How managers can make a decision in an uncertainty environment?

2

d. __Solution Criterion of Laplace (Bayesian)__

The Bayesian postulate: if the probabilities of phenomena is unknown,they must be intaken for equal

the expected value of the strategies

The chosen strategy is a strategy with the highest expected value, subject to equal probabilities

"I HAD MY DOCTOR DO A D.N.A. BLOOD ANALYSIS. AS I SUSPECTED, I'M MISSING THE MATH GENE."

Decision matrix

Alternative strategies	The state of the external environment			
	N_1	N_2	N_3	N_4
S_1	6	6	6	4
S_2	25	7	7	−15
S_3	20	20	7	−1
S_4	19	16	9	−2
S_5	20	15	15	−3

The result of the assumption of equal probabilities for each state of the economy is a decision in a situation of risk

The criterion of Laplace - is the criterion of rationality, completely insensitive to the decision-makers

Suitable for long-term forecasting by large firms, as in fact equality of probabilities of all the States of the economy is impossible, especially in the short term
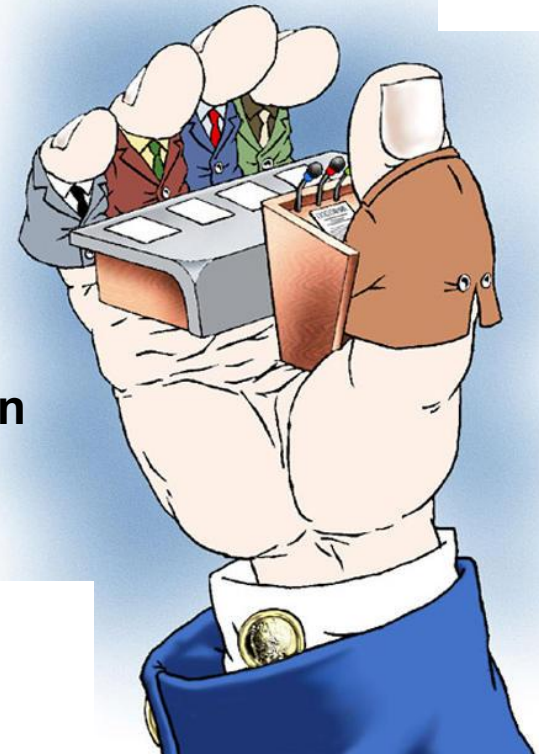
Conclusion :

The process of decision-making under uncertainty is the process of criteria selection, and then performance of the calculations necessary to make a selection within this criterion

What criterion is the most suitable?

The choice often depends on

personal reasons!

e. **Other methods of evoidance of uncertainty**

Hedging

- method in which future uncertainty is replaced with the reliability of the current contract

Manufacturer buys oil and plans to sell gasoline made of this oil after 3 months.

To reduce the risk, he enters into a forward contract for the supply of gasoline with expiry of 3 months.

e. Other methods of evoidance of uncertainty

FLEXIBLE INVESTMENT

I don't want to be locked in investments in specialized assets unless it will become clear that the demand for them will take place during the whole term of investments

e.   Other methods of evoidance of uncertainty

DIVERSIFICATION OF THE COMPANY'S INTERESTS

This approach is illustrated by the old adage:

"don't put all your eggs in one basket"

e. __Other methods of evoidance of uncertainty__

THE ACQUISITION OF ADDITIONAL INFORMATION

Obviously, the more information you gather about the future, the less it will be undefined

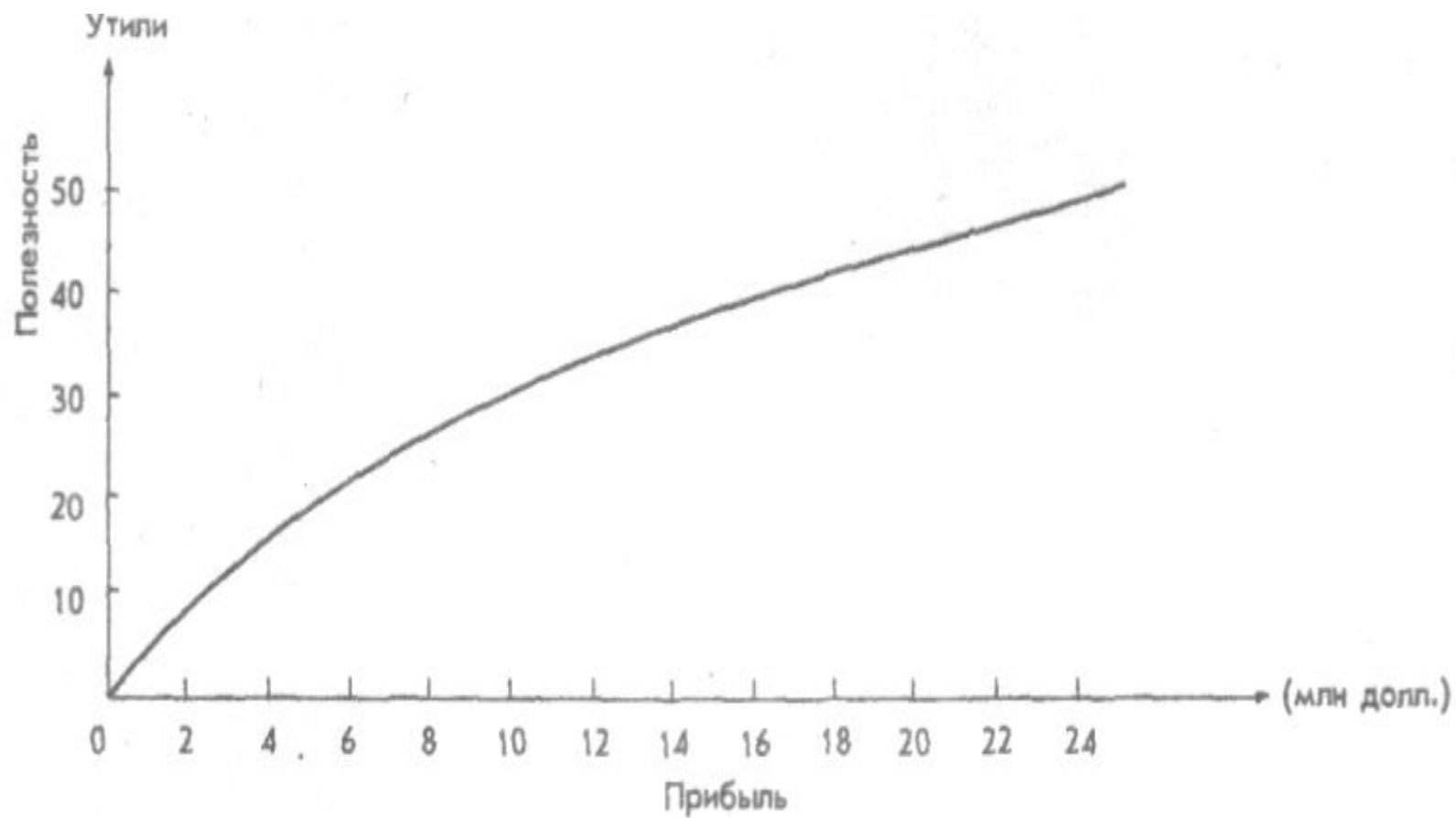**However, in some time the law of diminishing marginal utility will occur**

Tropical Products

Рис. 4.12. Предполагаемая функция полезности