# Inequality Leads To Sub Optimal Welfare Due To Irrational Consumerism 

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#### Abstract

: Economics tells us that to maximize utility the ratio of marginal utility to price of different goods must be equal. That is obvious because if the ratio is higher of one good it would make sense to take money from other goods and spend it on that good. However high inequality leads to irrational consumerism and people spend money on expensive goods where the ratio of marginal utility to price is far less than ratio of marginal utility to price in other goods. This is irrational. Obviously this leads to sub optimal welfare for the individual and society. Hence inequality must be mitigated to curb irrational consumerism led sub optimal welfare.


Date of Submission: 23-04-2023
Date of Acceptance: 05-05-2023

## I. Maximizing Utility

Utility is an imaginary concept in economics that roughly equates to satisfaction obtained by consumption of a good or service. Marginal Utility means the utility or satisfaction obtained from consumption of last unit of good. The law of diminishing marginal utility says that with successive consumption of good the marginal utility obtained from the last unit of good decreases.

But this paper is not about law of diminishing marginal utility. This paper discusses how to maximize utility. Utility can be maximized if the ratio of marginal utility to price of all goods consumed is same.

Say we have 4 goods - A, B, C and D. And the marginal utilities of these goods are MUA, MUB, MUC and MUD respectively. And the prices of the 4 goods are PA, PB, PC and PD.
So the utility is maximized when
$\mathrm{MUA} / \mathrm{PA}=\mathrm{MUB} / \mathrm{PB}=\mathrm{MUC} / \mathrm{PC}=\mathrm{MUD} / \mathrm{PD}$
This actually makes sense.
For instance consider the situation where $\mathrm{MUA} / \mathrm{PA}>\mathrm{MUB} / \mathrm{PB}$, then it is obvious that to increase total utility it makes sense to take money away from good B and spend on good A till such time that MUA decreases and MUB increases(considering law of diminishing marginal utility) to a level where

MUA/PA = MUB/PB
So a rational consumer would always try to distribute his expenditure among various goods and services in such a way that the marginal utility per unit of expenditure between different goods is same.

## II. Inequality led consumerism

However inequality led consumerism causes one to make purchasing decision that defies this rational behaviour. After all when there is inequality and you cannot save more than a certain percentage, one has to spend all the money amoung limited number of goods, then one splurges or wastes money on goods that don't provide marginal utility that is proportional to the price.

Say we eat one pizza and it provides 100 units of utility and it costs 100 rupees. Now we also buy a ladies bag for 200 rupees and it gives 200 units of utility.

The ratio of marginal utility to price in case of pizza is $100 / 100=1$
And the ratio of marginal utility to price in case of ladies bag is 200/200 $=1$
So since the ratio of marginal utility to price is same between pizza and ladies bag, the utility is maximised

However consider the situation of a rich person. Now the rich person will not buy a ladies bag costing 200 rupees but buy a ladies bag costing 20,000 rupees.

But the pizza will remain same, bought from say pizza chain and the price and marginal utility will be same.

Now the ladies bag costing 20,000 rupees will of course give more utility than the ladies bag costing 200 rupees, however not in same proportion. So if the ladies bag costing 200 rupees gave 200 units of marginal utility, the ladies bag costing 20,000 rupees will at most give 2000 units of marginal utility.
So now the ratio of marginal utility to price in case of pizza is $100 / 100=1$

And the ratio of marginal utility to price in case of ladies bag is 2000/20000 $=0.1$
So clearly the ratio of marginal utility to price is not equal between pizza and ladies bag. And you cannot even take money away from ladies bag and buy more pizza, because at the end of the day you can only eat so many pizzas. And a rich person cannot buy a ladies bag costing 200 rupees because that is below the status. Hence the rich person to maintain status purchases ladies bag at cost of 20,000 rupees which give only one tenth the marginal utility per unit expenditure than pizza.

Alternatively the rich person may buy pizza at 5 star hotel which may cost Rs. 2000 but give say 200 units of utility instead of 100 for normal pizza. Now if the rich person buys ladies bag at Rs. 200
The ratio of marginal utility to price in case of pizza is 200/2000 $=0.1$
And ratio of marginal utility to price in case of ladies bag is 200/200 = 1
Again ratio of marginal utility to price between pizza and ladies bag is not equal and the rich man cannot eat 100 rupees pizza and must buy pizza costing 2000 rupees at 5 star hotel according to his status but which does not give 20 times more satisfaction or marginal utility.

This is very irrational behaviour. And yet the inequality of income compels that kind of irrational choice, else the rich person will not be able to spend all of income after adjusting for reasonable level of savings - after all rich person cannot save $90 \%$ of income. The only way to curb this irrational consumerism is to curb inequality.

Only in a more equitably distributed society, will consumers make rational choices where ratio of marginal equality to price between different goods is made more equal and hence the overall utility is maximized. Inequality compels irrational consumerism where it is impossible to equate ratio of marginal utility to price between various goods and this leads to sub optimal welfare for individual and by extension to the society.

