

# THE FOLLY OF PROTECTIONISM

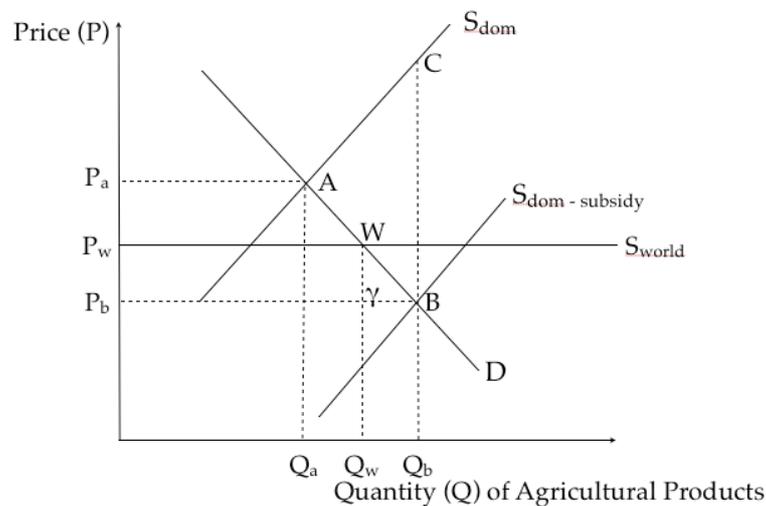
## Short Introduction to Four Popular Measures

In a free global economy, the primary sectors in the US and the EU would not have a right to exist in their present form. It is only because of protectionist measures that those economies are able to shield themselves from the world supply and its price, and that their flourishing agricultural sector is able to sell its goods at the high price observable for instance in supermarkets in Scotland. This essay will examine four such measures and their impact on domestic *consumer* welfare, and conclude that consumers are overall worse off with these measures in place. Yet, this essay will finish with a positive evaluation of the reasons behind protectionist thought in Europe and the United States.

### Income Support

One way of ensuring that domestic agricultural products are preferred over foreign goods is by imposing a subsidy on domestic producers. Such a subsidy would shift the supply (S) curve to the right from  $S_{dom}$  to  $S_{dom-subsidy}$  in figure 1. The subsidy is the vertical price (P) discrepancy between the S curves i.e. points C-B.  $S_{world}$  in this diagram is perfectly elastic, since on a global scale all elements of production are variable even in the short run (SR).

Figure 1: Income Support



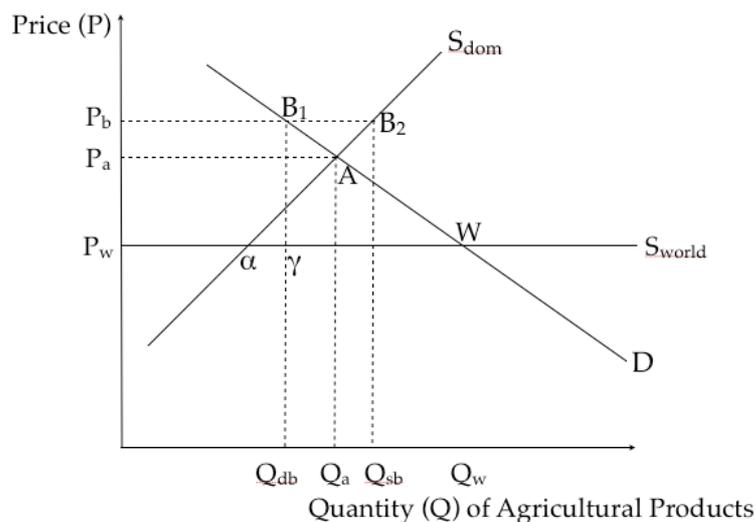
After the subsidy is imposed, price decreased from  $P_w$  to  $P_b$ ,  $Q$  demanded increases from  $Q_w$  to  $Q_b$ . There is a movement along the Demand (D) curve from point W to B.  $Q_b$  is sold at a lower price than  $Q_{world}$  could, thus consumers will only buy domestic products, ceteris paribus. This is based on the assumption that P is the predominant determinant of D.

With the subsidy in place, consumer surplus has increased by ' $P_w P_b \gamma W$ ' as well as ' $W \gamma B$ '.<sup>1</sup> The deadweight loss is just as big as ' $W \gamma B$ '. Note that there is an increase in government expenditure by ' $(C-B)*Q_b$ '. In this example consumers and domestic producers are better off, domestic taxpayers are worse off.

**Price Floor**

Another way of strengthening domestic producers is by imposing a P floor. Without any government intervention, the market is cleared at point W. The purpose of a P floor is to artificially move along upwards the D curve. Suppose the Government sets the minimum P to be  $P_b$  than the Q demanded would be  $Q_{db}$  and S would be  $Q_{sb}$ . There is excess supply of the size of the horizontal discrepancy between  $B_1$  and  $B_2$ . Note that consumers now purchase  $B_1$  where all S is domestic.

Figure 2: Price Floor



<sup>1</sup> These are boxes in the diagram that represent a monetary value.

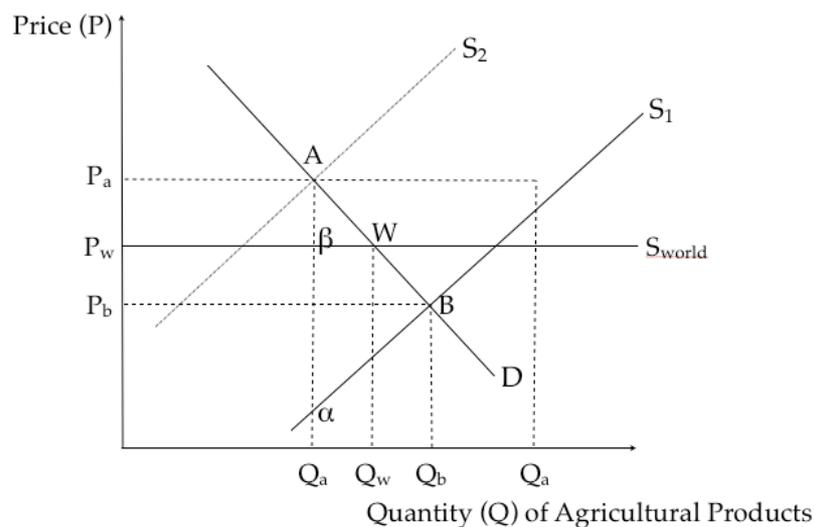
P has increased from  $P_w$  to  $P_b$ , the Q demanded has decreased from  $Q_w$  to  $Q_{db}$ . Consumer surplus shrinks by ' $P_b P_w W B_1$ ', the deadweight loss in figure 2 is ' $W \gamma B_1$ ' assuming producers maximise their surplus. Consumers will be far worse off; domestic producers better off, since before the measure they could only supply below P and Q or point  $\alpha$ .

One difficulty with this program is for governments to predict where exactly  $P_a$ , the domestic market P, would be. Often the P floor might end up above  $P_a$ , leading to excess S as in figure 2, or between  $P_w$  and  $P_a$ , leading to a shortage, ceteris paribus.

### Acreage Limitations

It is also possible to increase the price of domestically produced agricultural output with acreage limitation programs. These would promise benefits to producers if they produced less. It is like a tax for consumers, but without changes in the costs of the producer. Since production decreases, there is a movement along the D curve from B to A, where consumers are supplied by the imaginary curve  $S_2$ . This curve does not actually exist, as S is a function of costs, which have not actually increased.

Figure 3: Acreage Limitation

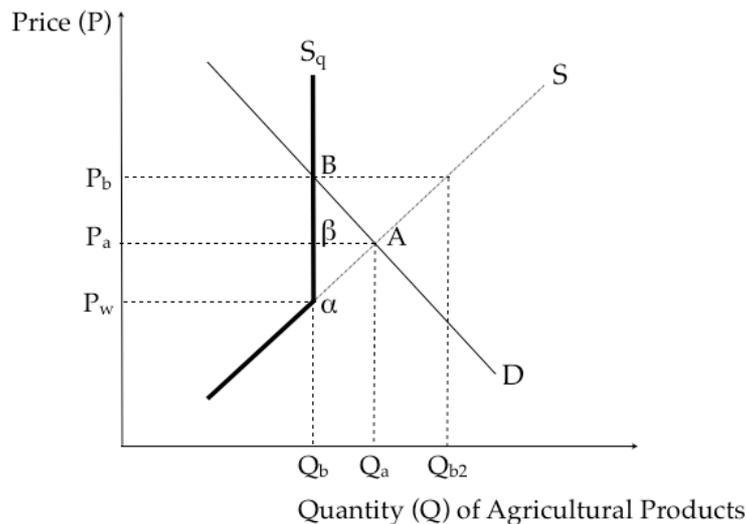


Consumer surplus decreases by ' $P_a P_b B A$ ' The deadweight loss is ' $A \alpha B$ ' Consumers are worse off, domestic producers better off, assuming there is no trade. If there is, this program would be absolutely



One form of quota that is not illegal however are domestic quotas. Much like acreage limitation programs this measure aims to decrease domestic S. With no quota in place, the market equilibrium will be at point A. Suppose a quota is imposed to limit industry S to  $Q_b$ . At point  $\alpha$  the S curve would become perfectly inelastic, since no P change could above  $P_w$  could affect the Q supplied.

Figure 5: Domestic Quota



S and D now meet at point B, where P has risen by  $P_b - P_a$  and we move along the D curve to  $Q_b$ . Consumer surplus decreased by 'P<sub>b</sub> P<sub>a</sub> A B', the deadweight loss is 'B  $\alpha$  A'. Consumers are worse off, produce may be worse off depending how elastic the D curve is, where greater elasticity is equivalent to less revenue after the quota was imposed.

### Evaluation

Apart from farm income support, all the above mentioned programs make consumers worse off. Since producers account for an insignificant part of EU and US economies, producer welfare consequences are not evaluated in this essay. In those economies there are approximately 9.15 million farms, which account for only 1% of the economy in the States and 1.7% in the EU and create an output of approximately \$470 billion.<sup>2</sup>

<sup>2</sup> Library of Congress online database, [[https://www.policyarchive.org/bitstream/handle/10207/1114/RL30753\\_20020731.pdf?sequence=1](https://www.policyarchive.org/bitstream/handle/10207/1114/RL30753_20020731.pdf?sequence=1)]

In the EU all the above mentioned programs are in place. Recently the number of P floors decreased and subsidies now play a bigger role in European protectionism. In the States subsidies also play a major role as well as quotas and tariffs.

The combination of these measures both in the US as well as in the EU lead to prices being higher than if agricultural products were supplied by  $S_{\text{world}}$ . It is therefore evident that consumers would be better off, i.e. have greater consumer surplus, without these protectionist measures in place. However, one has to note that food self-sufficiency has always been a target in the US and EU and that these measures also have political weight and ensure food quality, even though foreign producer might have a comparative advantage.

words: 1200

## **Bibliography**

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