

The necessity of a meat tax on the economy

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ABSTRACT. *The livestock section is a major section in ecosystems. While it is the leading source of water pollution in developed countries. In the agricultural sector, livestock sector is primary player. And meat tax is a direct way to control livestock.*

KEYWORDS: *meat tax, alternative policy, environmental problem, economic effect*

1. Introduction

There is a discussion that adding taxation on the meat industry is necessary or not. This essay tends to prove the necessity. The reason why the meat industry need to be taxed would be explained through kinds of economic theories, especially the negative externalities. Starting from discussing the livestock in a situation of free market. Admittedly, taxation has some disadvantages. However, benefits are greater than harm. With the help of tax, the quantity demand and quantity supply would change.

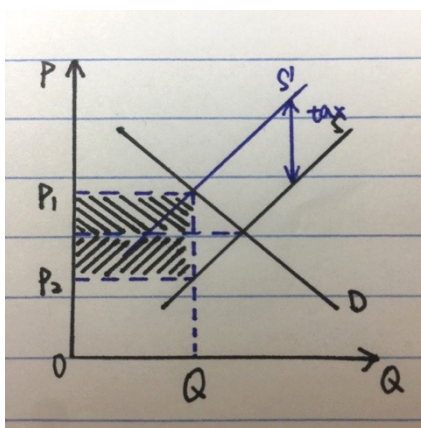
2. Price in free market

Mankiw, N.G. & Taylor, M.P.^[7] (2014, p.68) introduce the free market where the price is determined by the supply and demand. And free market would not be influenced by regulation or any action of government. The price of meat is only determined by two factors demand and supply. Mankiw, N.G. & Taylor, M.P.^[7] (2014, p.199) describe firms only care about profit and private cost, but nothing about society and social cost.

William, D. & Rohlf, Jr.^[10] (2011, p.95) assumes if there were no externalities, meat industry would produce at the best level of output. However, meat industry would not stop producing until the market output. There is a triangle which stands for deadweight loss. Sloman, J. & Garratt, D.^[9] (2013, p.203) offers the definition that deadweight loss is unnecessary loss of social welfare. When output between the quantity of original supply and quantity of actual marketing, marginal social cost is larger than the marginal private benefit. The difference between marginal social cost and marginal private cost is deadweight loss.

3. Advantages and disadvantages of taxation

Hornby, A.S.^[6] (2016, p.70) introduces that tax is money that you have to pay to governments. So that it could pay for public services. Business people pay tax according to their profits. Meat tax has lots of advantages. Miller, R.L.^[8] (2008, p.346) analyses that governments use the meat tax to environmental management, especially renovating damage brought by livestock.



P3

P3 shows that meat tax added on the meat industry. Therefore, the supply curve shifts inwards. P1 stands for the price consumer take. And P2 stands for the price seller take. The distance between two supply curves means tax.

The shadow is total tax revenue. Harriet, A.^[5] (2017)

Mankiw, N.G. & Taylor, M.P.^[7] (2014, p.210) provide another advantage that meat tax could help to achieve the optimal level of output. Meat tax belongs to Pigovian tax, which correct impact of negative externalities. If governments added the tax properly, marginal social cost would equal to marginal private cost plus tax. The meat industry would have higher cost than before. The free market output would equal to the optimal level of output. And, the deadweight loss would be reduced at the same time. Adding tax is a great way to internalize the externalities. Therefore, these externalities below could be taken by taxpaying enterprise. Ben, C.^[2] (2017, p.89) claims greenhouse gases, loss of biodiversity and water pollution are all negative externalities on production of livestock. Water pollution could be an example of negative externalities. When polluted water are drunk by innocent people, they might get sick. Medical costs would be taken to cure disease. These coats are regarded as negative externality. (Caroline, M.^[3] 2017)

Mankiw, N.G. & Taylor, M. P.^[7] (2014, p.239) put up with the point that improper size of tax might be too big or too small, which is a government failure. Governments failed to allocate the limited resource. Furthermore, tax is always unpopular among citizens. What's more, the meat tax could be regressive. Meat tax

affect the poor worse than the rich. Because the poor spend a large percentage of income on meat. Cost of meat would occupy higher percentage of their income. However, rich people actually would not get a lot of effect. Moreover, meat is a main resource of protein intake, which is a crucial element for peoples' health. (D.E. Crisp,^[4] 1974)

4. Conclusion

Livestock in a free market, profit as a motivation lead to a bad situation. The disadvantages of livestock are deforestation, greenhouse gas over proof, biodiversity loss and water pollution. These negative externalities on production explains the drawbacks of livestock. Deadweight loss is a result of negative externalities. Meat tax is a great solution. The advantages of meat tax are good usage of government revenue from tax and constant. And the disadvantages are all the advantages of livestock are restricted, regressive. The meat industry should be taxed.

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