Magadh Mahila College

Patna University, Patna

M A Economics

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Paper: Microeconomics (CC 07)

Topic: Compensation Principle

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New Welfare Economics: Compensation Principle

Pareto laid the foundation of the modern welfare economics by formulating the concept of Social Optimum which is based on the concept of ordinal utility and free from interpersonal comparisions of utilities and value judgement. He formulated value-free criterion in order to test whether a proposed policy change increases social welf-are or not.

Pareto criterion states simply that "an economic change which harms no one and makes someone better off indicates an increase in social welfa Thus, This criterion does not apply in those economic changes which harm some and benef others.

In terms of Edgeworth Box diagram Pareto criterion fails to say as to whether or not social welfare increases as movement is mad in either direction along the contract curve because it rejects the notion of interpersonal comparison of utility.

Since, every tangency point of the two indif-erence curves on the contract curve repre a "Pareto Optimum". There is thus no uniqu

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Pareto optimum position. This criterion does not tell as about changes in the level of social welfare if one moves on the contract curve from one tangency point to another because such movement harms one and benefits the other. Thus, the analysis of welfare in terms of Pareto optimality leaves a considerable amount of indeterminancy, for there are numerous Pareto optimum points on the contract curve.

Economists like Kaldor, Hicks and Scitovsky have made efforts to evaluate the change in social welfare resulting from any economic reorganisation which harms somebody and benefits the others. These economists have tried to remove indeterminancy of the Pareto optimality analysis. They have put forward a criterion known as the "Compensation Principle" on the basis of which they claim to evaluate those changes in economic policy or an organisation which make some individual better off and other worse off.

- Compensation Principle is based on the following assumptions:

(1). The satisfaction of an individual is independent of the others and he is the best judge of his welfare.

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2). There exist no externalities of consumption and production.

3). The tastes of individual remain constant.

4). Compensation principle accepts the level of social welfare to be a function of the level of production. Thus, it ignores the effects of a change in distribution on social welfare.

5). Based on ordinal utility analysis.

6). Interpersonal comparisons of utilities are not possible.

→ Kaldor – Hicks Welfare Criterion : Compensa-tion Principle.

Nicholas Kaldor was the first economist who has given a welfare criterion based on Compensation Principle / Compensation Payments. Kaldor's Criterion explains that how the welfare takes place when a movement in either direction of the contract curve happens in term of Edgeworth Box diagram.

According to Kaldor's welfare Criterion ;

If a certain change in economic organisation or

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policy makes some people better off and others worse off, then that change will increase social welfare if those who gain from the change could compensate the losers and still be better off than before.

According to Prof. Baumol, "Kaldor's criterion states that a change is an improvement if those who gain evaluate their gains at a higher figure than the value which the losers set upon their losses."

Thus, if any policy change benefits any one section of society (gainers) to such an extent that it is better off even after the payment of compensation to the other section of the society.

In Kaldor's words, "In all cases.... where a certain policy leads to increase in physical productivity and thus in aggregate real income... it is possible to make everybody better off without making anybody worse off. It is quite sufficient... to show that even if all those who suffer as a result are fully compensated for their loss, the rest of the community will still be better off than before.

Prof J.R. Hicks also supported Kaldor's Compensation principle to evaluate the change in social welfare by any economic reorganisation that

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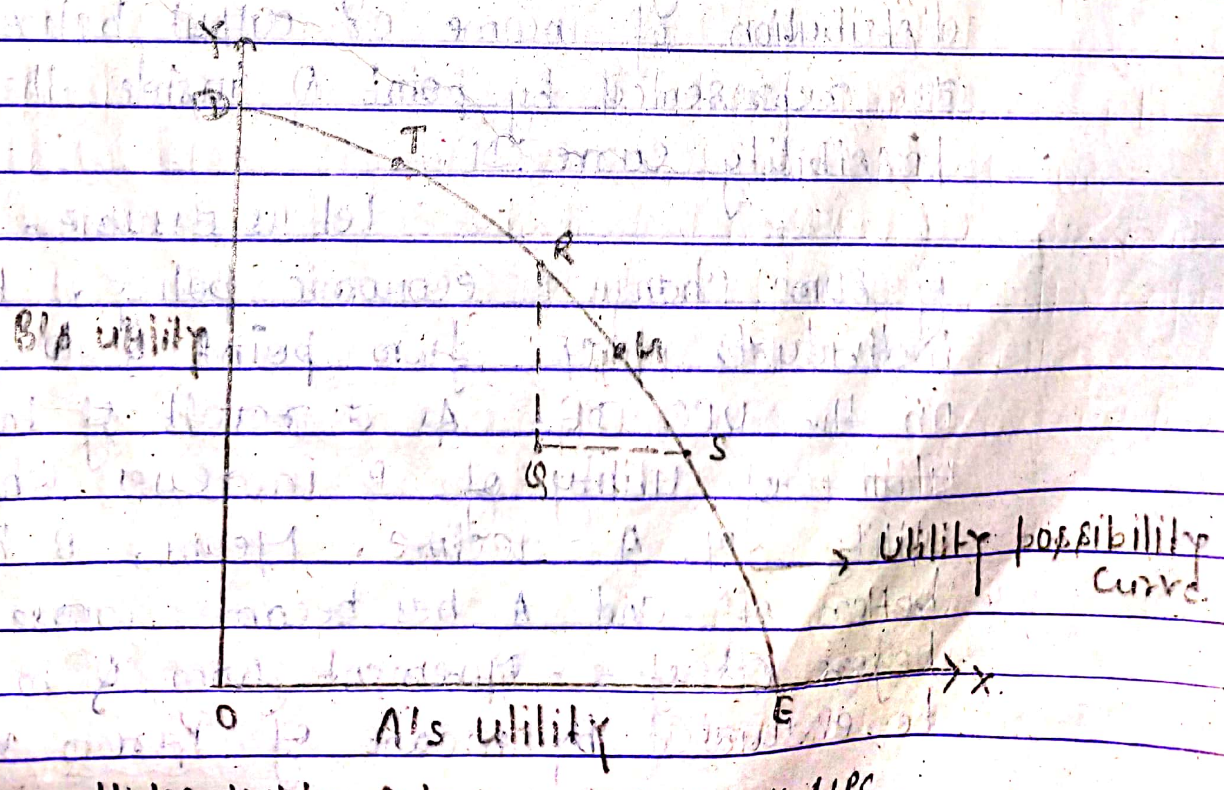
benefits some people and harms the others.

J.R Hicks states " If A is made so much better by the change that he could compensate B for his loss and still have something left over, then the reorganisation is unequivocal improvement."

In other words, a change is an improvement if the losers in the changed situation can not profitably bribe the gainers not to change from the original situation. Hicks has given his criterion from the loser's point of view, while Kaldor has formulated his criterion from the gainer's point of view. Thus the two criteria are really the same. That is why they are generally called by a single name "KALDOR - HICKS CRITERION".



Hicks-Kaldor Criterion explained with UPC

In the given figure;

X - axis = Ordinal utility of A
Y - axis = Ordinal utility of B
DE = Utility possibility curve shows various combinations of utilities obtained by individual A and B.

As we go;

Down of UPC = Utility of A increases while utility of B decreases.

Up of UPC = Utility of B increases while utility of A decreases.

Suppose utility obtained by A and B from the distribution of income or output between them are represented by point Q inside the utility possibility curve DE.

Let us assume, as a result of some change in economic policy, the two individuals moves from point Q to point T on the UPC DE. As a result of this movement ~~utility of~~ utility of B increases while the utility of A decline. Means, B has become better off and A has become worse off than before. Therefore, movement from Q to T can't be evaluated by means of Pareto optimum.

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Of course, points such as R, W, S or any point on the segment RS of the UPC are socially preferable to point Q on the basis of Pareto optimum

Since, Movement from Q to T involves interpersonal comparison of utility so, it can not be said whether social welfare increases or not on the basis of Pareto criterion.

However, the compensation principle propounded by Kaldor-Hicks enables us to say whether or not social welfare has increased as a result of movement from Q to T.

A/c to Kaldor-Hicks criterion, individual B who gains with the movement from Q to T could compensate A (who is loser) and still be better off than before.

Here, B gives compensation to A. Now they can move from T to R position. At position R, A is better off than position Q and B is still better off as compared to position Q.

It means, due to policy change and consequent movement from position Q to position T, the gainer (individual B) could compensate the loser (individual A) and is still better off than at Q. Therefore, A/c Kaldor-Hicks criterion, social welfare increases with the movement from position Q to position T because from T they could move to the position R through mere redistribution of income.

Note :

According to Kaldor - Hicks criterion, compensation may not be actually paid to judge whether or not social welfare has increased. It is enough to know whether the gainer could compensate the loser for the loss in his welfare and still be better off.

Whether redistribution of income (i.e., payment of compensation) should be actually made following change in policy is left for the Govt. to decide. If it is possible for gainer to compensate the loser and still be better off, the economist can say that social welfare has increased. It may be noted that gainer can compensate the losers and still be better off only when the change in economic policy leads to the increase in output or real income. That is why Kaldor and Hicks claim that they have bee able to distinguish b/w change in output from change in distribution. When their criterion is satisfied by any change in the situation, it means that the economy has moved to a productively more efficient position and as a result social welfare can be said to have increased.

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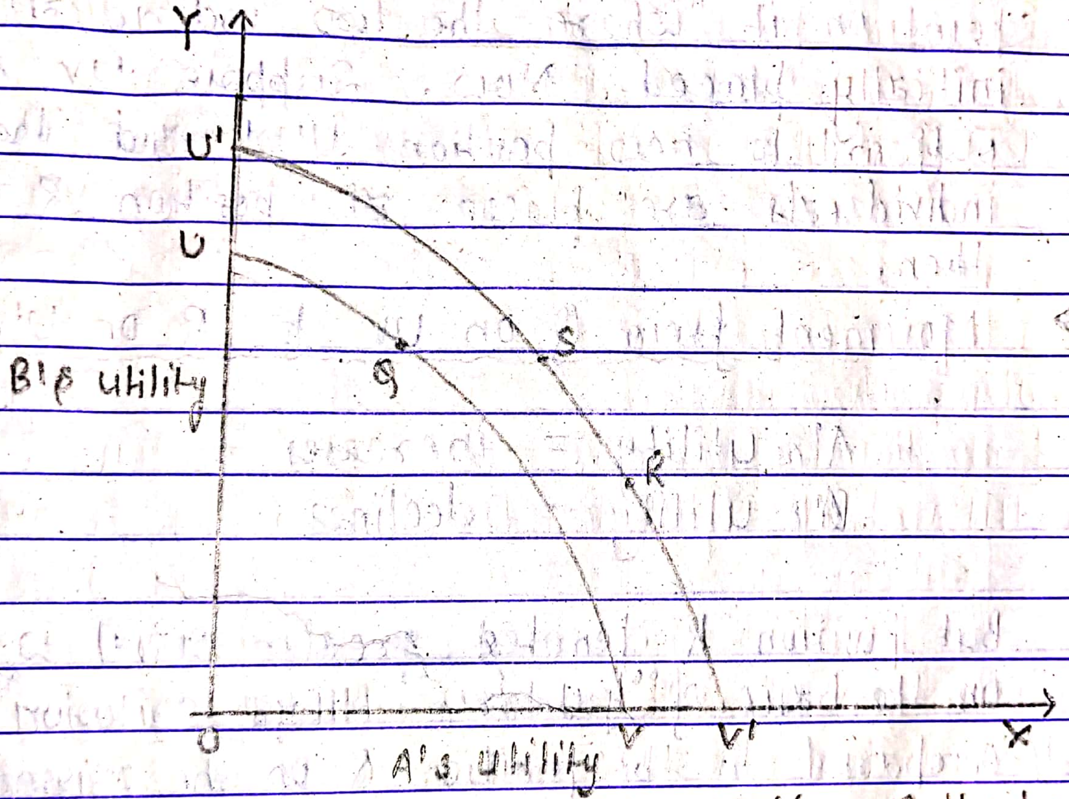
Kaldor - Hicks criterion become more clear if the movement from T to h takes place by redistribution of income. Now, at position h ; A and B both are better off than the position T. And at point h, Both A and B are better off than point Q also.



Hicks - Kaldor Welfare Criterion

The Change in economic policy brings about a movement from a position inside the utility possibility curve to a point on it. Now let us see what happens to social welfare if as a result of the adoption of a certain economic policy the utility posibility curve moves outwa and the two individuals moves from a point on the UPC to a point on the higher UPC.

It can be shown that, according to Kaldor-Hicks criterion, such a movement causes an improvement in social welfare.

<u>Explaination of the Graph;</u>

UV is the original UPC and Q represent a point on it where the two individuals are initially placed. Now, suppose UV shifts outward to new position U'V' and the two individuals are placed at position R on it. Then,

→ <u>Movement from Q on UV to R on U'V';</u>

A's utility = increases
B's utility = declines

But position R denotes greater social welfare on the basis of "Kaldor's-Hicks criterion" as compared to the position Q on the original UPC UV because with U'V' as the UPC it is possible to move, through mere redistribution of income from position R to position S where the individual B has been fully compensated for his loss of utility, the individual A is still better off as compared to position Q. To conclude,
Any change in the economy that moves the individuals from a position on a lower UPC to a position on a higher utility possibility curve increases social welfare.

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