

Pertemuan 3

RISK ATTITUDES:

Expected Utility Theory and Demand for Hedging

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TEORI UTILITAS

“Semakin tinggi kekayaan seseorang, semakin besar kemungkinan tingkat kepuasannya.”

Antara uang dan kebahagiaan

Uang Tidak Membuat Orang Bahagia, ” (Tim Harford)

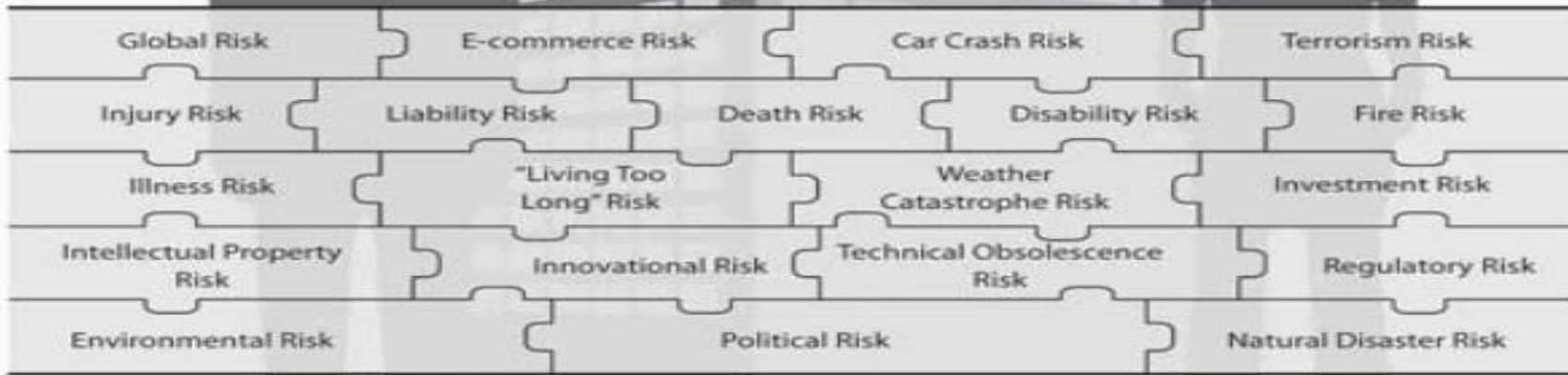
Tapi pernikahan, seks, sosialisasi tetap dilakukam ketika tua

“Haruskah Aku Membandingkanmu Dengan Sosis Musim Panas?” (Daniel Gilbert)

Uang tidak bisa membuat Anda bahagia, tetapi membuat perbandingan yang tepat bisa

“Uang, Kebahagiaan dan Mengejar Keduanya,” (Elizabeth MacDonald)

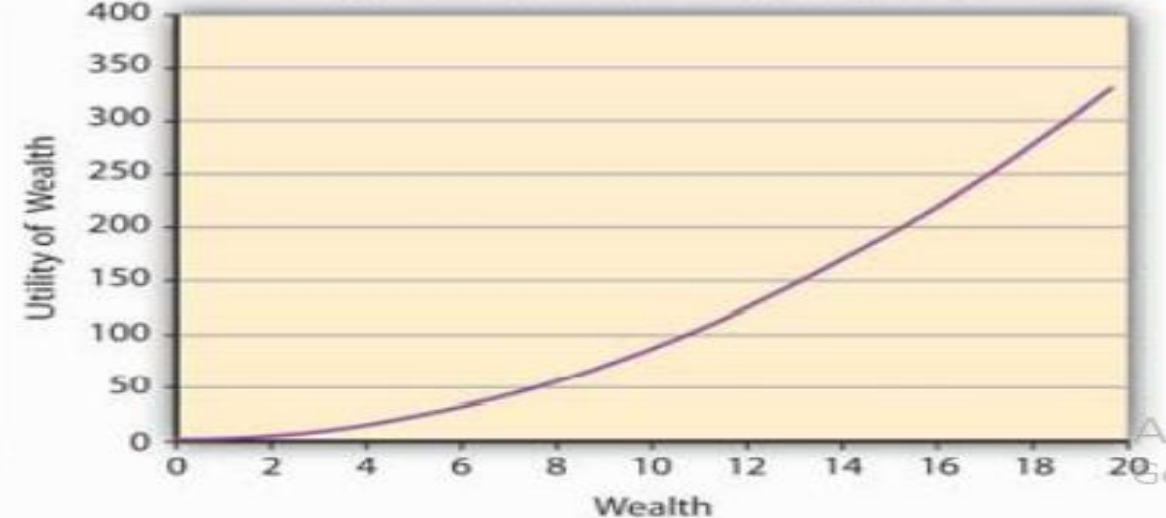
Dalam hal uang dan kebahagiaan, para ekonom dan psikolog telah salah paham.



A Utility Function for a Risk-Averse Individual



A Utility Function for a Risk-Seeking Individual



SIFAT MANUSIA

- Teori utilitas mendasarkan keyakinannya pada preferensi individu.
- Teori utilitas adalah teori positif yang berusaha menjelaskan perilaku yang diamati individu dan pilihan.
- Teori Ini berbeda dengan teori normatif, yang menyatakan bahwa orang harus berperilaku di cara yang ditentukan olehnya
- Jadi, di bawah asumsi teori utilitas, kita dapat berasumsi bahwa orang berperilaku seolah-olah mereka memiliki fungsi utilitas dan bertindak sesuai dengannya.

Asumsi Teori utilitas

1. Komplit

Individu dapat menyusun urutan peringkat atas semua pilihan.

2. Asumsi monotonisitas (Lebih Banyak Baik)

Asumsi lebih banyak lebih baik mengatakan individu lebih memilih A+ daripada A.

3. Rasionalitas

KETIDAKPASTIAN, NILAI YANG DIHARAPKAN, DAN PERMAINAN YANG ADIL

Ketidakpastian

Hidup penuh dengan ketidakpastian

Nilai yang diharapkan

Jumlah produk dari dua hal yaitu hasil dan probabilitas yang terkait. Jika probabilitas hasil yang besar sangat tinggi maka nilai yang diharapkan juga akan tinggi, begitu pula sebaliknya.

Permainan yang adil

Nilai yang diharapkan dari permainan digunakan ketika seseorang merancang permainan yang adil. Salah satu di mana biaya bermain game sama dengan kemenangan yang diharapkan dari game tersebut, sehingga nilai bersihnya permainan sama dengan nol.

Choice under Uncertainty: Expected Utility Theory

Dunia ketidakpastian, manusia ingin maksimal utilitas yang diharapkan. Tidak mudah, membuktikannya secara aksiomatis adalah tugas yang sangat menantang.

John von Neumann dan Oskar Morgenstern (1944) menganjurkan pendekatan yang membawa kita ke representasi matematis formal dari maksimalisasi yang diharapkan utilitas .

Theory that says persons will choose an option that maximizes their expected utility rather than their expected wealth.

Biases Affecting Choice under Uncertainty

Why do some people jump into the river to save their loved ones, even if they cannot swim?

These are examples of aspects of human behavior that $E(U)$ theory fails to capture. Undoubtedly, an emotional component arises to explain the few examples given above

Penyebab BIAS

1. Humans tend to give more weight to events of the recent past than to look at the entire history. We could attribute such a bias to limited memory, individuals' myopic view, or just easy availability of more recent information. We call this bias to work with whatever information is easily availability an availability bias
2. Anchoring bias. Often individuals base their subjective assessments of outcomes based on an initial "guesstimate." Such a guess may not have any reasonable relationship to the outcomes being studied.
3. Failure to ignore sunk costs.

CASE STUDY

Suppose a person goes to the theater to watch a movie and discovers that he lost \$10 on the way. Another person who had bought an online ticket for \$10 finds he lost the ticket on the way. The decision problem is:

“Should these people spend another \$10 to watch the movie?”

In experiments conducted suggesting exactly the same choices, respondents' results show that the second group is more likely to go home without watching the movie, while the first one will overwhelmingly (88 percent) go ahead and watch the movie. Why do we observe this behavior? The two situations are exactly alike.

Each group lost \$10. But in a world of mental accounting, the second group has already spent the money on the movie.

INFORMATION ASYMMETRY

1. Adverse Selection

Consider the used-car market. While the sellers of used cars know the quality of their cars, the buyers do not know the exact quality (imagine a world with no blue book information available). From the buyer's point of view, the car may be a lemon. Under such circumstances, the buyer's offer price reflects the average quality of the cars in the market.

2. Moral Hazard

The simplest way to understand the problem of “observability” (or clarity of action) is to imagine an owner of a store who hires a manager. The store owner may not be available to actually monitor the manager's actions continuously and at all times, for example, how they behave with customers. This inability to observe actions of the agent (manager) by the principal (owner) falls under the class of problems called the principal-agent problem.

How can we solve this problem?

Moral Hazard Problem Solution

An ideal solution would be continuous monitoring, which is prohibitively expensive and may not even be legal for privacy issues.

Alternatively, insurance companies try and gather as much information as possible to arrive at an estimate of the cost of care or lack of it

The following are several reasons for companies hedging behavior

1. Managers hedge because they are undiversified:

Small shareholders like us can diversify our risks, but managers cannot. They invest their income from labor as well as their personal assets in the firm. Therefore, while owners (principals) are diversified, managers (agents) are not. Since managers are risk averse and they control the company directly, they hedge.

Managers want to lower expected bankruptcy costs: If a company goes bankrupt, then bankruptcy supervisors investigate and retain a part of the company's assets. The wealth gets transferred to third parties and constitutes a loss of assets to the rightful owners. Imagine a fire that destroys the plant. If the company wants to avoid bankruptcy, it might want to rebuild it. If rebuilding is financed through debt financing, the cost of debt is going to be very high because the company may not have any collateral to offer. In this case, having fire insurance can serve as collateral as well as compensate the firm when it suffers a loss due to fire.

CONTINUOUS

3. Risk bearers may be in a better position to bear the risk:

Companies may not be diversified, in terms of either product or geography. They may not have access to broader capital markets because of small size. Companies may transfer risk to better risk bearers that are diversified and have better and broader access to capital markets.

4. Hedging can increase debt capacity:

Financial theory tells us about an optimal capital structure³⁷ for every company. This means that each company has an optimal mix of debt and equity financing. The amount of debt determines the financial risk to a company. With hedging, the firm can transfer the risk outside the firm. With lower risk, the firm can undertake a greater amount of debt, thus changing the optimal capital structure.

5. Lowering of tax liability:

Since insurance premiums are tax deductible for some corporate insurance policies, companies can lower the expected taxes by purchasing insurance.

6. Other reasons:

We can cite some other reasons why corporations hedge. Regulated companies are found to hedge more than unregulated ones, probably because law limits the level of risk taking

TERIMA KASIH

