How many equilibrium states are there in a typical economy? This is one of the important questions in general equilibrium theory. Another is: What is the connection between equilibrium allocations and Pareto allocations? Ideally, the answer to the first question would be 'one', but unfortunately uniqueness obtains only under strong conditions. Given this, focus shifts to the size of the equilibrium set where it is hoped that the set will be finite. This turns out to be the case, at least generically. Debreu (1970) established that for almost all exchange economies the equilibrium set is finite and has an odd number of locally isolated elements. In this paper we show that the structure on the equilibrium set, particularly the failure of uniqueness, has important implications for interpretations of the Second Welfare Theorem. In particular we show that when equilibrium is not unique the initial redistribution of endowment or wealth needed to decentralize any desired Pareto optimum is quite different to that needed when equilibrium is unique. We also note that 'finiteness of the equilibrium set' is a blunt conclusion which leaves open the possibility that the number of equilibria is nevertheless numerically large.

Stimulated by the argument in Mas-Colell, Whinston and Green (1995) that: (i) short of going all the way to uniqueness we have no way of refining the blunt conclusion of finiteness and (ii) that 'finitite' should not be presumed to mean 'small' we use a theorem of Balasko (1988) to show that in the case of exchange economies and contrary to these claims: (a) the blunt conclusion of finiteness can be refined and (b) that 'finite' probably does in fact mean 'small' at least for exchange economies. We extend Balasko's theorem to cover the case of production economies and remark on the implication of this result for the Second Welfare Theorem.