

Before we consider how and why markets sometimes fail us, we need to again consider how and why they work. The theory suggests that markets - supply/demand/price mechanisms - work with human nature to bring about the most efficient uses of scarce resources. The better we use our scarce resources, the more society can consume - the better our standards of living can be.

Efficiency:

Generating the most possible satisfaction from a given amount of resources. With efficiency (allocative efficiency), society cannot change the way resources are used in any way that would increase the amount of satisfaction obtained by society. SO, if we can improve our resource allocation, then we have NOT achieved efficiency - society could be better off.

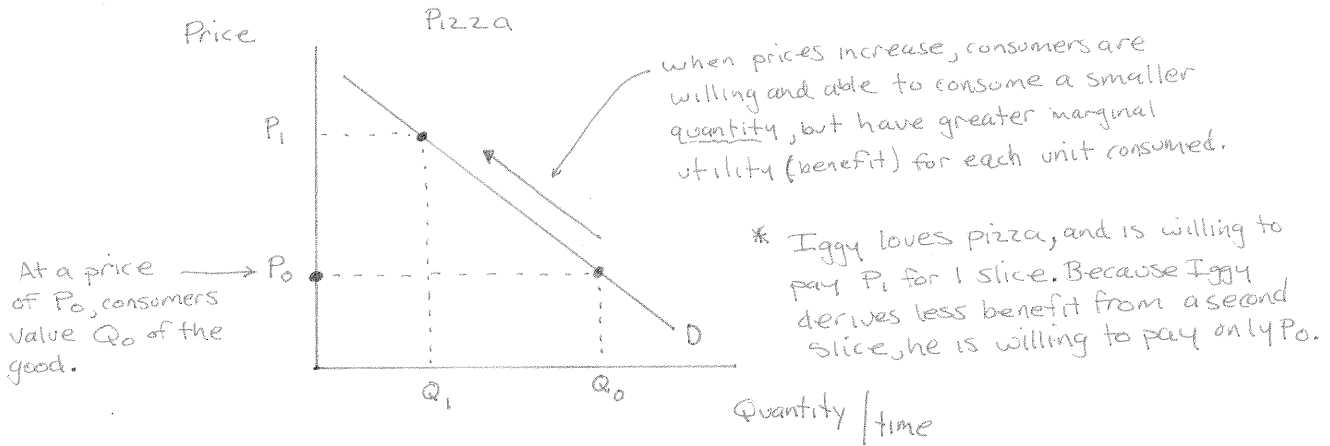
What to produce
 How to produce
 For whom to produce

Limited Resources are being used by private property owners in order to maximize benefit which causes people to produce what/how/for whom - in the most efficient manner.

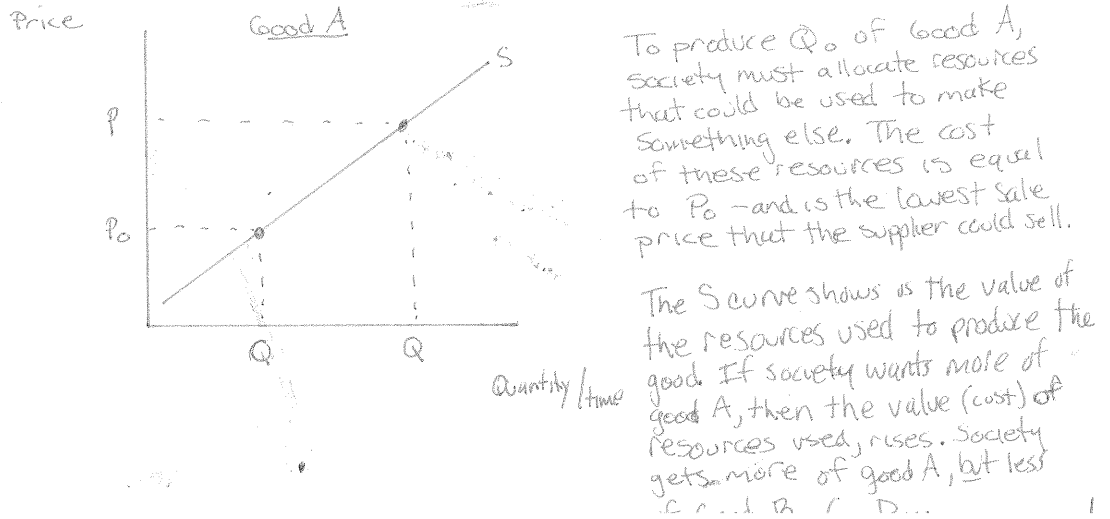
Competitive Markets:

The buying side of a market (demand), reflects the willingness and ability to make a purchase. Demand indicates the satisfaction received by society when a good is consumed. When you buy something, you are 'voting' for it - you are voting for resources to be used to produce THAT good.

*A Demand curve shows us value/benefit



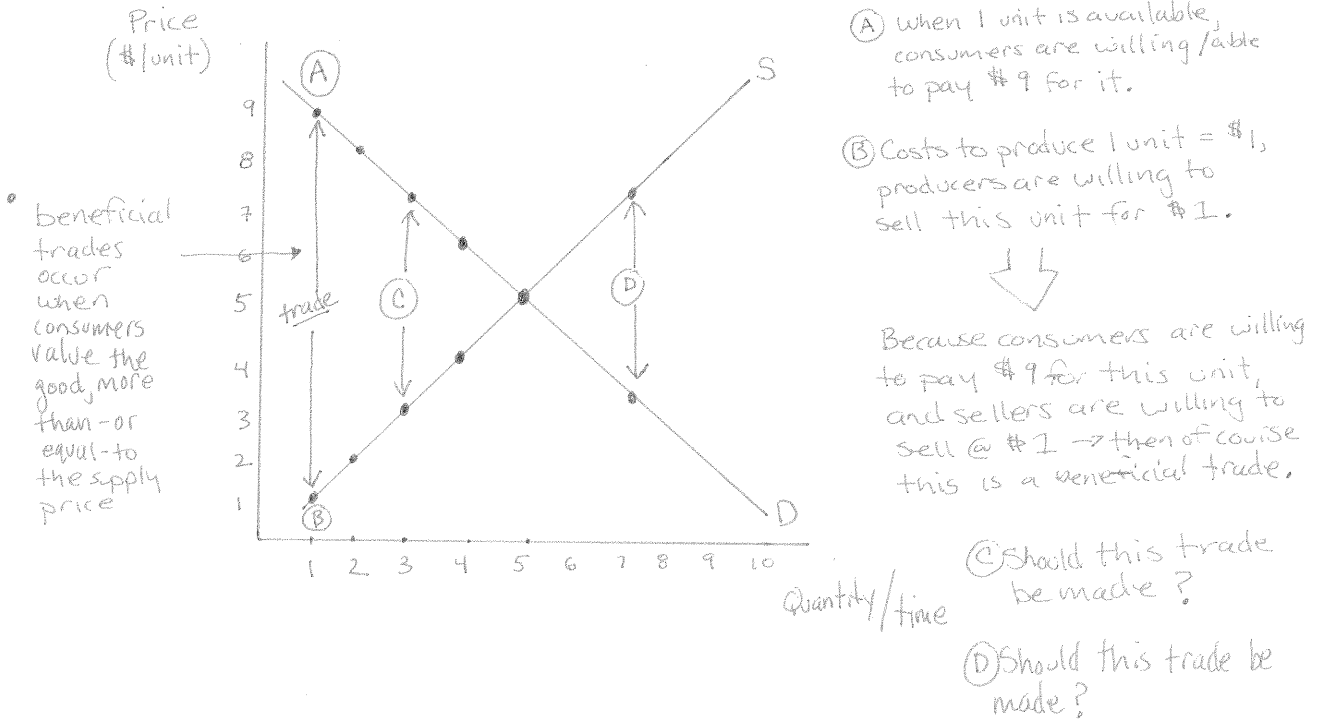
The selling side of a market (supply), reflects the OPPORTUNITY COST of production. In particular, the supply price indicates the value, in terms of satisfaction, that society forgoes from other goods that are not produced. When a supplier produces a quantity of a good, then MUST use resources - these resources CANNOT be used to make ANYTHING else. The OpCost of production is what we must give up. When good A is produced, we must give up some of good b...or c...or d....



How is efficiency achieved in a market economy - review the price mechanism, then consider:

In a market economy, people utilize their private property (private resources) in a way that is most beneficial for them - and also for society. We produce what is valued the most - then we TRADE for other things we want. A market scissors diagram shows us WHICH TRADES SHOULD BE MADE, AND WHICH SHOULD NOT BE MADE. When we put supply and demand together - with prices that to reflect consumer value and producer opportunity costs - we know which trades should take place.

A market diagram illustrates BENEFICIAL TRADES:



When all the beneficial trades have been made, we have achieved allocative efficiency - well, maybe not. For now, we will assume this is true - in section 2.4, Market Failure, we will come to recognize that SOMETIMES, this is not true.

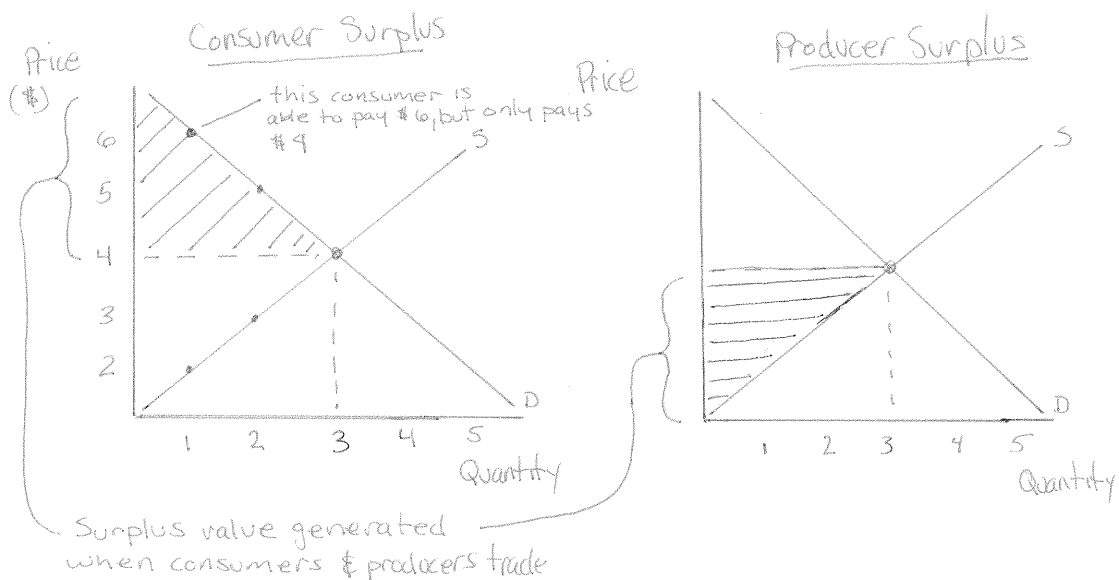
Consumer Surplus and Producer Surplus - Trade DOES make us wealthier

When all trades are made, the amount of satisfaction received is maximized - this is the 'extra gain' to social welfare created by individuals making beneficial trades.

Consumer Surplus:

The satisfaction that consumers obtain from a good beyond the price that they pay. This is the difference between the maximum demand price that buyers are willing to pay, and the price that they actually have to pay.

Imagine you bought lunch in the cafeteria for only \$2, when you were willing/able to pay \$5. You receive a surplus of value - you not only got the lunch, but now you're able to purchase something else with the \$3 you would have happily paid to get the lunch. You not only got a lunch, but also a new pen. This was a very beneficial trade for you, as you valued the good and were willing/able to pay more.

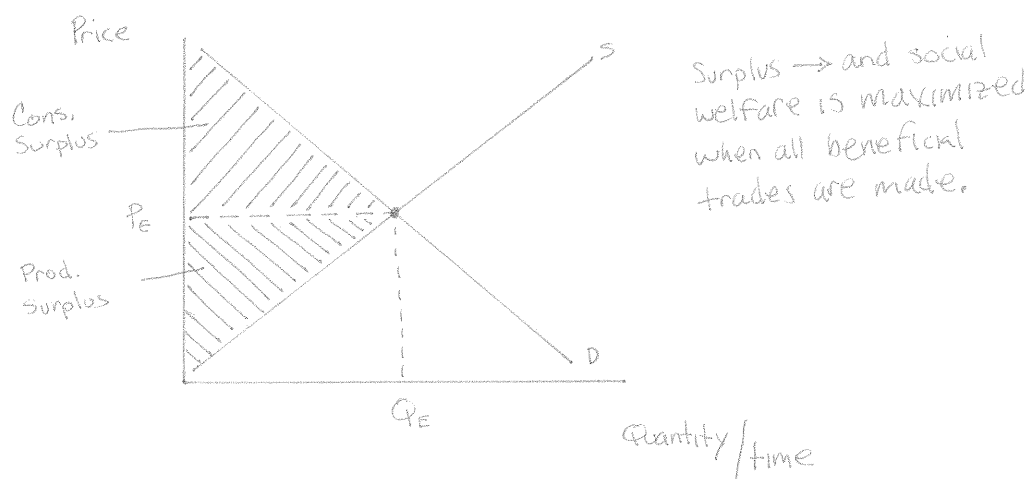


Producer Surplus:

The satisfaction that producers obtain from production, beyond the price cost of production. For the producer, satisfaction is REVENUE. The revenue that producers obtain from a good over and above the price paid to make it. When a producer makes Good A, at a cost of \$3 (opportunity cost), and then is able to sell it at \$5, then \$2 of surplus value have been created. The producer would have traded for \$3, but instead, sells at a higher price.

When Producer and Consumer Surplus are maximized, we have achieved allocative efficiency. Another way to state this is that when all beneficial trades have been made by members of society, then allocative efficiency has been achieved. When all beneficial trades are made - consumers and producers have maximized surplus value. The surplus is the BONUS received by society for making trades. Trade makes us wealthier (SOCIAL WELFARE) - but try telling this to people who are angered by international trade....

Showing Producer/Consumer Surplus on a market diagram



Deadweight Loss:

When society doesn't get to make beneficial trades, we lose surplus, we are poorer than we otherwise could be. Deadweight Loss is a fancy term which means we have lost some of the precious gains that trade gives us. Deadweight loss, once realized, can never be regained - it is a lost opportunity to increase societal welfare.

Deadweight losses are modeled with a S&D diagram. These losses occur anytime market functions are disrupted - price controls, taxes and subsidies are the examples we are familiar with.

Deadweight loss resulting from a tax:

When a tax is imposed on Good A, $Q_d \downarrow$ and prices rises. Some of the consumer/producer surplus is redirected to the government in the form of taxes. Some of the surplus is lost forever - and ever (deadweight loss).

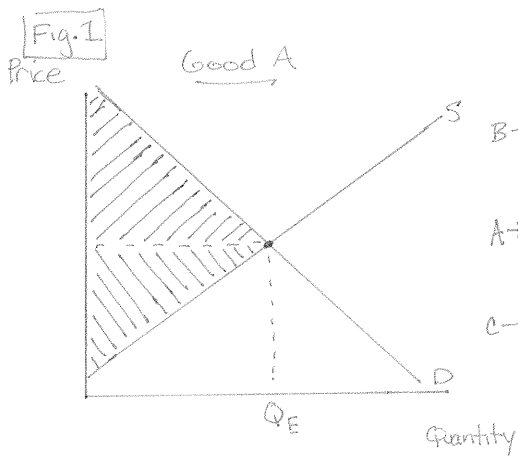


Fig. 1:
All beneficial trades have been made. Cons & Producer surplus are maximized = efficiency.

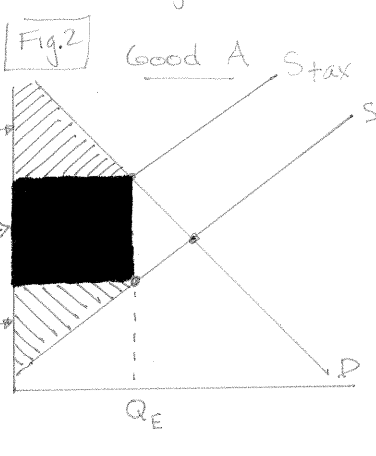


Fig. 2:
A tax is imposed. Price rises, $Q_d \downarrow$ and some surplus is redirected towards Gov't via tax revenue.

A = govt revenue (once surplus)
B = remaining consumer surplus
C = remaining producer surplus

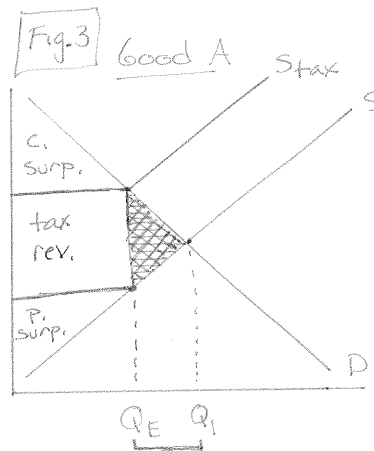


Fig. 3:
Because some trades are not made due to tax (A), some surplus earned by producers and consumers will be lost.
Taxes do cause inefficiency, but the cost of the loss may be smaller than the benefits derived from additional tax revenue — but only if tax revenues are used wisely.

So what have we learned? Supply and Demand show us value - the cost of production for supply, and the benefit of consumption for demand. When we make beneficial trades, we gain additional value - producer/consumer surplus - hence, a net societal welfare gain. When we 'fool around' with markets, we lose some of that net societal gain in the form of deadweight loss. **HOWEVER**, and this is a big however, the taxes, subsidies or price controls may achieve something else that is even more valuable. In section 2.4 we will see that **SOMETIMES**, markets allow trades to occur that actually make us all worse off. When that is the case, we **SHOULD** 'fool' with markets by taxing, or subsidizing.

