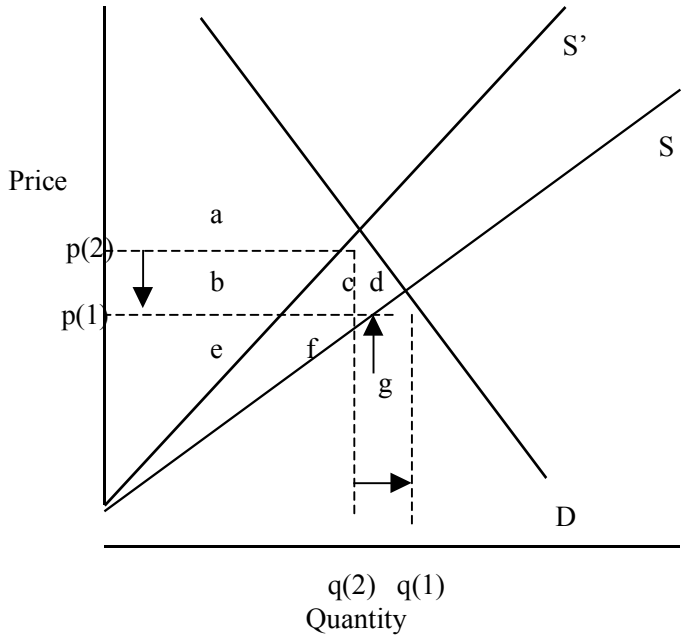
APPENDIX 1. Welfare Equilibrium Model

Illustration of Welfare Equilibrium Model



The current wine grape situation is depicted by the intersection of the supply curve S' and the demand curve D. The supply curve which represents wine grape industry long run costs is assumed to have current infection levels of Eutypa with its associated increased costs. Producer profits are represented by the area b+e and consumer welfare is reflected by the area a. The supply curve S represents a situation with reduced or no Eutypa. If such a situation existed, producer profits would shift to e+f+g and consumer welfare (through reduced prices) would shift to a+b+c+d. Overall, society, producer + consumers would be better off by c+d+f+g (the total gain in increased profits plus reduced prices). In applying this model to the actual situation with respect to Eutypa, an estimate of the difference in the two supply (cost) curves will have to be made.