

## 2 The elementary market

The aim of economic theory, in the broadest definition of the term, is to analyse the interactions between agents devoted to production, exchange and consumption of goods and services in the widest sense. This analysis must begin by establishing the general principles that govern individual decisions, and this is exactly what the previous chapter was studying. However, this knowledge alone is clearly not enough, because economic interactions are also dependent on the institutional contexts within which they take place. Economic schemes can take one of several different forms, according to the nature of the game rules imposed on the agents. These institutional contexts may vary considerably, as we shall have the opportunity to study throughout this book, but one of them plays a central role in economic analysis, the market, considered as the real or virtual place in which sellers and buyers meet to exchange goods or services. The market, either in its competitive form or in other forms, is the principal subject of microeconomics handbooks, and it is to the market, in its simplest form, that this chapter is devoted.

### 2.1 Background and problems

The pure perfect competition market is the institution which satisfies most exactly the requirements of the individualist approach. Sellers and buyers are anonymous and equal before the law, even though they may possess different economic weights due to the inequality of initial endowments. Each agent has access to the same information, namely the exogenous quality of the goods and the publicly announced price. The available possibilities of exchange are taken up by the private agents when they are seen to represent a means of increasing their utility. In such a context, the pursuit by each individual of their personal interest results in voluntary transactions. These transactions are only mutually compatible when the total of individual demands is equal to the total of individual supplies. The market is then said to be in equilibrium. The key theoretical question posed by these markets is that of their self-regulation: are the forces of competition powerful enough to result in the market necessarily attaining its equilib-

rium? This belief is shared by many economists. It lies at the heart of standard microeconomic theory.

If we consider that the essential question facing individualist societies can be expressed as follows: “how can a multitude of private decisions, taken independently by each agent on the sole basis of his individual preferences and beliefs, be made into a coherent whole?”, then the pure perfect competition market provides an exemplary answer. Firstly, the market respects the autonomy of agents in the determination of their objectives and preferences. Coordination in trading is always *a posteriori*: it involves no a priori restriction on preferences, no prior subjection that may limit the freedom of the traders by obliging them *ex ante* to respect certain collective objectives that are deemed to be legitimate or desirable. Each individual pursues what he considers to be his own personal interest. Secondly, this scrupulous respect of individual autonomy, espoused by liberal economists as the cornerstone of ethical values in trading relations, does not result in social anarchy. Competition, through the operation of flexible prices, produces a structure of mutually advantageous transactions such that individual intentions end up converging. In this perspective, it is the mechanism of price flexibility which ensures the global coherence of individual actions, what is commonly referred to as the “invisible hand”.

The characterisation of a situation of pure and perfect competition is based on a certain number of classic conditions: exogeneity of prices for the agents; homogeneous and divisible goods; perfect information; transactions without constraint. Thus, E. Malinvaud (1969) wrote: “perfect competition exists when the price of each good is the same for every agent and every transaction, when each agent considers this price to be independent of his own decisions and when he can buy or sell whatever quantity of the good he desires at this price”. It is often assumed that these assumptions require the existence of a large number of atomised agents, each of a sufficiently low weight as to have negligible influence on prices. The formalisation of the pure perfect competition market that is most widely accepted by economists is that provided by the Walrasian market. We shall now briefly describe its main principles.

### 2.1.1 The Walrasian market

To simplify, we shall consider an exchange economy. This is an economy without production, constituted solely of  $n$  consumers. Let us assume that this economy contains  $m$  homogeneous and perfectly divisible goods, denoted  $k \in \{1, 2, \dots, m\}$ . Each consumer  $i$  is endowed with an initial vector of resources, denoted  $w_i = (w_i^1, \dots, w_i^k, \dots, w_i^m)$ . In such an economy, the func-