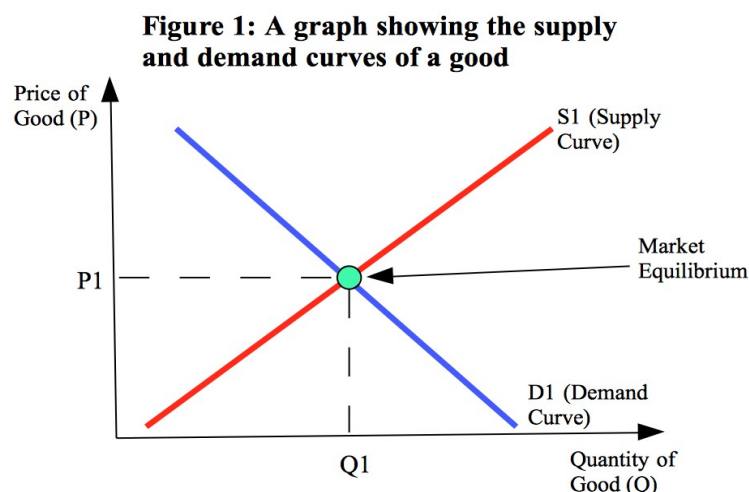


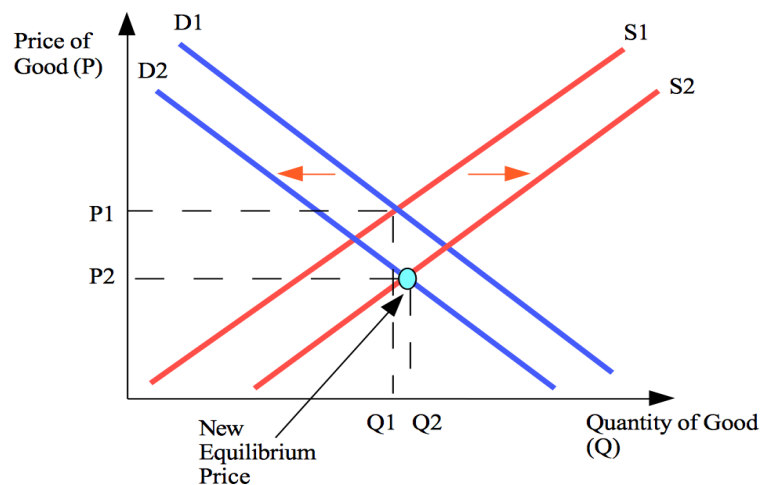
Prices are based on the equilibrium between supply and demand factors. The price of a good, in this case steak, is not fixed and fluctuates depending on market conditions. In this essay it will be proven that the final shelf price of a steak is based on numerous factors which affect the forces of supply and demand. This will be done by analysing demand and supply curves and equilibrium prices, the effects of substitute goods, excess demand relating to population, the effects of costs of production, excess supply and climate.

Demand and supply are vital forces in determining the final price of a good. Both can be represented graphically which aids in understanding their meaning and what influences them. The demand curve indicates the price of a good versus the quantity demanded related to that price (Mohr, 2015:63). Because as the more expensive a good becomes, the less people will demand of it, the graph tends to have a negative gradient (Mohr, 2015:63). This is the visual explanation of the “law of demand” (Mohr, 2015:62). The supply curve indicates the price versus the amount of the good that is supplied (Mohr, 2015:73). Unlike the demand curve's gradient, the supply curve slopes upwards since as the price of a good increases, the more firms will want to produce and sell in order to make a profit (Mohr, 2015:72). Both curves and forces work simultaneously in the market mechanism in order to achieve an equilibrium. This equilibrium is represented by the intercept of the two curves (Mohr, 2015:75). Influences on these curves and the way they move and are shifted make an impact on the final price of a good, in this case steak.



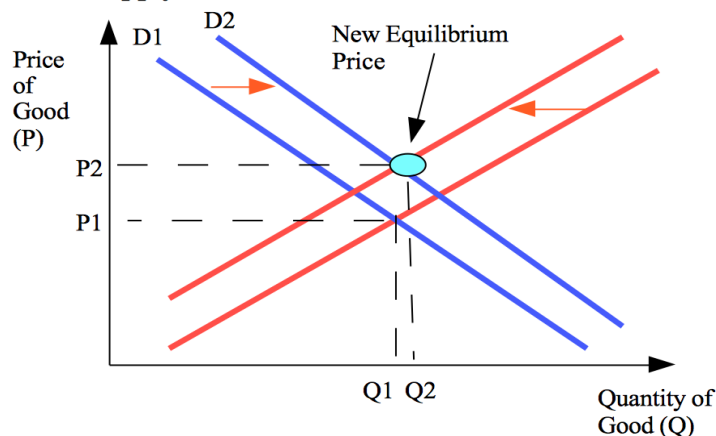
One important factor which influences both curves and hence the final price is alternate goods consumers face which may be consumed in place of the good in question (Mohr, 2015:61). When one chooses to consume a steak, this can be done without any need or assistance of another good or complement. However, the consumer may decide to purchase a related good instead of the steak depending on the relative prices of the goods. The beef industry faces competition between other protein industries in South Africa based on market demand and individual taste (Phillips, 2013). If a replacement protein, for example chicken, were to be set at a lower price in relation to steak, consumers would not want to purchase the more expensive steak and demand would decline with the demand curve shifting to the left (Mohr, 2015:67). The supply curve for steak is affected by this decrease in the price of the substitute in that it shifts to the right indicating that the supply for the good has increased (Mohr, 2015:75). This is because nobody has the incentive to buy steak. A new equilibrium point is thus reached.

Figure 2: A graph showing a leftward shift in the demand curve and a rightward shift in the supply curve



Alternatively, if the substitute, for example chicken, were to become more expensive, consumers would prefer the cheaper option of the steak. This would result in demand increasing and the demand curve shifting to the right (Mohr, 2015:67). Supply would decline as more people prefer the steak's price and the curve would shift to the left (Mohr, 2015:75). A new equilibrium price is reached in this case as well. Hence the point of substitutes is one method in which the final shelf price of steak is determined.

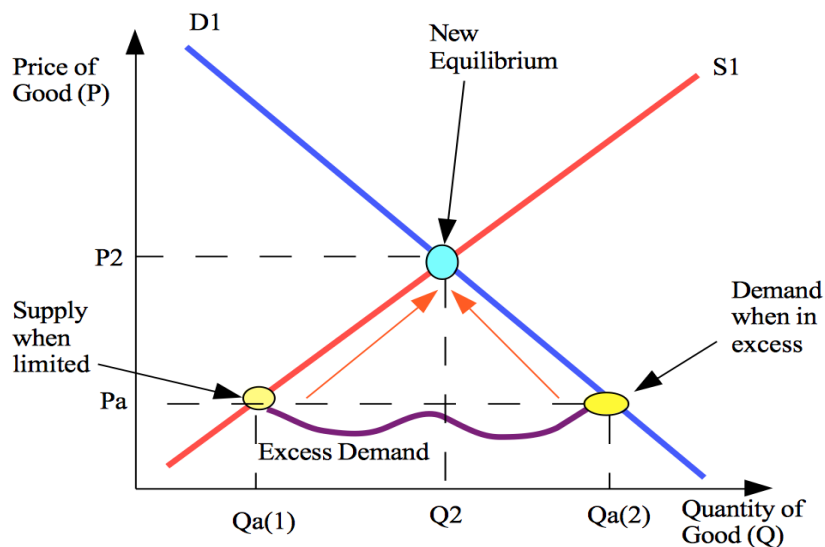
Figure 3: A graph showing a rightward shift in the demand curve and a leftward shift in the supply curve



Another scenario which must be addressed is whether there is excess demand in the market. A possible reason for this excess demand could be an increase in population or target market within Cape Town. For the reader's interest, Phillips (2013) claims that the population of South Africa as a whole is expected to increase to "two billion people by 2050." This possible resultant excess demand affects both demand and supply curves and hence alters the final price of the good. If there are a greater amount of people in Cape Town demanding steak, demand will increase but supply may remain the same and hence not be able cater for the growth in the demand (Mohr, 2015:76). Consumers, wanting to purchase the steak, will then be willing to pay more for it (Mohr, 2015:76). At the same time the producers increase the supply, which was once limited, since they can receive more profit from the increased price they charge and this is shown by a movement up the slope of

the supply curve (Mohr, 2015:76). Yet, as the price increases, the quantity demanded decreases because other consumers do not want to pay the higher price for the steak and this is indicated by a movement down the slope of the demand curve (Mohr, 2015:76). This all occurs simultaneously until a new equilibrium price is eventually reached (Mohr, 2015:76). Therefore, an increase in population may result in excess demand and in the process of relieving the market of this excess demand, a new final price for steak is achieved.

Figure 4: A graph showing the move back to market equilibrium when there has been excess demand in the market



Observing a different view of how the price of a steak is ultimately decided, the actual costs of production cannot be ignored. These are aspects such as land, cattle and feed, transport and even vaccinations that play a role in the supply of the good. Because firms and producers always aim to earn profit, they will have to make up for the costs through the pricing of the good (Mohr, 2015:71). It stands to reason then that the more it costs to maintain the land and cattle and so on, the higher the ultimate price will be. In terms of transportation, areas in which cattle are reared in South Africa such as the Eastern Cape and Kwazulu Natal are distant from Cape Town compared to other agricultural products (Sainfo reporter, 2008). This implies great cost in the transportation of the good and this factor will thus increase the price. This will be shown by the supply curve shifting towards the left because less steak will be produced per unit of the price (Mohr, 2015:71). Costs of production and demand are also affected by climate during periods in the year. This is because, hypothetically, if there is a drought, it will cost more to purchase feed and maintain the land on which cattle is reared. Thus the same theory applies. The point of costs of production and how they affect supply show processes of how the final price of steak is achieved.

Agricultural regions of South Africa

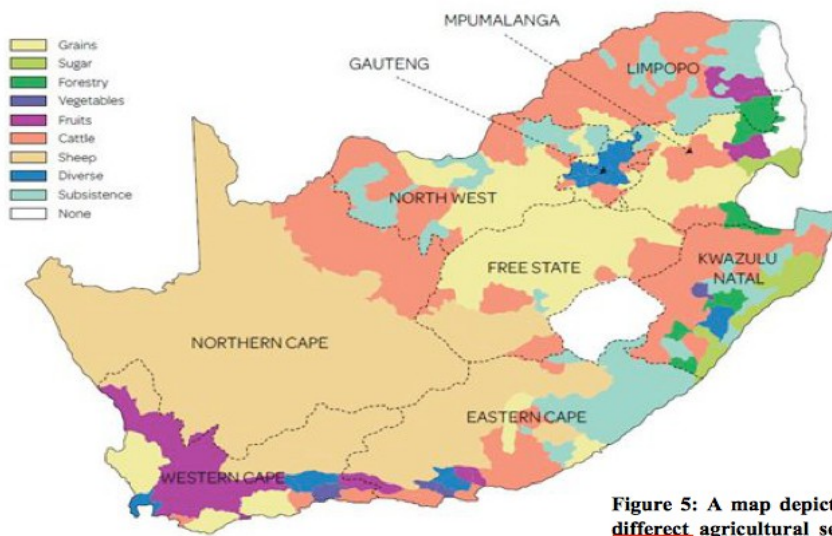
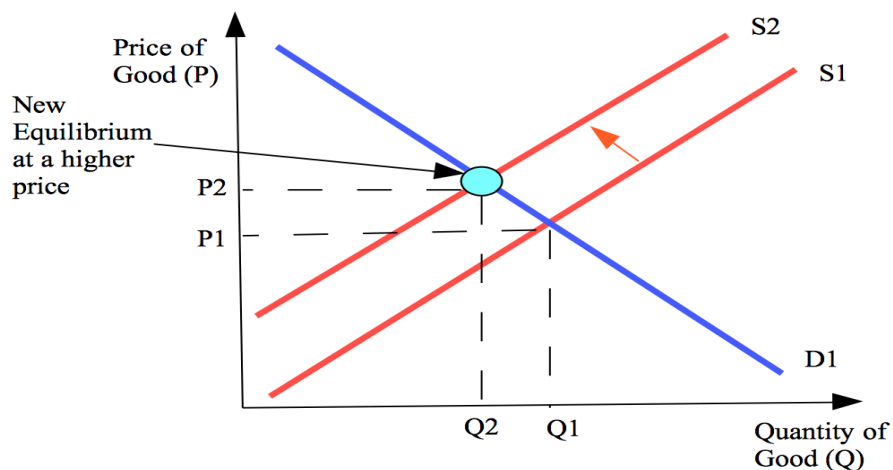


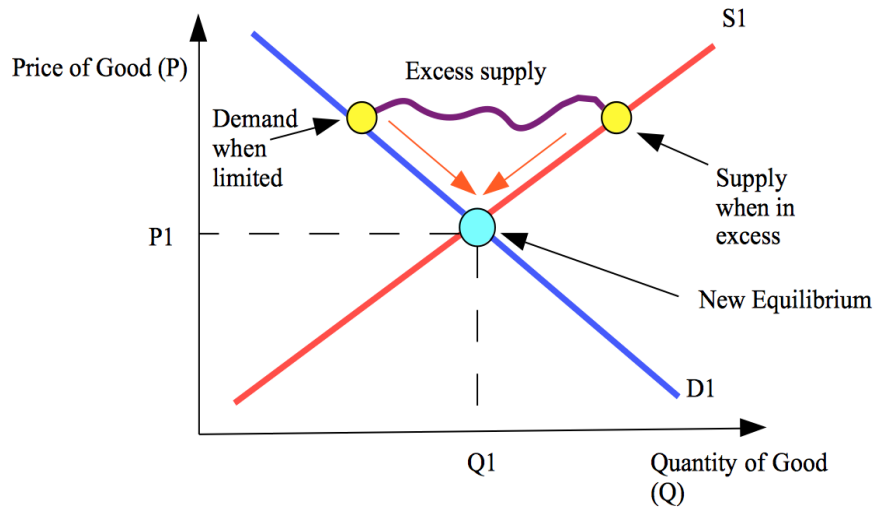
Figure 5: A map depicting the different agricultural sectors for produce in South Africa. *Source:* (Africa Research Institute, 2013)

Figure 6: A graph depicting a leftward shift of the supply curve as a result of increased costs of production.



In a continued analysis of climate, consumers will tend to braai steaks in the hotter seasons in South Africa, thus demand could fluctuate at different times in the year with the demand curve shifting either direction. This will result in a change of prices. In addition, not all steaks may be priced equally as, for example, one may find tenderloin to be more expensive than sirloin (Lopez-Aly, 2011). These two scenarios could result in excess supply in the market for steak. In this case, producers halt production and try to sell off what supply is in excess (Mohr, 2015:76). This is an example of discount pricing. A fall down the slope of the supply curve then happens, lowering the price, while the quantity demanded increases due to the lowered charge (Mohr, 2015:76). A new equilibrium price is reached eventually as both forces act simultaneously (Mohr, 2015:76). Therefore, these points influence the final pricing a steak in a supermarket.

Figure 7: A graph showing the move back to market equilibrium when there has been excess supply in the market



In conclusion, the process by which the price of steak sold in a Cape Town supermarket is determined has numerous branches and possibilities. In observing elements that affect the market mechanism which include substitute goods, excess demand, costs of production, excess supply and climate it is indicated that while all these elements seem to have some influence in the market, they all affect the forces of supply and demand in some manner. These influences thus prove to affect the equilibrium price of the good and depict many processes by which the final price is determined.