Community Economic Development

The Shaffer Star: Markets, or Supply and Demand

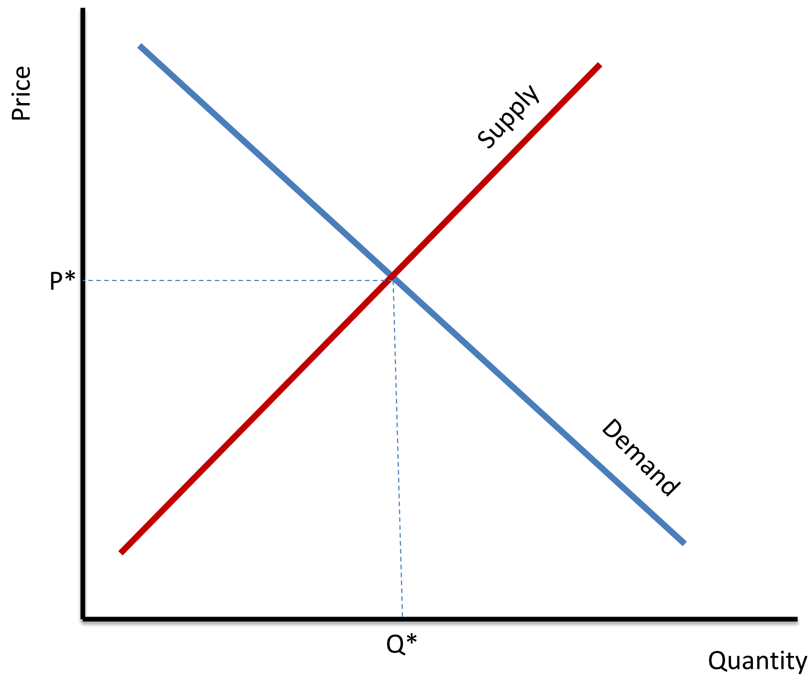
When using a systems approach to reflect on community economic development it is useful to have a paradigm to organize one's thinking. Ron Shaffer offered a six point paradigm which we call the "Shaffer Star": decision-making, resources, **markets**, society, rules, and space. Shaffer maintained that nearly every issue a community may face falls into one of these components or elements of the community.

The **markets** node refers to the economic forces that are at play in a capitalist economy. In the simplest sense, we are talking about the forces and logic behind supply and demand. Economists, as do most social scientists, tend to think in terms of theoretical constructs that can be easily represented or stated in formal models. For economists, the "bread and butter" framework of the economy is embodied in demand and supply. If the community economic development practitioner or Extension Educator has a working understanding of the basic demand and supply framework they have a working understanding of how a capitalist economy functions.

The most fundamental or basic question that economists asked is how limited resources are allocated to maximize well-being. Under certain assumptions, such as perfectly competitive markets (firms and consumers are price takers, or they cannot influence prices), full information, and perfectly rational behavior, people and firms react to prices: prices are the one mechanism that operationalizes the economy. Consumers and firms make decisions to buy (demand) or produce and sell (supply) based on prices that are determined by the markets.

If the price of an additional unit of a good or services (what economists call "marginal cost") is greater than the benefits from consuming that additional unit of a good or service (what economists call "marginal benefit"), or the cost is greater than benefit, the consumer or business will not make the purchase. If the price is less than the gain in benefits then the purchase will be made. The "equilibrium point" is where the price (marginal costs) is equal to the benefits received (marginal benefits). The key here is price; prices are the "market clearing mechanism", which is best described by supply and demand analysis.

The textbook presentation of the supply and demand model is mapped in what is call "price-quantity space" or price is along the vertical axis and quantity is along the horizontal axis. Notice that at higher prices people are willing to buy less and as price goes down people are willing to buy more, or the demand curve is downward sloping. The simplest technical reason for demand curves sloping downward centers on consumer income: for a given level of income as prices go up consumers simply cannot afford to buy as much, or prices go down they can afford to buy more. The supply curve is upward sloping in that at low prices firms are willing and able to produce and sell less, but as prices go up firms are willing and able to sell more. In strict technical sense the supply curve is a direct representation of the cost curve of producing the good or service.



At price P* consumers are willing to buy and firms are willing to sell Q* and the market is in equilibrium. At a price above P* consumers are willing to buy less than Q* but firms are willing to sell more than Q*, here demand is less than supply. At the same time at a price below P* consumers are willing to buy more and firms are willing to produce less than Q* or demand is greater than supply.

In a perfectly competitive capital economy in order for markets to "work" and result in an efficient allocation of resources, Adam Smith's Invisible Hand of market forces, it is imperative that both consumers and firms are "price takers" or they react to prices as determined by supply and demand. If consumers or more likely firms have some influence on prices, such as a monopoly or firm that can exert monopoly powers, then they are not price takers, and capitalist markets results in something less than efficient allocation of resources. Unless all economic agents are price takers, Adam Smith's Invisible Hand drops the ball and we have some form of market failure.

It is important to realize that supply and demand is constantly shifting creating new opportunities for communities as well as closing off previous markets. There are several reasons why both supply and demand is constantly shifting. Underlying the supply curve or function is the cost structure of firms. Recall that the firm is making the decision to produce an addition unit of the good or service based on how much it can gain in revenues (marginal revenue or price) compared to how much it costs to produce the good or service (marginal cost). If the price is greater than costs, the firm will produce or supply the product whereas if price is less than the costs, the firm will not produce or supply the product. The key here is costs. Costs in turn reflect the prices of inputs (for example, wages) and the technology used by the firm. If input prices change, the cost structure of the firm changes and the supply curve shifts. More important, if a new technology is introduced that lowers costs again the supply curve shifts. For communities, firms that are able to innovate or be early adopters of new technologies are able to profit till those new innovations have been widely adopted. In the short term, before markets can fully adjust, innovators and early adopters can earn more than normal profits. We can see this via our understanding of basic supply and demand.

Author: Steven Deller, Department of Agricultural and Applied Economics, University of Wisconsin—Madison/Extension