

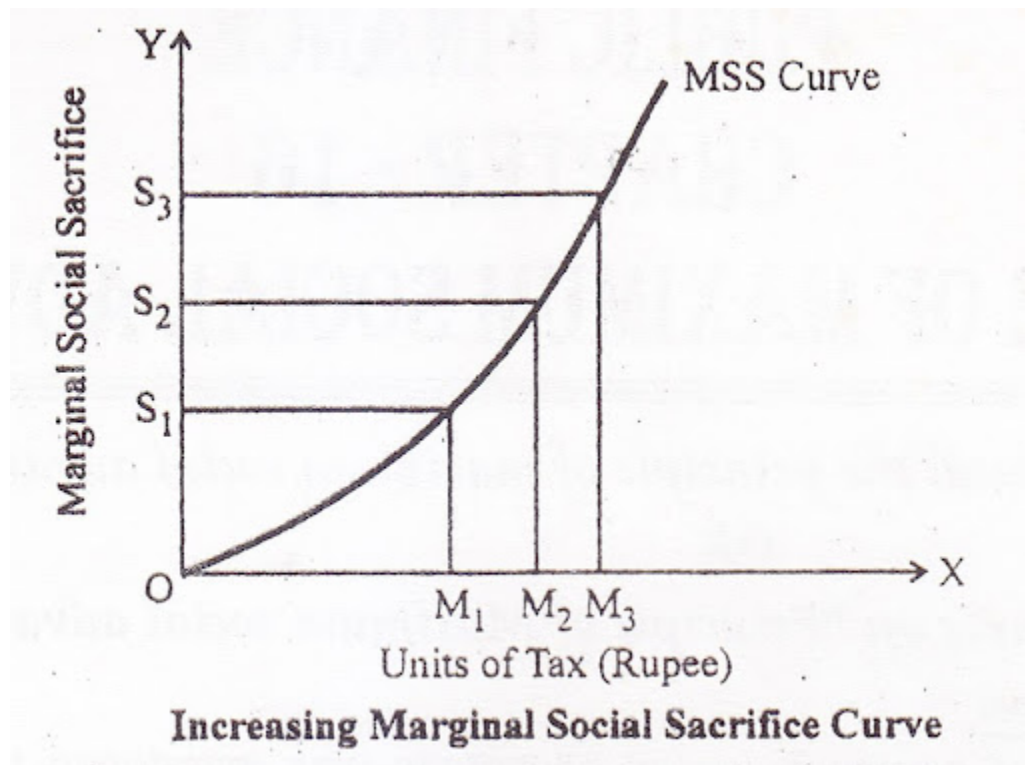
Principle of Maximum Social Advantage

- The principle of Maximum social advantage is the 'Principle of Public Finance'. It is the fundamental principle which should determine fiscal operations of the government. This principle is formulated and popularized by Dr. Dalton and Prof. Pigou. Dr. Dalton calls it as the principle of maximum social advantage and Prof. Pigou describe as principle of Maximum Aggregate Welfare.

- According to Dalton, the principle of maximum social advantage is the most fundamental principle lying at the root of public finance. Hence, the best system of public finance is that which secures the maximum social advantage from its fiscal operations.
- The principle of maximum social advantage implies that public expenditure is subject to diminishing marginal social benefits and taxes are subject to increasing marginal social costs. So it is necessary to get an equilibrium position where marginal social benefits of public expenditures are equal to the marginal social sacrifice of taxation to maximize social advantage.
- Thus, MSA is achieved at the level of taxation and public expenditure where marginal social sacrifice arriving out of former and marginal social benefit from latter become equal to each other. Any other level of taxation and public expenditure will achieve less than maximum social advantage.

- This principle is however based on the following assumptions:
- 1. All taxes result in sacrifice and all public expenditures lead to benefits.
- 2. Public revenue consists of only taxes and no other sources of income to the government.
- 3. The government has no surplus or deficit budget but only balanced budget.
- 4. Public expenditure is subject to diminishing marginal social benefit and taxes are subject to increasing marginal social sacrifice.

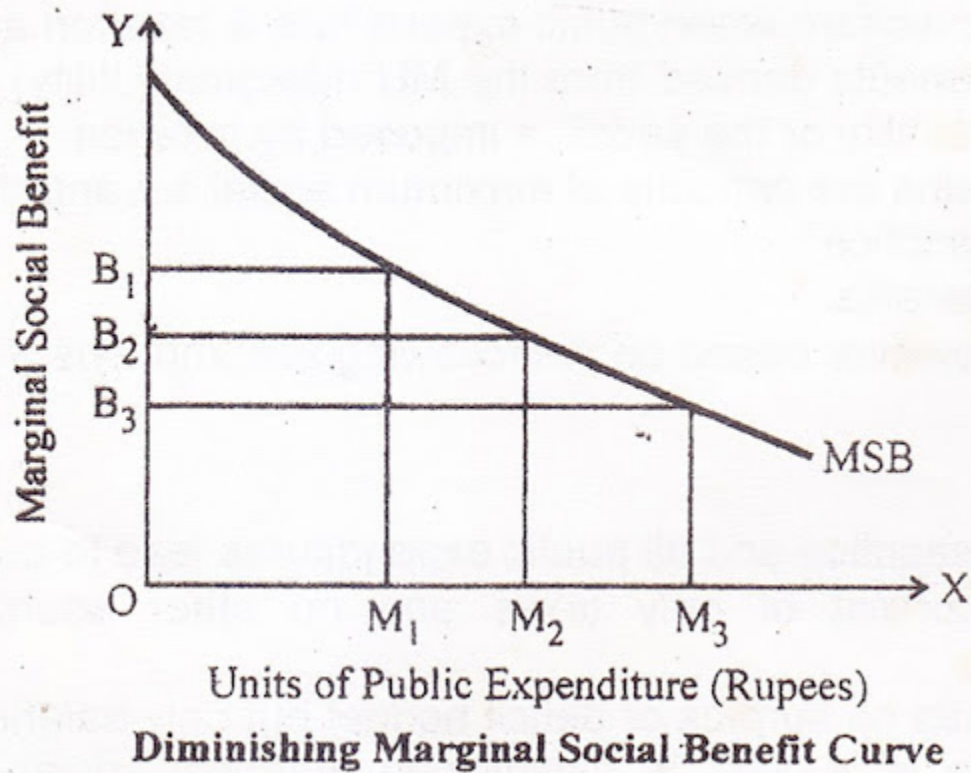
- Hugh Dalton explains the principle of maximum social advantage with reference to Marginal Social Sacrifice and Marginal Social Benefits.
- **Marginal Social Sacrifice (MSS):** Marginal Social Sacrifice (MSS) refers to that amount of social sacrifice undergone by public due to the imposition of an additional unit of tax.
- Every unit of tax imposed by the government taxes result in loss of utility.
- Dalton says that the additional burden (marginal sacrifice) resulting from additional units of taxation goes on increasing i.e. the total social sacrifice increases at an increasing rate.
- This is because, when taxes are imposed, the stock of money with the community diminishes. As a result of diminishing stock of money, the marginal utility of money goes on increasing.
- Eventually every additional unit of taxation creates greater amount of impact and greater amount of sacrifice on the society.
- That is why the marginal social sacrifice goes on increasing. We can see the Marginal social sacrifice in the following diagram:



- The diagram indicates that the Marginal Social Sacrifice (MSS) curve rises upwards from left to right. This indicates that with each additional unit of taxation, the level of sacrifice also increases. When the unit of taxation was OM_1 , the marginal social sacrifice was OS_1 , and with the increase in taxation at OM_2 , the marginal social sacrifice rises to OS_2 and so on.

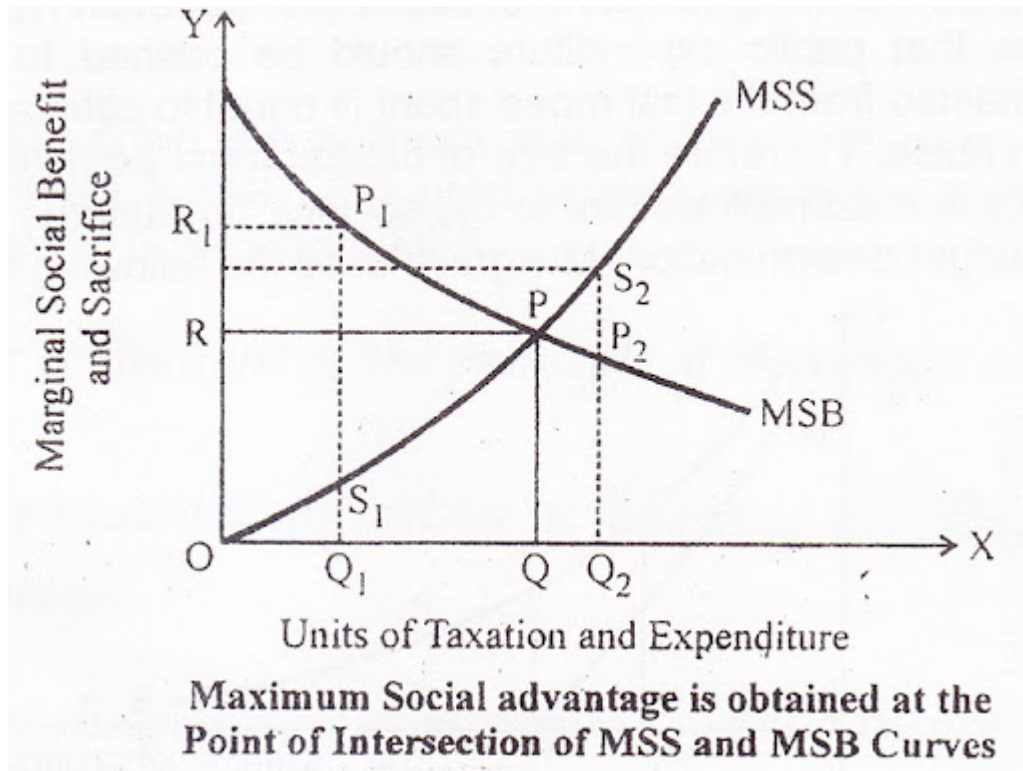
- **Marginal Social Benefit (MSB):**

- While imposition of tax puts burden on the people, public expenditure confers benefits.
- The benefit conferred on the society, by an additional unit of public expenditure is known as Marginal Social Benefit (MSB).
- Just as the marginal utility from a commodity to a consumer declines as more and more units of the commodity are made available to him, the social benefit from each additional unit of public expenditure declines as more and more units of public expenditure are spent.
- In the beginning, the units of public expenditure are spent on the most essential social activities.
- Subsequent doses of public expenditure are spent on less and less important social activities. As a result, the curve of marginal social benefits slopes downward from left to right as shown in figure below:



- In the above diagram, the marginal social benefit (MSB) curve slopes downward from left to right. This indicates that the social benefit derived out of public expenditure is reducing at a diminishing rate. When the public expenditure was OM_1 , the marginal social benefit was OB_1 , and when the public expenditure is OM_2 , the marginal social benefit is reduced at OB_2 and so on.

- **The Point of Maximum Social Advantage:**
- Social advantage is maximised at the point where marginal social sacrifice cuts the marginal social benefits curve.
- In the diagram, the marginal disutility or social sacrifice is equal to the marginal utility or social benefit at the point P. Beyond this point, the marginal disutility or social sacrifice will be higher, and the marginal utility or social benefit will be lower.



- At point P social advantage is maximum. If we consider Point P₁, at this point marginal social benefit is P₁Q₁. This is greater than marginal social sacrifice S₁Q₁. Since the marginal social sacrifice is lower than the marginal social benefit, it makes more sense to increase the level of taxation and public expenditure. This is due to the reason that additional unit of revenue raised and spent by the government leads to increase in the net social advantage. This situation of increasing taxation and public expenditure continues, as long as the levels of taxation and expenditure are towards the left of the point P.

- At point P, the units of taxation and public expenditure moves up to OQ, the marginal utility or social benefit becomes equal to marginal disutility or social sacrifice at this point.
- Therefore at this point, the maximum social advantage is achieved. If we moved forward to OQ levels of units, the marginal social sacrifice S2Q2 is greater than marginal social benefit P2Q2.
- Therefore, beyond the point P, any further increase in the level of taxation and public expenditure may bring down the social advantage.
- This is because; each subsequent unit of additional taxation will increase the marginal disutility or social sacrifice, which will be more than marginal utility or social benefit.
- This shows that maximum social advantage is attained only at point P & this is the point where marginal social benefit of public expenditure is equal to the marginal social sacrifice of taxation.

Musgrave's Approach

- The principle of Maximum Social Advantage has been interpreted by economist Richard Musgrave who termed it as Maximum Welfare Principle of Budget Determination.
- According to Musgrave, the principle explains that taxation and public expenditure should be carried out up to that level where satisfaction obtained from the last unit of money spent is equal to the sacrifice from the last unit of money taken in terms of taxes.
- In other words, it should be carried out up to the point where marginal social benefit is equal to marginal social sacrifice.
- To illustrate his interpretation, Musgrave used Fig. in which, the size of the budget (level of taxation and public expenditure) is shown on the X-axis. On the positive part of Y-axis MSB is measured and on the negative part, MSS is measured.

- The curve EE, in the first quadrant, represents the marginal social benefit (MSB) of successive units of money spent as public expenditure, allocated optimally between different public uses. It falls from left to right because as public expenditure increases, MSB declines. The curve TT, in the fourth quadrant, represents the marginal social sacrifice (MSS). As additional units of taxation are raised from the people, MSS increases.

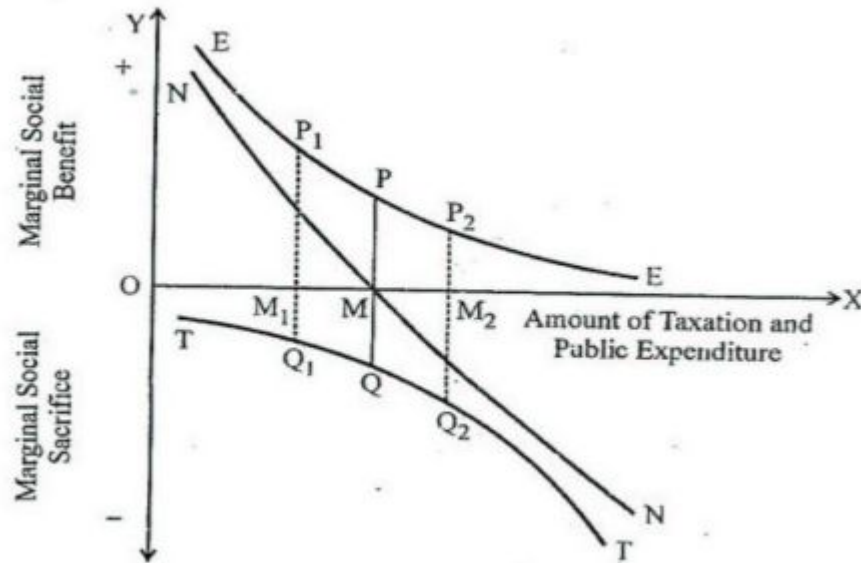


Fig.2.4 : Gains and Losses from Budget Operation

- Accordingly, the curve SS slopes downwards from left to right in the fourth quadrant showing rising MSS. The curve NN measures Marginal net benefits (MNB) which is derived from successive addition to public budget. MNB is calculated by deducting MSS from MSB.
- The vertical distance between EE curve and TT curve measures MNB at different sizes of the budget. The optimum size of the budget is determined at OM, where MNB is zero.
- At this size of the budget, the marginal social benefit MP is equal the marginal social sacrifice MQ ($MSB = MSS$). Since MSB and MSS are measured in opposite directions, the MNB curve NN cuts the X-axis at point M where marginal net benefit is zero ($MSB - MSS = 0$).
- At any point to the left of M, say M1, MSB will be greater than MSS and MNB will be positive. It is beneficial to increase size of the budget as long as MNB is positive. So there will be a tendency to move from M1 towards M.
- If the budget size exceeds M, say M2, than MSS will exceed MSB and MNB will be negative. Therefore it will be beneficial for the government to cut down the size of the budget and move from M2 towards M.
- According to Musgrave the optimum size of the budget is given by the point where the marginal net benefit is zero. This point corresponds to the point of maximum social advantage, as at this point $MSB = MSS$.

- The principle of maximum social advantage has been criticized on various grounds. The main **practical difficulties** are as follows:

(i) Difficulties in Measuring Social Benefits: The principle of maximum social advantage is theoretically explained with the help of the marginal utility analysis. The Marginal benefits of public expenditure and the marginal disutility on sacrifice of public revenue are concepts, the objective measurement of which is extremely difficult.

(ii) Unrealistic Assumptions: It is unrealistic to assume that government expenditure is always beneficial and that every tax is a burden to society. For example, taxes on cigarettes or alcohol can provide benefit to society; expenditure on social overheads like health care will give rise to social benefit whereas unnecessary increase in expenditure on defense may divert resource from productive activities causing loss of welfare to society.

(iii) Neglect of Non – Tax Revenue: The principle says that the entire public expenditure is financed by taxation. But, in practice, a significant portion of public expenditure is also financed by other sources like public borrowing, profits from public sector enterprises, imposition of fees, penalties etc. Dalton fails to take into account all such other sources.

(iv) Lack of divisibility: The marginal benefit from public expenditure and marginal sacrifice from taxation can be equated only when public expenditure and taxation are divided into smaller units. But it is not possible practically.

- **(v) Large Budget Size:** The financial operations of the government involve collection of large sums of money from taxation and other sources and the disbursement of large amounts by way of public expenditure. The effects of small additional amounts of these on the community are difficult to measure. Therefore, in practice, the public authorities are not in a position to estimate the marginal benefits and the marginal sacrifice.
- **(vii) Different Periods:** The impact of many public projects is felt over the long period by both the present and the future generations. In order to determine maximum social advantage it becomes necessary to calculate social benefits from public expenditure in short period and in long period.

- **(viii) Conceptual differences:** Taxes are paid by individuals and the sacrifice involved is felt at an individual or micro level. Whereas, all the people are jointly benefited at macro level through public expenditure in a community. Many economists argue that it is neither possible nor desirable to compare micro and macro concepts by using the same criteria.
- **(ix) Misuse of Government Funds:** The principle of Maximum social advantage is based on the assumption that the government funds are utilized in the most effective manner to generate marginal social benefit. However, quite often a large share of government funds is misused for unproductive purposes which so not provide any social benefits.