AE 503

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

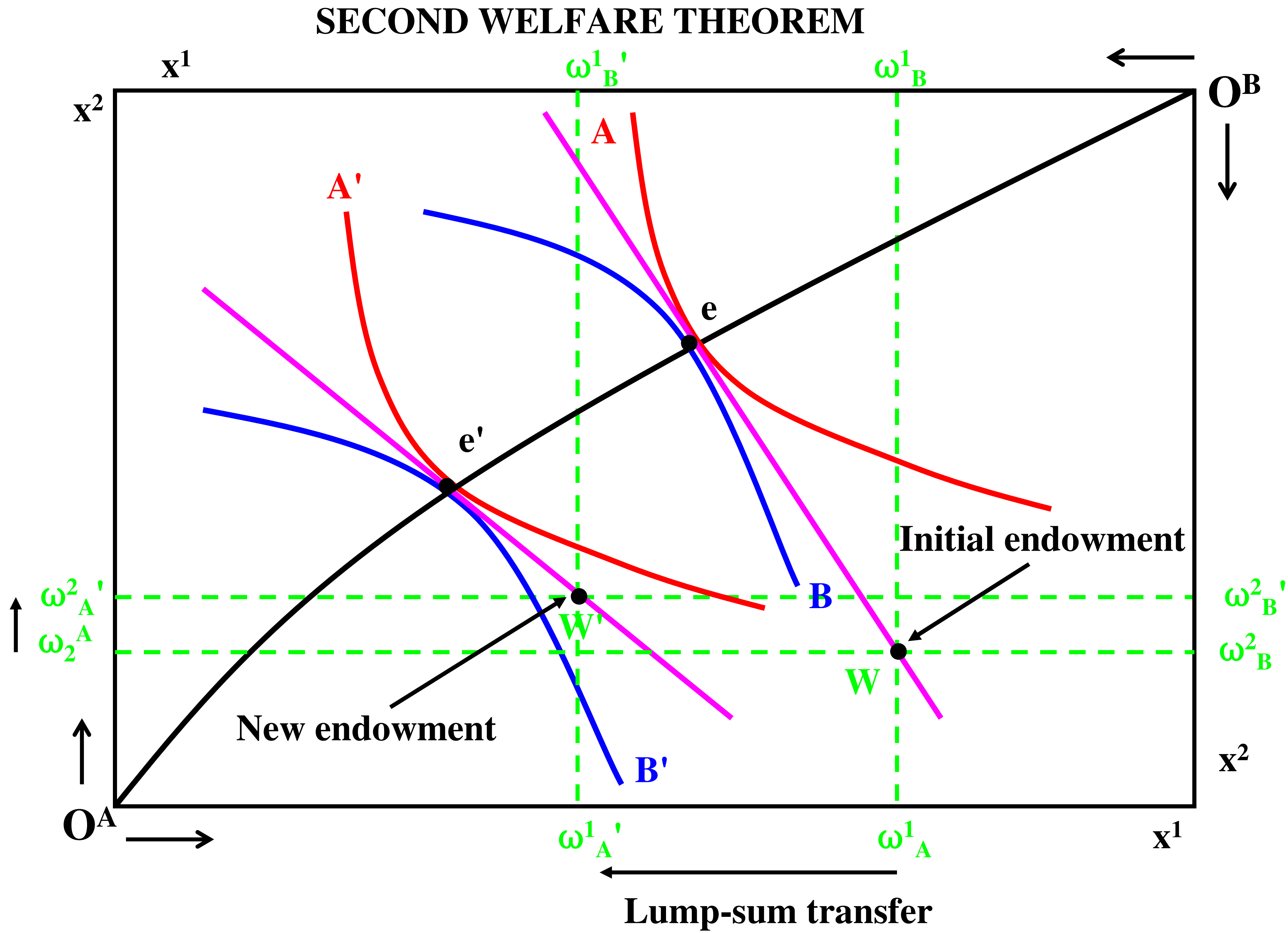
- ☞ This theorem assumes that there are no market imperfections such as monopoly, externalities and public goods

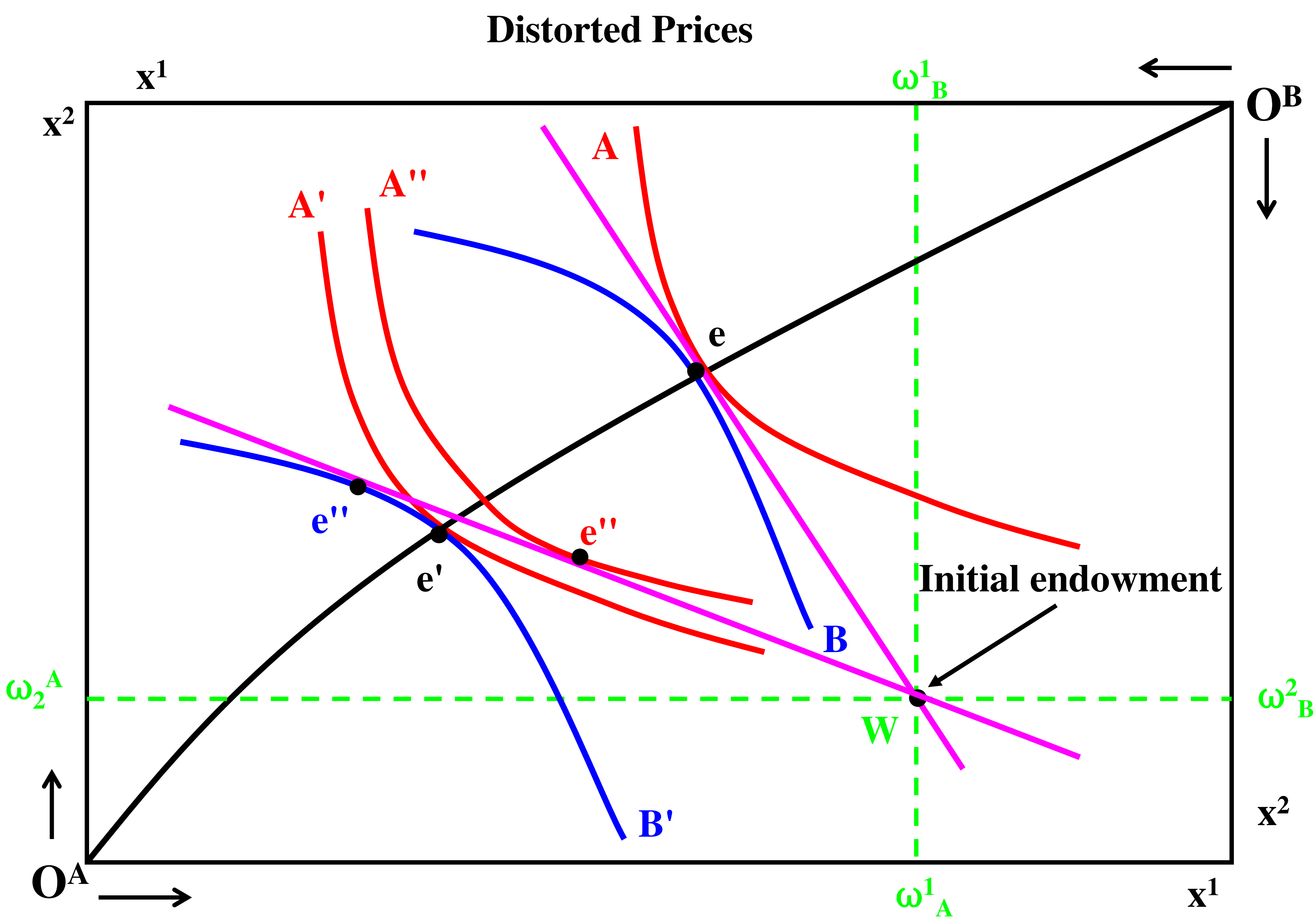
IMPLICATIONS OF THE SECOND WELFARE THEOREM

- **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
x1
x2
ω1B'
ω1B
OB
A
A'
e
e'
B
B'
Initial endowment
New endowment
ω2A'
ω2A
ω2B'
ω2B
W'
W
x2
OA
ω1A'
ω1A
x1
Lump-sum transfer


Distorted Prices
x1
x2
ω1B
OB
A
A''
A'
e
e''
e''
e'
Initial endowment
B
ω2A
ω2B
W
B'
x2
OA
ω1A
x1