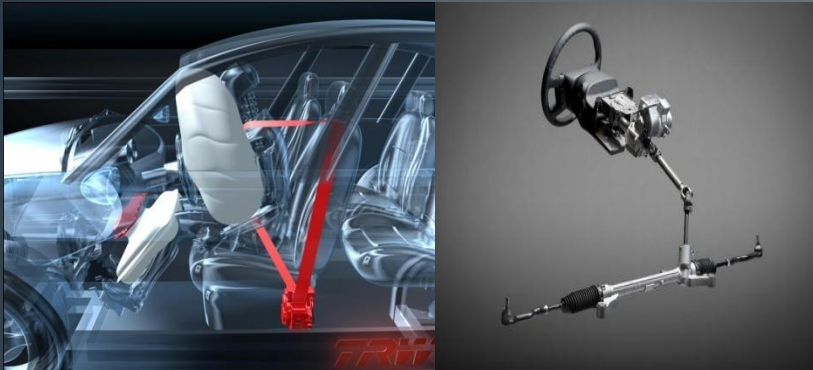
CO

= 700 lei - 500 lei =
200 lei

Marginal opportunity cost

- **Marginal opportunity cost** is an economic term that analyzes the effect of producing additional units of a product on the costs of a business, as well as the opportunities the companies give up to produce more of a product.
- The marginal opportunity cost equals the total costs required to produce an additional unit for a particular product. This cost includes, besides the money spent on raw materials, costs with electricity and others, revenues that could be obtained through the different use of the resources available to the company.

The marginal opportunity cost



- SC TRW AUTOMOTIVE must distribute a worker who works at the flywheel to the airbag line to produce an additional airbag, the marginal opportunity cost represents the additional income that the company could have obtained if this worker had remained at the airbag line. production of flywheels.

- As a consumer decides to choose additional units from a particular product, the opportunity cost of each additional unit consumed will increase.
- The opportunity cost for the second unit consumed will be higher than for the first unit, the opportunity cost for the third unit consumed will be higher than for the second and so on.

Marginal opportunity cost

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- People should have an understanding of economics as the field is so important to understanding the world that we live in. Though this list contains ideas that are controversial, it is not intended to promote anger or controversy. Rather, these entries were chosen to shed some light on lesser known, yet important economic issues facing our world, and give readers something to ponder. Please give your opinions on these issues in the comments.

1. Paradox of Value



- The Paradox of Value is also known as the **diamond-water paradox**. Also known as the **diamond-water paradox**.

We understand that water is necessary to our life and that ornaments such as diamonds are not life-sustaining. But water typically has a low market price, while diamond jewellery has a high market price.

One reason is that, in most countries, water is abundant relative to demand whereas diamonds are scarce relative to demand.

The marginal utility of a diamond is often very high in part because it is used as a celebration of a life-event and also as a signal from one person to another of their commitment to each other.

- **Value in use** i.e. drinking water to satisfy your thirst
- **Value in exchange** – what a resource can be sold for in exchange for other products. Nothing is more useful than water: but it will purchase scarce any thing. The reverse is usually true for expensive jewellery

2. Khazzoom–Brookes Postulate



- This proposal was named after economists Daniel Khazzoom and Leonard Brookes, who argued that increased energy efficiency, paradoxically, tends to lead to increased energy consumption. It was found to be true in the 1990's. So how is this possible? Wikipedia explains it very effectively:

“Increased energy efficiency can increase energy consumption by three means. Firstly, increased energy efficiency makes the use of energy relatively cheaper, thus encouraging increased use. Secondly, increased energy efficiency leads to increased economic growth, which pulls up energy use in the whole economy. Thirdly, increased efficiency in any one bottleneck resource multiplies the use of all the companion technologies, products and services that were being restrained by it.”

3. Bounded Rationality

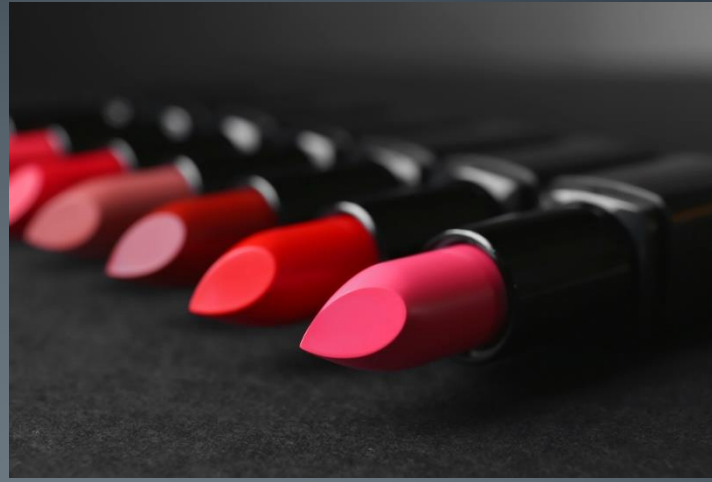


- Economic theory generally assumes that individuals are completely rational, and as such, make rational decisions.
- Recent books on behavioral economics, notably Dan Ariely's Predictably Irrational have brought forth evidence that people do not make rational decisions at all. Bounded Rationality is the idea that individual decision making is limited by personal information, cognitive limitations, and time constraints.

The basic idea of economics is that people act in ways to maximize their self-interest.

We do things that will increase our “utility”, or happiness. It seems logical that we would make rational decisions in order to accomplish that. Unfortunately, information asymmetry (described below), cognitive biases (read about them in my previous list) and other factors conspire to bound our rationality, and people often make choices that lead to outcomes that go against their desires.

4. Lipstick Effect



- Economics has many categories for “goods”. “Luxury Goods” are items that people buy more of as their income rises, as opposed to “Necessity Goods” like food and shelter, whose demand is unrelated to income. Examples of luxury goods include fine jewelry, expensive sports cars and designer clothing. The Lipstick Effect is the theory that during an economic calamity, people buy more less costly luxury goods. Instead of buying a fur coat, people will buy expensive lipstick. The idea is that people buy luxury goods even during economic hardships, they will just choose goods that have less of an impact on their funds. Other less expensive luxury goods besides cosmetics include expensive beer and small gadgets.
- Interesting Fact: After the 9/11 terrorist attacks on America, lipstick sales doubled.

5. Tragedy of the Commons



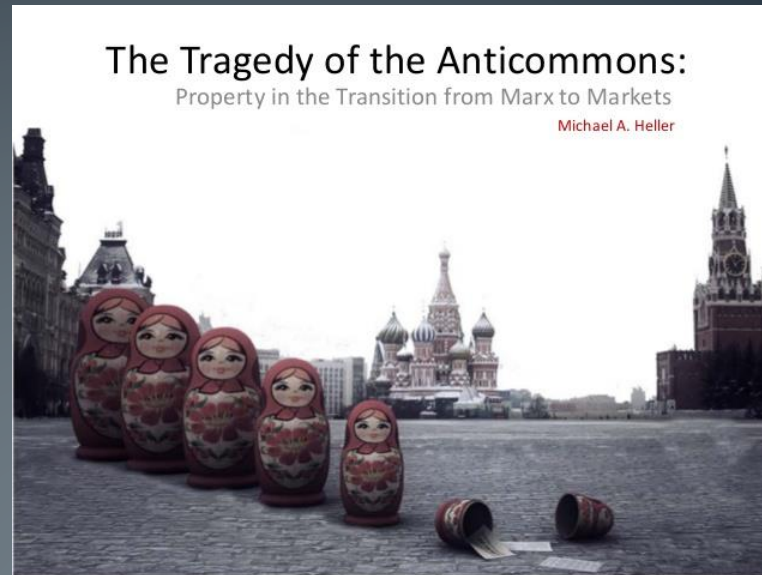
The things you
take for granted,
someone else is
praying for.

LoveThisPic.com

The tragedy of the commons is a situation in which multiple individuals, acting independently, deplete a shared resource, even when it is not in anyone's interest to do so.

The best current example of this is fishermen. Nobody owns the earth's fish populations, indeed, they are a shared resource. Fish are a good that people the world over consume, and as a result, there are multiple fisherman competing for these fish. Each fisherman will try to catch as many fish as possible in order to maximize his profits. However, it is also in the fishermen's best interest to sustain the fish populations, i.e., leaving enough fish to repopulate, so that down the road, there are still fish to be caught. If each fisherman is concerned with sustainability, and they should be if they don't want to find new careers in the near future, they theoretically will work to preserve the fish populations. Here is the problem: there is a lack of trust. A fisherman that acts responsibly and limits the amount he catches will be screwed if all the other fisherman do not. The other fisherman get more fish than he does, make more in profits, and will ultimately deplete the fish population anyway. So each fisherman, believing that the others will take more than their sustainable share, will take as many fish as he can, and the world's fish supplies will deplete, even though no one wants them to.

6. Tragedy of the AntiCommons



- The opposite of the above mentioned tragedy of the commons, the anticommons is a situation where too many owners (and bureaucratic red tape) discourages accomplishment of a socially desirable outcome. The classic example is patents. If a product requires multiple components or techniques patented by different people or companies, then it becomes difficult, time consuming and very costly to negotiate with all the owners, and the product may not be produced. This can be a huge loss if the product is in great demand or would have great social benefits. Everybody loses in this situation, the patent holders, the would-be manufacturers and the consumers who would have bought the product.
- Interesting fact: A single microchip contains up to 5,000 different patents. No one can create a microchip unless every single patent holder agrees to license their patent.

7. Perverse Incentives



- A perverse incentive is an incentive that has an unintended and undesirable effect which is opposite to the initial interests. A type of unintended consequences, perverse incentives are the result of an honest good intention. A historical example illustrates the problem: 19th century paleontologists traveling to China used to pay peasants for each piece of dinosaur bone that they presented. It was later found the peasants found bones and then smashed them into many pieces, which significantly reduced their scientific value, to get more payments. More modern examples include paying architects and engineers based on project costs, which leads to excessively costly projects as they overspend unnecessarily to make income.

8. Information Asymmetry

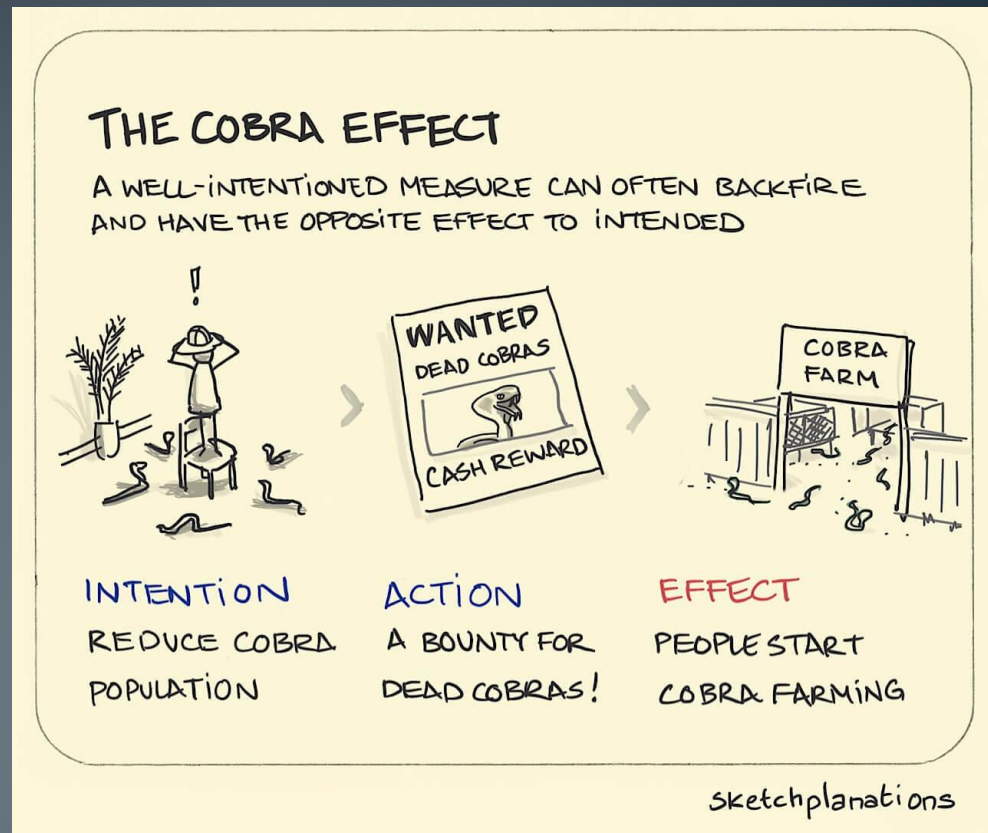


Information asymmetry is a prevalent issue in economics. In most sales transactions, the seller has more information than the buyer, and as such has the opportunity to try to pass off low quality or defective products for higher prices. This leads to buyer distrust and the old idiom: Buyer Beware.

Adverse selection is a market process where information asymmetry causes negative results. A good example is health insurance. Insurance companies depend on a mix of clients: they need a certain number of healthy individuals (low-risk) to pay premiums and not use a lot of services so that the premium prices can average out. However, the people most likely to buy health insurance are people who need it because of health problems (high-risk). These people are more costly to the insurance companies because they need more services than a healthy person. The insurance companies do not know every new policy applicants health status (but they certainly do everything in their power to find out as much as they can), and this lack of information requires the companies to raise premiums to mitigate the risk. This increase in premiums causes the healthiest people to cancel their insurance. This leads to a further increase in premium price as the insurance companies now have a riskier group, which leads to the now healthiest people canceling their insurance, continuing the “adverse selection spiral”, until the only people insured are the direly ill. At this point, the premiums paid will not even begin to offset the costs of the sick. In theory, this could lead to the collapse of the health insurance industry, however, this is an unlikely scenario as their risk is diminished by things such as employer offered insurance, which includes a large set of healthy individuals who average out the risk.

Another information asymmetry example is the “Market for Lemons”, a term coined by the economist George Akerlof. The used car market is the classic example of quality uncertainty. A defective used car (“lemon”) is generally the result of untraceable actions, like the owners driving style, maintenance habits and accidents. Because the buyer does not have this information, their best assumption is that the vehicle is of average quality, and therefore will pay only an average fair price. As a result, the owner of a car in great condition (“cherry”), will not be able to get a price high enough to make selling the cherry worthwhile. End result: the owners of good cars will not sell their vehicles in the used-car market. This reduces the quality of cars in the used-car market, this reduces the price buyers will pay, this further reduces the quality of cars sold. You get the idea.

9. The Cobra Effect



- This is when the solution to a problem actually makes the problem worse. The term 'Cobra effect' comes from an anecdote from colonial India. The British government wanted to decrease the population of venomous cobra snakes, so they offered a reward for every dead snake. However, the Indians began to breed cobras for the income. When the government realized what was going on, the reward was canceled, and the breeders set the snakes free. The snakes consequently multiplied, and increased the cobra population. The term is now used to illustrate the origins of wrong stimulation in politics and economic policy. Unfortunately, some of the crises facing our world are the result of honest attempts to solve problems.

10. The Samaritans Dilemma

- This is the idea that giving charity reduces an individual's incentive to help themselves. When given assistance, the recipient has two choices: use the aid to improve their situation, or come to rely on the aid to survive. Obviously, good Samaritans give assistance in the hopes of the former, that the recipient will use the aid to improve their situation.
- For example, when a country gives financial aid to another country who has experienced a natural disaster, we assume that the money will go to helping the victims, cleaning, rebuilding, etc. Arguers against charity often bring up this dilemma, claiming that beneficiaries of such aid lose incentive to work or become productive members of society. This can be seen in action when people who want to give a dollar or two to a homeless person do not, because they are afraid the person will buy booze with it. A "transfer of wealth" of a couple of dollars from someone who can spare the dollars to someone who will use the dollars to improve their situation is a wonderful arrangement. However, if the recipient of the dollars is not going to use the money for a noble purpose, and instead is going to buy illicit drugs with them, it is a less desirable arrangement, and most charitable people would decline to give the dollars. Here's the problem: it is hard to know how the person you are giving the dollars to will use the funds, so people might instead opt to not give to any homeless people. Now the individuals who would have used the money to improve their situations suffer.

