THE WELFARE THEOREMS

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THE FIRST THEOREM OF WELFARE ECONOMICS

- An equilibrium achieved by a competitive market will be Pareto efficient

THE SECOND THEOREM OF WELFARE ECONOMICS

- With convex indifference curves, there will be a set of prices such that each Pareto efficient outcome is a competitive market equilibrium
IMPLICATIONS OF THE FIRST WELFARE THEOREM

A private market that is competitive will result in Pareto efficiency - all gains from trade will be exhausted.

A competitive market is a benchmark by which policy-makers can judge actual market outcomes.

This theorem assumes that there are no market imperfections such as monopoly, externalities and public goods.
IMPLICATIONS OF THE SECOND WELFARE THEOREM

This theorem suggests that problems of *efficiency* and *distribution* can be separated:

- If it is felt that the equilibrium at e' is somehow better than that at e, a *lump-sum transfer* of good 1 can be made from consumer A to consumer B, the endowment changing from W to W'.

- The price system should then be allowed to generate an *efficient* outcome, given the new endowment - prices should not be used for re-distribution.
SECOND WELFARE THEOREM

Lump-sum transfer

Initial endowment

New endowment
"Distorted Prices"

\[ x^1 \quad x^2 \]

Initial endowment

\[ \omega^1_A, \omega^2_A, \omega^1_B, \omega^2_B \]