

**SA422: HOUSING ECONOMICS AND FINANCE 2008/2009**  
**Handout 1: Some Basic Economic Principles and their Application to Housing**

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**N.B. LECTURE OVERHEADS ARE PROVIDED ON THE NET AT**

**<http://econ.lse.ac.uk/courses/sa422/>**

**HANDOUTS PROVIDE BACKGROUND AND ADDITIONAL MATERIAL AND SHOULD BE READ IN CONJUNCTION WITH OVERHEADS, YOUR OWN LECTURE NOTES AND OTHER READING.**

**Objectives**

This overview aims to clarify how markets work to allocate resources, the problems that arise when markets operate freely, the special attributes of housing which makes it particularly problematic and thus why economics is relevant to those working in housing.

**Why Housing Economics?**

1. The reason for introducing economic analysis in the context of housing is that the resources available to individuals and society are limited while our wants are insatiable. It is therefore desirable to allocate available resources in the way that best meets objectives. Economics is one way of analysing this process and the decisions necessary to achieve these objectives.
2. Scarcity means that if one makes a particular choice these resources cannot be used for another purpose. The opportunity cost of a particular decision is defined as the value of the next best alternative - e.g. if use resources to build new houses, the same resources cannot be used for rehabilitation. Only if the value foregone, i.e. the net value of rehabilitation, is less should new homes be built. The same applies for an individual making choices between housing possibilities, between housing and other goods/investments. Similarly government must choose between priorities. What economics attempts to do is make transparent these choices, and clarify which options are appropriate. Can sometimes measure this opportunity cost through prices.
3. Most economic models are optimising models in that they examine how to achieve the best possible outcome - e.g. models examining the conditions necessary to maximise welfare, or to minimise cost. The concept of welfare may appear somewhat nebulous. In an economy based on individual decisions welfare is defined as the individual's own valuation of the net benefits received. These will then usually be implicitly valued in money terms by that individual's decisions about how to allocate available resources. Adding up these individual welfare valuations into family, group or social welfare objectives causes many theoretic, methodological and practical difficulties. For simplicity we assume that each individual can value their own utility and that either one person cannot evaluate another's utility and that only the individual's own valuation is relevant or that we (as a group or society) can define group welfare - often called a social welfare function.
4. There are two main objectives with respect to resource allocation:-

to use the resources available as efficiently as possible;  
to use those resources as equitably as possible.

5. Definitions of efficiency:

- (i) productive efficiency i.e. that all goods and services are produced at least possible unit cost which depends on technology which determines feasible ways of production and relative prices of inputs. Thus if capital is relatively cheap in comparison to land would build houses to higher density. If land is freely available but capital scarce choose a technology which uses more land and less capital; similarly with labour skills. The objective is always to obtain as much as possible for the least opportunity costs.
- (ii) allocative efficiency i.e. that the allocation of factors to the production of goods and services, the relative quantities of these goods and services and the allocation of the goods and services available to consumers result in the highest possible level of welfare (satisfaction) achievable given the limited resources available, existing technology and preferences.

Within a market system the objective is normally defined as Pareto optimality: a situation where, given the distribution income, it is not possible to make someone better off without making someone else worse off.

6. Definition of equity:

Figure 1 shows a formal way of thinking about two different approaches - minimum standards and equality.

More generally:-

- (i) minimum standards - ensuring that every member of society obtains certain socially defined standards e.g. that all families should be able to obtain separate accommodation at a price within their means with specific amenities and bedroom standards. Such standards change over time and reflect growing aspirations.
- (ii) similar opportunities at similar cost for equivalent households (horizontal equity)
- (iii) redistribution of income towards lower income households (vertical equity) - reallocation of resources or goods and services between groups (through changes in wealth - the ownership of resources, income, changes in prices and redistribution via direct provision. Positive redistributive policies versus unintended distributional outcomes.

Economic Organisation

7. Methods of economic organisation vary. At one extreme there is the pure market system where individuals own all resources and allocate their resources in response to prices. Prices therefore act as information, as incentives and as rationing devices within a wholly decentralised decision system. At the other extreme, there are centralised administrative systems where the allocation is

done by a central agency on the basis of information and an overall social welfare function. All actual economies are more or less mixed with varying levels of government intervention to reallocate income; to modify prices; to tax and subsidise particular goods, services and factors; and, in some cases, to substitute public provision and allocation for private incentives.

8. In a well operating market system prices act to allocate resources to their highest value. Prices act to provide:
  - information to consumers, producers and owners of factors of production (resources);
  - an incentive for these actors to increase or reduce their requirements in response to scarcity and their relative value;
  - a rationing device so that the demand for limited resources is brought into line with available supply.
9. In this well-operating system, individuals own resources which they sell to firms to obtain the maximum income possible (see figure 2.1). They then allocate that income so as to maximise their own utility given income, by ensuring that the utility received from the last £ spent on any good is the same as for any other. Firms maximise profit and therefore minimise costs. Free entry and exit ensures efficient production and the correct mix of products, which are produced at normal profit. Full assignability means there are no effects on others except those reflected in prices. The price system provides the incentives to ensure that resources go to their best uses and provide the highest utility, given the original distribution of income and preferences, the availability of basic factors and technology.
10. If the market operates reasonably well then government intervention may be best limited to distributional issues, plus some basic standard setting and information. Prices will tend to allocate resources in relation to value. If market works badly it may be better to replace the market with government production and allocation (figure 2.2) - although this generates problems of administrative failure. In between government may modify prices by taxation, subsidy and regulation in order better to reflect real resource costs.

### Basic Principles of Demand, Supply and Equilibrium Price

11. The demand schedule shows the amount buyers will purchase at each possible price - given that everything else that might affect demand - including income, population, tastes and the price of other goods - is held constant. It is normally downward sloping (figure 3.1).
12. The supply schedule shows the amount producers are prepared to sell at each possible price. Again, every other factor which affects how much is supplied - input costs, technology, the price of related goods etc. - is held constant. The schedule is generally upward sloping at least in the short-run (figure 3.1)
13. Equilibrium price and quantity are determined by the intersection of the demand and supply schedules i.e.  $q^*$  at  $p^*$  (figure 3.1). If at a given price (say  $P_a$ ) the quantity demanded is less than supply there will be a surplus  $q_a^s - q_a^d$  (figure 3.2) and pressure on suppliers to reduce price to get

rid of the excess. Where the quantity demanded is greater than that supplied (say  $p_b$ ) there will be a shortage  $q_b^d - q_b^s$  (figure 3.2). Sellers will increase price and buyers will be prepared to pay the higher price to obtain the goods they want.

14. What causes equilibrium price and quantity to change: equilibrium price and quantity change when either the demand curve or the supply curve shifts and the other responds (figure 3.3). Such shifts occur because one or more of the factors which determine consumer and producer decisions (e.g. income, relative prices) change.

### The Nature of Housing

15. Housing is, in many ways, a microcosm reflecting market, administrative and mixed systems. Some parts of the housing system are very much market oriented; at the other extreme the social sector provides accommodation which is allocated on the basis of need; in between large scale subsidies, some taxes and a wide range of regulations, modify prices, output and allocation.
16. Specific attributes of housing to be addressed:
- (i) complex bundle of multiple attributes: necessary/luxury, asset/consumption good/different elements of dwelling;
  - (ii) slow adjustment of supply and demand;
  - (iii) housing takes a large proportion of income and wealth, but seen as necessary good;
  - (iv) dependence on finance market by both consumers and producers;
  - (v) locationally specific nature of investment;
  - (vi) longevity of investment & specificity/irreversibility of asset;
  - (vii) problems of individual relationships;
  - (viii) emphasis on housing in social policy.
17. All of these factors mean that:
- (i) the analysis of how housing markets behave is more complex than the basic models imply;
  - (ii) it is likely that the market will not work particularly efficiently, so there is a wide range of efficiency as well as distributional reasons for government intervention.

### **Reading:**

LeGrand, C Propper & S Smith	Chapters 1, 5 and 10
Lipsey & Chrystal <u>or</u> Begg	Chapter 1
Oxley	Chapters 1 and 3

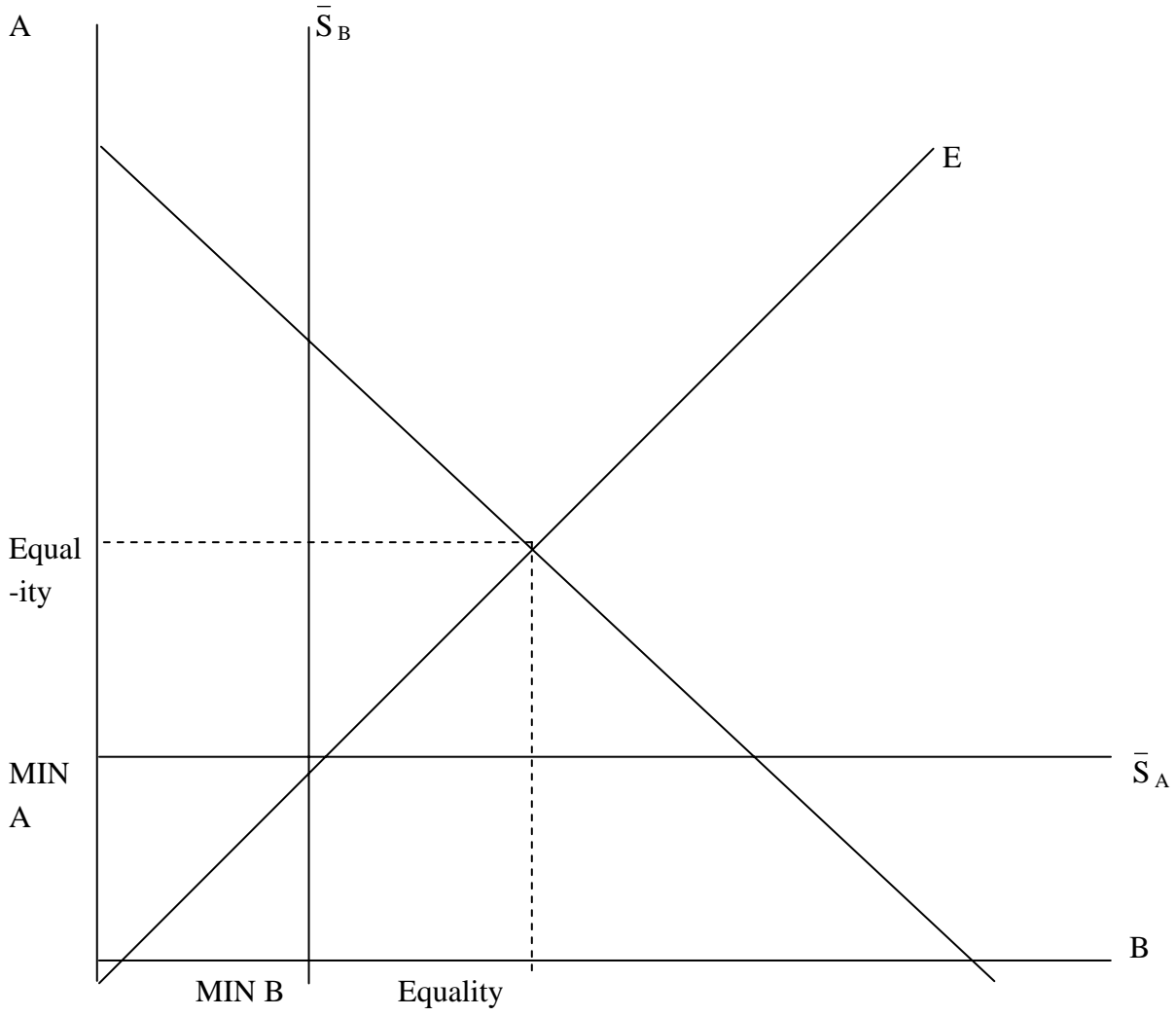


Figure 1: Minimum standards and equality (2 person example)

**Figure 2: Economic Organisation**

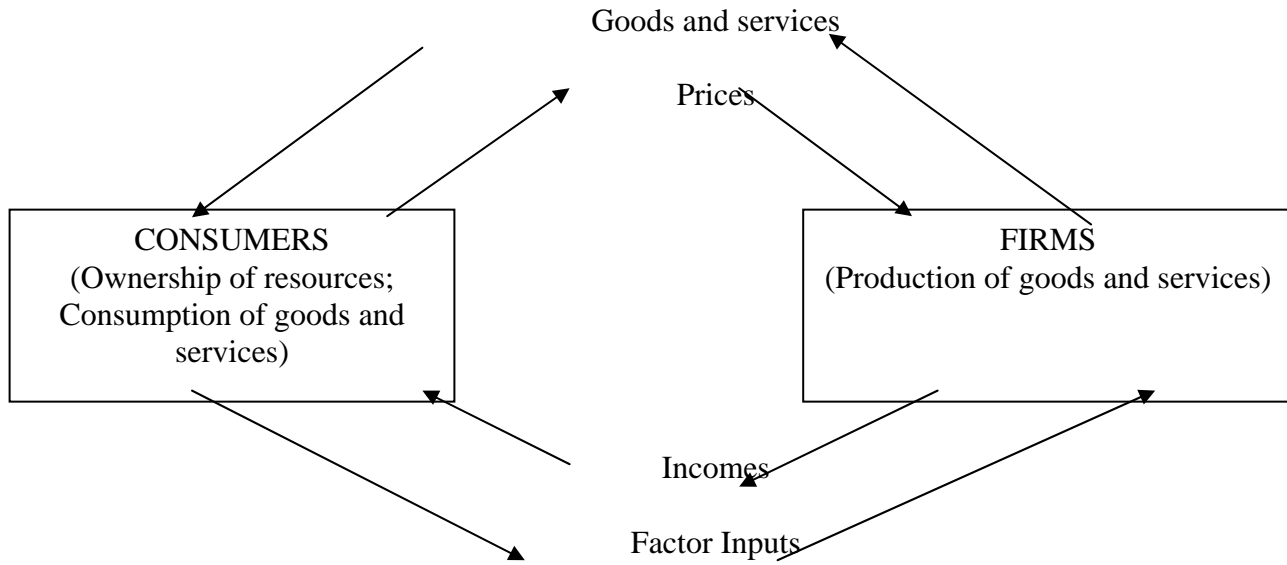


Figure 2.1 Market allocation and individual ownership

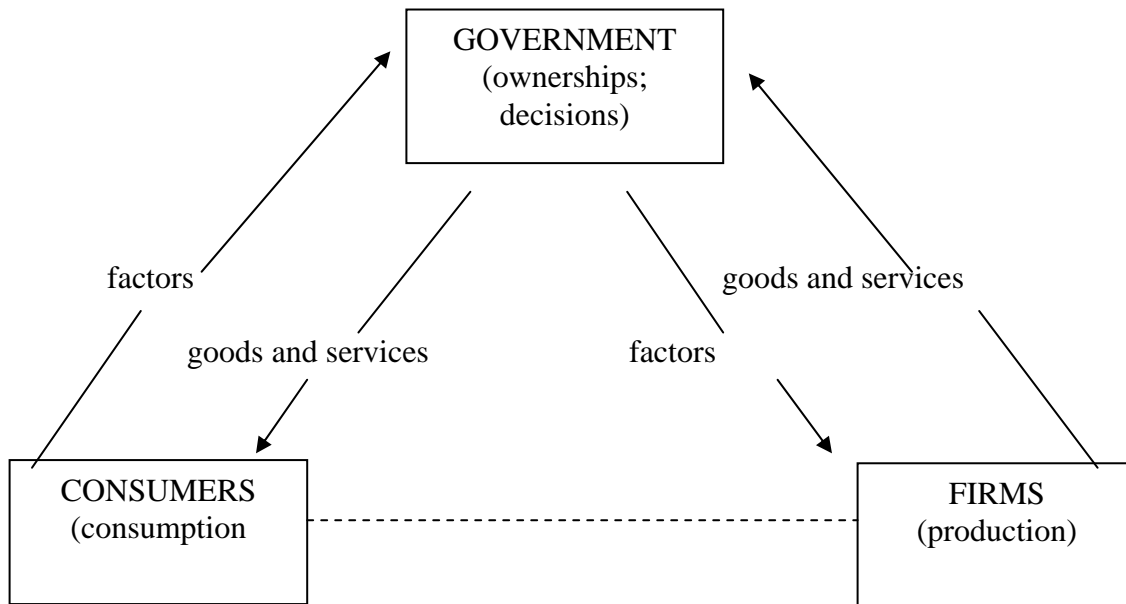


Figure 2.2 Command economy: state ownership and central control

Figure 3: Describing Market Behaviour

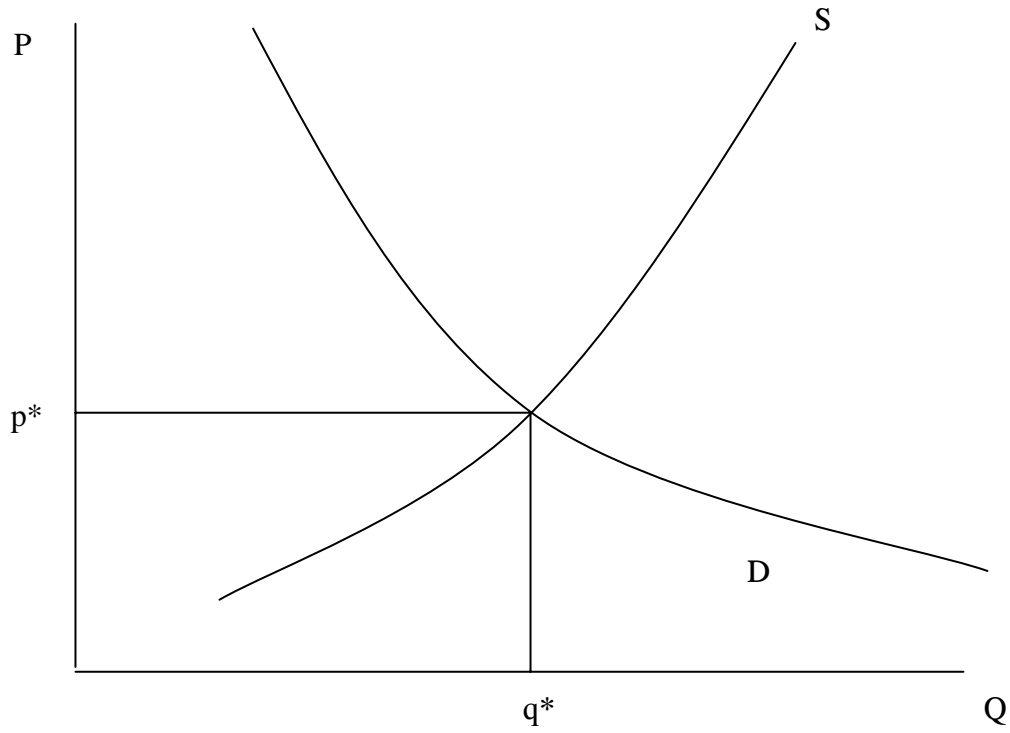


Figure 3.1: Demand, Supply and Equilibrium

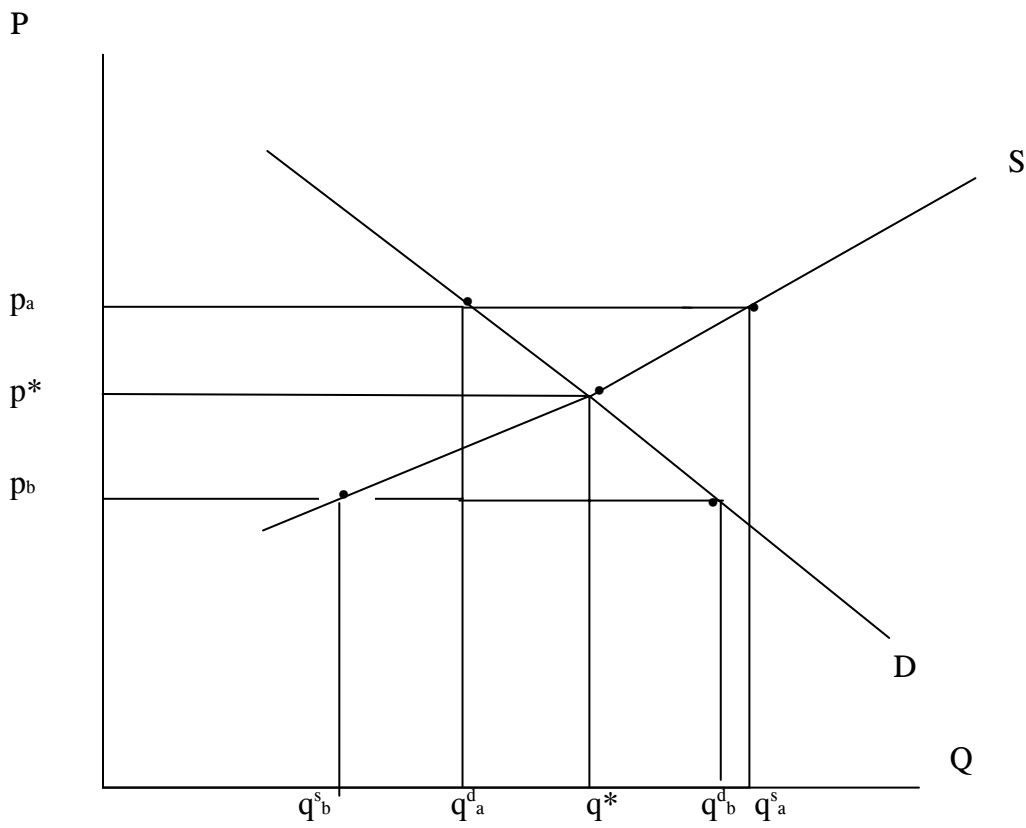


Figure 3.2: Adjustment to Equilibrium

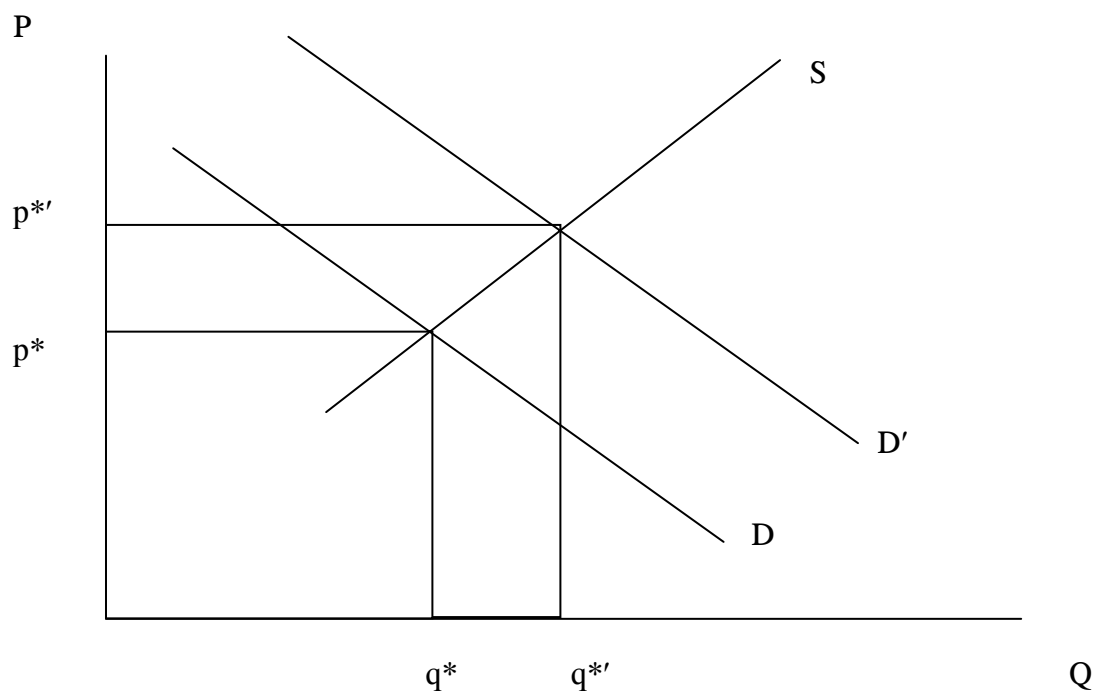


Figure 3.3: Impact of Increasing Demand