Market Failure

Do markets always work best? Most economists emphasize the desirability of free markets, but there are potential problems that may arise. We can spend years discussing this issue, but instead will introduce some of the problems that limit the effectiveness of markets. They can be summarized in terms of four categories:

- **Market control**
  - For a market to be effective, there must be a large number of buyers and sellers such that no individual buyer or seller has control of the market. Most economists would prefer that markets be allowed to work, but in the absence of competition, efforts need to be made to promote more competition, if possible. In some cases, this may involve removing barriers to competition or limiting the anti-competitive practices of existing firms. In most cases, excessive market power occurs when one firm dominates a market, thus resulting in consumers having less choice and paying relatively high prices for a product. In addition, the firm has less incentive to enhance efficiency, innovate, improve quality, etc.
  - Thus, virtually all economists agree that government has a role in promoting competition or limiting the abuse of monopoly power. An example from the past involves the break-up of ATT, which once had a monopoly over long distance. Rather than continue to regulate the prices set by ATT, the government required ATT to make access to its long distance network available to other providers for a nominal fee and then relied primarily on competition to determine prices. As expected, competition drove down prices and enhanced quality. Some states have applied the same principle to utilities such as electricity and natural gas. The company that invested funds in developing the infrastructure charges a fee to other firms which then can make use of the infrastructure. Alternative strategies of dealing with excessive market power include:
    - Government regulation of pricing by monopolies (for example, require government approval prior to price increases). Typically, this involves companies presenting their costs to the regulators who then allow for some mark-up. One problem that occurs is that the company has little incentive to improve efficiency since any reduction in cost would likely lead to a reduction in the price approved by the regulator. Thus, it would be nice to avoid this approach if possible. However, in many cases, it has been used due to the lack of viability of alternative approaches.
    - Freeing up trade so foreign companies provide competition to domestic monopolies. If it's difficult for domestic firms to develop to challenge a domestic monopoly, global competition can provide the pressure to ensure efficiency and competitive pricing.
    - Many times, monopolies are temporary and are eliminated as technology develops. A current example is the demise of the "Wintel" monopoly (Microsoft Windows + Intel chips). As the mobile and tablet industries begin to dominate, the Wintel monopoly is losing its clout and pricing power.

- **Imperfect information**
  - For a market to work, producers and consumers need to have full information about the product available prior to completion of the transaction. If a consumer had access to the available information about a product prior to the purchase, then they can make a reasonable decision. It would be hard to complain that you're being ripped off when you voluntarily engage in a
transaction in which both sides had complete information about the product (OK, easy to complain, but hard to justify!). However, if some important information is withheld from the consumer, then the transaction may not be appropriate.

- Most companies will not want to trick consumers into buying a product since they want repeat customers and also want to maintain their reputation so as to attract new customers. However, in some cases, firms may be short-sighted or worse so most economists favor a role for government in ensuring transparent information be available prior to purchases. Examples include rating the quality of meat, listing the ingredients in food, etc. Examples of the private sector trying to ensure complete information include E-bay and Amazon. In both cases, customers as well as sellers are able to rate one another, helping future buyers and sellers to evaluate one another prior to engaging in transactions. By doing this, both sides have more complete information about the transaction in advance.

- **Externalities**
  - Companies normally adjust the amount that they produce based on the cost of production in that higher costs tend to discourage production. Externalities are consequences (such as costs) of production not directly incurred by the producer. For example, a company produces a good that pollutes the air or water. Pollution is a cost of production felt by society, but not by the firm. Therefore, the firm doesn't take the cost of pollution into account when making production decisions and thus more of the good is produced than the market would prefer if all production costs were felt by the firm.
  
  - Virtually all economists favor some approach to "internalizing" the cost, but may differ as to how to do it. How can the costs of pollution be internalized? Alternatives include imposing a carbon tax that reflects how much cost a certain amount of carbon results due to increased pollution; restrictions as to how much pollution a company can emit, a program of cap and trade (limiting the amount of overall pollution and allowing firms to trade pollution permits), etc.
  
  - Since externalities represent a true cost to production not incurred by the firm, production (supply) is too high, resulting in overproduction of the product and the price being too low. Internalizing the cost will reduce supply to a more efficient level that more accurately reflects the true cost of production. Unfortunately, a difficulty occurs when its time to determine the external cost (cost of pollution). Everyone recognizes the harmful effects of pollution, but it's difficult to put a dollar amount on the cost.

- **Public goods**
  - Public goods are products that involve benefits that can't be restricted to the one who is paying. Thus society receives substantial benefit from the good, beyond that received by the individual. An examples is national defense. Everyone benefits from it, but it is hard to restrict defense to one person (an army that protects one person is likely to protect many others). As a result, virtually everyone supports a government role in establishing a military. In many cases, the good or service won't be produced since the cost exceeds the price an individual buyer would be willing to pay. However, if everyone who benefits from the public good helps pay for it, the good is produced and everyone benefits.
  
  - Some other examples of public goods are highways and education. Clearly, many people can use a highway at the same time and a highway is unlikely to be built just for one consumer. Regarding education, society benefits from individuals being more educated in many ways.
including a larger pool of productive workers (easier for firms to find qualified workers, increased innovation, etc.), fewer people needing government assistance (less government spending on welfare and unemployment benefits; can spend more on other programs or reduce taxes), and more customers as well as more tax revenue as people earn more income.

Almost everyone supports a government role in encouraging the production of highways and education, however, people may disagree as to how the government fulfills that role. For example, traditionally, the government has built highways. Recently, governments around the world have engaged in public-private partnerships to build highways. So government plays a role, but it may be in combination with the private sector. Similarly, virtually everyone either supports public education or government assistance for individuals to attend private schools. It's hard to find someone who opposes both public schools and also tuition tax credits for K-12 education. Thus, most support a role for government, but may differ as to how government promotes a public good.

**Conclusions**

Though most economists extol the virtues of markets, there are certain circumstances in which markets aren't efficient in ensuring the best production and allocation of goods and services. Certain government interventions, depending on how they are implemented, can be considered as improving market efficiency. However, implementation of these policies can be quite complex. Though there is justification for a role for government in improving market efficiency, there is debate as to how the government should intervene. In the ideal world, government intervention would be just enough to correct the inefficiencies at a minimal cost. This is quite difficult to implement in the real world since the size of the problem is hard to measure (for example, the cost of pollution). Many economists support cost-benefit analysis when considering new regulations or interventions. Others oppose this on the grounds that some of the costs and benefits are hard to measure and may be subjective.

**STOP AND THINK:** How does market failure affect the efficiency of markets? In other words, is the "right" amount of a good produced in the existence of market failure? If not, why not?