

## ANNEX A. BASIC MARKET CONCEPTS AND DEFINITIONS

HEA Practitioners not already familiar with basic economic concepts will find the following section helpful as a primer in basic definitions and concepts which underpin market analysis.

### What is a market?

The term “market” is used here and in HEA to mean a place where exchange occurs. The nature of markets varies widely: trade may occur through local arrangements between surplus and deficit households, through itinerant traders, through village shops, supermarkets or through weekly and permanent market centres. Labour markets may sometimes operate throughout an area – for example, a commercial agricultural district – rather than in a specific named place. A hierarchy of markets is often found, with larger markets in district centres, perhaps offering a wider range of commodities, and smaller markets at a more local level.

### How households use markets

Households resort to markets for a variety of reasons:

- to increase household income through specialised production and “adding value”. A household may choose to grow a crop that is most easily and reliably produced in its area, and to exchange all or part of it for other crops produced in other areas. These may be food crops – in central Afghanistan, for example, high-quality potatoes are grown and exchanged for wheat grown in other areas, with the producer making a profit (in terms of dietary energy) on the exchange – or they may be cotton, coffee and a wide range of other cash crops, or products such as handicrafts and firewood; pastoralists depend on markets to supply cereals which they receive in exchange for livestock and livestock products.
- to obtain paid work on larger land holdings, cash-crop plantations, in urban areas or in other countries.
- to obtain manufactured goods (such as soap and cloth) or to pay for basic services (such as education, health care or water provision)
- to invest income surplus to consumption requirements (for instance, they may purchase assets, or save surplus income in a financial institution)

In practice, the way households use markets often depends upon the ease of physical access. Distances to the formal markets may often be long and the travelling time substantial. Some pastoral people may only be within reasonable striking distance of a market during a limited number of periods during the year. Some areas may be cut off from markets during the rainy season and for others access to markets may be insecure – with relatively high risk of goods being stolen. It may also be difficult for people to transport heavy or bulky goods over long distances and transport charges may make it uneconomic to use far away markets.

### Supply and demand

Supply and demand are key elements of any market assessment as the level of supply and demand of a commodity represent the most immediate influence on prices of items people sell and buy. Supply typically increases as price increases: if a producer can earn more money from each item, they usually want to sell

It is important to remember that supply and demand will be different for each type of commodity. Different considerations may also apply to different types of one commodity, e.g. maize, sorghum, wheat. Some of these may be produced in the area, others traded from a distance.

more. Demand typically decreases with price: if meat prices rise, people usually buy less meat which they substitute for something cheaper.

Patterns of supply and demand vary. For example:

- The supply of a commodity at a market may be entirely from local producers (e.g. perishable vegetables) or from a much wider geographical area, including international imports (e.g. rice, electronic goods).
- Demand may also be entirely local (e.g. for wild fruits), or may be from traders who are supplying a distant urban or export market (e.g. minerals, cotton).

In a given area, the normal supply of (for example) cereals to a market may be from local producers and the demand may be from local people who wish to acquire grain. Under these conditions, any small change in the supply to the market, perhaps because of a poor local crop, can lead to a sharp increase in cereal prices. The number of people wishing to buy cereals may remain the same, or even increase, and prices may rise to high levels as buyers compete to purchase the limited supplies by offering more money (and suppliers charge more money!). However, in a market connected to larger cereal-producing areas (for example when local and regional markets are

integrated), a similar failure of local supply might have no effect on prices, or at most cause only a small increase, as any local shortfall would be made up by supplies from other areas.

Levels of supply and demand will also vary with price: in general, a high price for a commodity will tend to increase supply and reduce demand, and a low price will have the reverse effect. Demand for a commodity may move between markets: if prices are high at one market, people may be able to travel to take advantage of lower prices for the same good elsewhere.

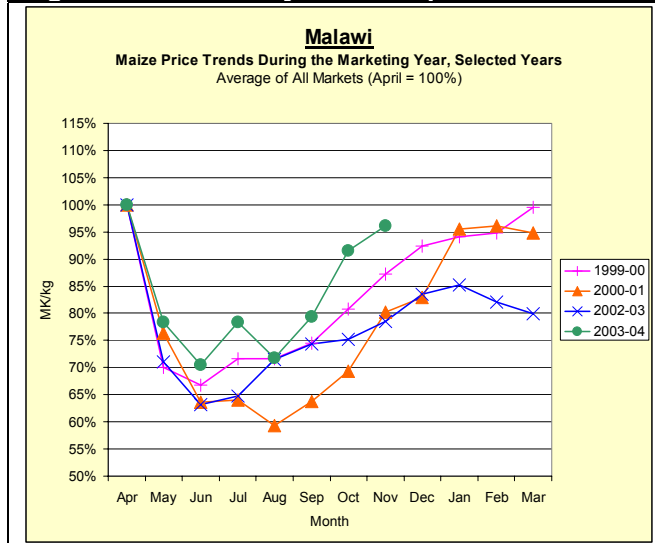
When the quantity of a good supplied is the same as the quantity demanded for that good the market is said to have reached equilibrium.

### Elasticity

Elasticity is a measure of how responsive one variable is (such as price) to changes in another variable (such as demand). For example when demand increases, prices tend to rise – the rate at which demand will rise is a measure of elasticity. Elasticity can be derived from observing market behaviour (collecting data from traders about volumes traded for a given period, and prices for that period), or it can be predicted using an econometric model.

In practice you can have elasticities of anything with respect to anything else. For HEA studies, as we rarely have access to information on volumes traded we cannot usually calculate elasticity precisely. But the concept is important for us when predicting how people will behave. The most important elasticities for HEA studies are price elasticities of demand, income elasticity of demand, price elasticity of supply, and cross-price elasticity of demand.

**Figure 1. Seasonality of cereal prices in Malawi**



These measure:

<b>Elasticity</b>	<b>What it tells us about...</b>
<b>Price elasticity of demand tells us about...</b>	<p>the responsiveness of demand to change in price. This is affected by:</p> <ul style="list-style-type: none"> <li>• whether close substitutes are available (e.g. if sorghum is acceptable, and available, households are likely to purchase it in larger quantities when maize prices increase).</li> <li>• Whether the good is a necessity or a luxury: the price elasticity of demand is low for necessities (demand will change proportionately less for a given change in price, e.g. for an essential medicine) and high for luxuries (demand is more responsive to change in price).</li> <li>• Time: the price elasticity of demand tends to increase over time as consumers adjust to a price change.</li> </ul>
<b>Income elasticity of demand tells us about...</b>	<p>The responsiveness of demand to change in income. This is important to consider when analyzing what households might economize on during a shock (e.g. they will purchase less sugar), and what they might spend money on when their income goes up (agricultural inputs perhaps).</p>
<b>Price elasticity of supply tells us about...</b>	<p>The responsiveness of the quantity supplied to change in price. A good whose supply is price elastic is usually something easy and quick to produce. For instance, when the price for cakes is 20 for \$1 there are few cake producers in a village in Aceh, Indonesia. In the run up to the festival of Eid prices start to increase and more women are attracted to the business. However, a good whose supply is price inelastic might be something like timber, as even if the price rises today, it takes years to plant and grow more trees.</p>
<b>Cross-price elasticity of demand tells us about...</b>	<p>The responsiveness of the quantity demanded of one good to the change in the price of another. If the two goods are substitutes (e.g. maize and sorghum) this elasticity is positive as a rise in the price of one leads to a rise in demand for the other. If they are complementary (e.g. livestock drugs and livestock), the elasticity is negative, as a rise in the price of one leads to a drop in demand for the other.</p>

While the jargon around elasticity can be somewhat confusing, it is important to realise that the fundamental principles which lie behind elasticity are straightforward and common-sense if we think of real examples:

- If an item is *essential* (e.g. food, water, emergency health care) then people will still try to buy it (i.e. there will be minimal reduction in demand) even when prices reach high levels. Interventions are necessary in such cases to protect households from having to resort to unsustainable or detrimental coping strategies to generate the cash to procure the needed items.
- For non-essential or “luxury” items, demand will fall disproportionately more with relatively small increases in price.

### Seasonal Fluctuations in Price

The prices of many commodities in poor economies fluctuate between seasons and between years. The seasonal price fluctuations of locally produced commodities are, however, usually broadly predictable. For example, crop prices in producer areas are generally lowest immediately after the harvest (see **Figure 1**). If farmers have to sell produce immediately after a harvest in order to obtain cash to meet their consumption needs, they will obtain a much lower return than if they sell at a later period. Richer households with savings and reserves may be able to wait and sell their products at a later time to get a higher price. Poorer households, which depend on exchange of their labour, livestock or cash crops for survival, may have to sell even if prices are against them.

Food and other goods produced outside the area and imported for sale will tend to show the seasonal price pattern of the producer area.

### **Key determinants of market prices and market functioning**

In the sorts of contexts in which HEA assessments are carried out, prices for goods and services are mainly determined by:

- The balance between supply and demand at the market. A larger supply of a commodity to a market relative to demand will tend to reduce selling prices, and vice versa.
- The extent of competition between traders. The greater the degree of competition in a market, the harder it is for any one actor to influence either the price or the quantity on the market, and thus the greater the influence on price of the “natural” factors of supply and demand.
- Market integration: market integration refers to how changes in prices in one market get transmitted to neighbouring markets. For example, if there is a drought in one area and grain prices increase, this should lead suppliers from other unaffected areas to try to supply grain to the affected area so that they can benefit from the higher price, which in turn leads the price to begin to fall. This should occur in an integrated market as long as the price difference is greater than the costs of transporting and selling the item in a different market. Market integration is affected by the availability of information between markets, the existence of marketing networks, physical obstacles to trade such as poor infrastructure or conflict, and market regulation by government. Governments may intervene to stabilise prices for consumers and/or producers (for instance, ADMARK, the parastatal grain marketing agency in Malawi, buys up grain from farmers when prices are abnormally low, and releases grain on the market when consumer prices are excessively high).

Market integration is important for HEA studies because it explains current marketing opportunities and constraints, and it can help us understand future opportunities and constraints. Understanding market integration is important particularly in needs assessments as interventions need to avoid over-estimating or under-estimating the ability of markets to respond. See [Guide 7](#) in Chapter 3, Annex C for more details.

### **Competitiveness of markets**

The competitiveness of a market refers to how many buyers and sellers there are for a good, and how big their market share is. The competitiveness of a market has a significant influence on how prices and supplies may react to a shock.

Perfect competition refers to a situation where no single supplier or single producer can influence the price of a good. This requires that there are many producers or suppliers of a

good or service and that none of them has a big enough market share by themselves to influence the price. It also requires that consumers see the products of producers to be very similar. For example, in a village where many people are producing the same crop and selling directly to consumers, the market for that crop is likely to be perfectly competitive.

However, perfect competition rarely exists in the real world, and imperfect markets of some form are the norm. When there is imperfect competition, suppliers can be in a position to manipulate either the prices for items or the quantities supplied, unless the market is regulated somehow. Imperfect markets include monopolistic and oligopolistic market structures (see **Box 1**).

### **Box 1. Definitions of imperfect markets**

**Monopoly:** A producer is a monopolist if it is the sole supplier of a good that has no close substitutes. Monopolistic firms are able to raise prices above the competitive level by reducing output – due to their possession of market power. Monopolists stay in business because of the barriers to entry for other would-be competitors. Barriers can include control of a scarce resource, economies of scale, technological superiority, government-created barriers or even intimidation.

**Oligopoly:** this is an industry with only a small number of competitors. Oligopolistic firms compete but they have some market power: it is a situation of imperfect competition. Oligopolies are more common than monopolies. The source of oligopolies is the existence of economies of scale which allows large firms to expand proportionately greater than small firms.

**Example:** In Lesotho two companies have until recently dominated the maize milling market – tending towards an oligopoly, and disadvantaging farmers: *“Although the food market in the country is liberalised, the grain-milling sector is largely dominated by a few big millers. The Lesotho Flour Mills that is co-owned by Seaboard International (51%) and the Government of Lesotho (49%), controls a 40% market share of maize meal. However, the number of local milling companies is growing...”* ( Mukeere & Dradri: 2005, p. 21)

### **Inflation**

Inflation refers to persistent increases in the general level of prices, i.e. where price rises are sustained. The consumer price index is one common measure of inflation and changes in the cost of living, and is an index of the prices of a basket of key goods and services purchased by consumers. Inflation can be seen as a devaluing of the worth of money.

Inflation is caused by:

- Excess demand for a product or service (demand-pull inflation)
- High costs (cost-push inflation)
- Excessive increases in the money supply (monetarism).

These causes often amount to the same thing. The mechanism by which the increase in money supply causes inflation is by creating excess demand, making monetarism compatible with the demand-pull argument. The demand-pull and cost-push theories are also linked – an excess of demand causes producers to raise their prices – but this leads to workers to demand higher wages to maintain their living standard; this causes higher demand and the process begins again. Similarly, if under the cost-push argument the cost increases which stimulate price rises are wage costs firms can still only raise their prices if the demand is there for their goods to sell (otherwise they will go bankrupt). The cure for inflation usually includes austerity measures.