

Microeconomics II

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Classic Microeconomics studies the role of markets in the allocation of scarce resources and concludes that under the appropriate conditions,

▷the exchange of goods and services in competitive markets leads to an efficient allocation of resources: the inputs are used in the most valuable production activities, and the goods are distributed in a way such that there are not further gains to trade.

(First Welfare Theorem)

The presence of *uncertainty and risk* poses an additional challenge to resource allocation and suggest a reason for the existence of competitive markets for the exchange of *contingent contracts*, which

▷specify not only the quantity of the physical good involved in the exchange, but also the time and circumstances (*state of nature*) in which the seller is to deliver the goods.

The existence of competitive markets for the exchange of contingent contract leads, under appropriate conditions¹, to an efficient allocation of resources, which involves not only allocating the inputs and goods adequately, but also

▷sharing and distributing risks efficiently.

¹The conditions above, plus the existence of a complete set of markets for contingent contracts, as well as a judicial system capable of enforcing these complex contracts.

Contingencies included in a contract must refer to

- ▷ observable events, or
- ▷ verifiable actions,

by all parties (and by the external authority enforcing the contracts).

The presence of *asymmetric information* about uncertain events, or the impossibility of verifying actions, limits the possible contingencies that contracts may consider. These limitations:

- ▷ alter the interpretation of the results of classic microeconomics, and
- ▷ pose important questions about the role of institutions (other than markets) in the allocation of resources.

An examination of common situations involving asymmetric information reveals that a sophisticated contract design allows to remove some of the restrictions that a superficial look would suggest:

▷ Even when one of the parties does not observe relevant events or actions it is possible to design contracts that provide appropriate incentives to reveal private information or take the desired action.

The Economics of Information provides a *theory of incentives* for the analysis of the effects of private information or hidden actions in contractual settings.

Recent developments in the study of the topics that emerge in long run contracting (*dynamic contract theory*) such as

▷ renegotiation, relational contracts, incomplete contracts, etc.,

provide instruments for the analysis of questions related to ownership and control, which are central to economics. (This analysis aims at providing a *theory of the firm* or, more broadly, a the *theory of organizations*.)

The purpose of the course is to provide an introduction to the ideas and methods of *Contract Theory*.

<http://www.eco.uc3m.es/docencia/microii>