

# The impact of a sugar tax on the economy

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**ABSTRACT.** *As the proportion of obese people increases, many countries have begun to set sugary taxes to control the number of such obese people. On the whole, sugary tax can bring a lot of positive effects, but it still needs to reduce the negative impact of the sugar tax by strictly setting of sugar tax value and some supplementary measures.*

**KEYWORDS:** *Sugary tax; Economic loss; Market failure*

## 1. Introduction

The number of obesity people today in the world is over 2.1 billion, which accounts for 30% of the world's total population (Murray & Ng, 2013). Many experts believe that this is related to a large number of drinking sugary drinks. In the recent year, many countries set up the tax on the sugary drinks.

## 2. Negative market effect caused by sugary drinks

Due to its huge needs of people, sugary drink is now turn to be demerit goods and over-provided goods in free market. This causes market failure and occur large negative externalities, which means that consumers will have payment and loss in other factors which do not have direct contact with the consumption. The obesity may cause series of health problems and the extra cost for the gym or the hospital. At the same time, in addition to lead to obesity, the sugary drinks are also linking to diabetes, cardiovascular disease and tooth decay. It causes the decreasing of the labour and recession of economic. All the people who are rather than obese people will also have some loss.

## 3. Advantages and disadvantages of sugary tax

Firstly, establishment of sugar tax and increase in its number can effectively reduce the demand for people of the sugar-sweetened drinks. Establishing a sugar tax is equivalent to set up extra payment of sugary drink. And in the case of constant price and quality, factors other than actual price will shift the demand curve (Anderton, 2008)[1]. When people need to pay other money for the sugary-sweetened drinks, the demand curve will shift inward, that is, the total demand

degree of sugary drink will decrease, because at the same time there still has substitutes such as water, wine, etc. Also, with the reduction in demand for sugary beverages, obese people and other people will also reduce the intake of sugary drinks, which indirectly improve the people's health index. This process internalizes externalities[2].

The second advantage is that it will bring the positive social benefit. Even though a sudden tax increase would lead to a reduction in the sales of sugar-containing beverages, the social tax revenue will continue to increase, as long as there are people still to buy sugary drinks. This tax can be used by the government to build public facilities to benefit the public, and in medical and health area it can be invested in health care provision to reduce health cost. Once a person benefits from the medical plan, the people around him/her will reduce the risk of contracting disease and then the social benefit will be greater (Anderton, 2008). In addition, this part of the tax can also be added in decentralized individual subsidies and operation of funds of national economic system[3].

However, it would be simplistic to assent that sugary tax has the generally negative impact. The first one is that taxes have its misleading. According to statistics, the biggest benefit from escaping obesity and being healthy is the elderly, while the major consumers of sugar-sweetened drinks are youth and adults (Health, 2013). Only for the sugary drinks tax cannot directly affect the elderly groups. Obviously, this does not mean that elderly do not benefit from the sugary tax, but the effect is not obvious. And it is also unfair for the poor who are obese and the rich who are not obese.

Secondly, sugar tax will lead to the decreasing of industrial company's production and at last cause economic losses. As Anderton (2008) mentions, demand and production are the causal relationship between each other. Sugar tax can be regarded as an indirect tax. That is, although the consumer is responsible for this extra expense at last, the tax is first paid by the production company. And this means that the company's production costs increase. When the government set up the sugary tax cost of production increase. It leads to the decrease of supply. So the supply curve shifts inward. The cost company needs to pay first will eventually be transferred to the consumer during consumption. The final price increase, the total purchase will decrease. This will undoubtedly lead to the loss of industry related companies. So the sugar tax is not appropriate to set too high in order to minimize the negative effect[4].

It can be easily understand from the above discussion that there are both advantages and disadvantages of the establishment of sugar tax. Though sugary tax has its negative impact, it still is able to reduce the number of the obesity. For example, Dr. Briggs who is from Oxford University said that the research of their department show the result that sugary tax "is a promising population measure" and the other study estimates the 20% tax will reduce the intake of 28 calories per person per week (Health, 2013). It shows that the sugary tax is necessary but it's not suitable to be set up too high. However, there is no denying that, it's still has some problems.

#### 4. Conclusion

Sugar-sweetened drinks is demerit goods, which cause negative externalities such as the increasing number of obesity, the decreasing health level of people and the economic recession. However, due to the increased demand for the sugary drinks, it is over-supplied. Many countries have already carried out sugary tax to solve the problem. In conclusion, sugar tax has its advantages and disadvantages, but the advantages of sugary tax outweigh the disadvantages and the disadvantages can be made up for other deficiencies such as tradable permit and subsidy. The government should also strictly control the amount of sugar tax to reduce negative effects.

#### Reference

- [1] Anderton, A(2008). The demand curve. Economics. 5th ed. Edinburgh: Pearson Education.
- [2] Health(2013). Sugary drinks tax 'effective public health measure'. BBC News. <http://www.bbc.com/news/health-24759517>
- [3] Murray, J. L. & Ng, M(2013). Nearly one-third of the world's population is obese or overweight, new data show. <http://www.healthdata.org/news-release/nearly-one-third-world%E2%80%99s-population-obese-or-overweight-new-data-show> (Accessed: 9 December 2016).
- [4] Mytton, O(2014). Time for a sugary drinks tax in the UK?. Journal of Public Health, vol.37, no.1, p.24.