Florig considers an exchange economy with L commodities and I consumers. Every consumer is characterized by his utility function $u_i : R^L_+ \to R$, which is defined by $u_i(x_i) = b_i \cdot x_i$ for a given vector $b_i \in R^L_+$, and by his initial endowment $\omega_i \in R^L_+$. An exchange economy is uniquely characterized by the pair (b, ω).

The sum over consumers of the vectors b_i and ω_i is assumed strictly positive. Each individual vector b_i and ω_i is assumed to be non-zero. These conditions mean that every good is desired by some consumer and owned by some consumer, and every consumer desires at least one good and owns at least one good.

The optimization of u_i on R^L_+ subject to the constraint $p \cdot x_i \leq p \cdot \omega_i$ for given prices $p \in R^L$ determines the demand of consumer i at prices p. Prices p are said to be Walrasian if the sum of the consumers' demands at p equals the sum of the consumers' initial endowments. The corresponding tuple of demands is called a Walrasian equilibrium allocation. For given (b, ω), the set of Walrasian equilibrium price vectors is denoted by $P(b, \omega)$ and the set of Walrasian equilibrium allocations by $X(b, \omega)$. The set $\mathcal{W}$ denotes the set of economies (b, ω) for which the set $P(b, \omega)$ is non-empty.

The first main result of the paper, Proposition 3.2, characterizes $P(b, \omega)$ for all economies $(b, \omega) \in \mathcal{W}$. The proof is the first constructive proof of the fact that $P(b, \omega)$ is a convex polyhedral cone.

Let $(b, \omega) \in \mathcal{W}$ and $p \in P(b, \omega)$. The second main result of the paper, Proposition 3.3, constructs a partition $L_1, \ldots, L_k$ of the set of commodities L which is the coarsest one such that, for all $q \in P(b, \omega)$, the function $\ell_q : L \to R$, defined by $\ell_q(h) = q_h / p_h$ for all $h \in L$, is measurable.

The upper and lower semicontinuity of X and the upper semicontinuity of P have been studied before. Proposition 4.1 derives for each $(\bar{b}, \overline{\omega}) \in \mathcal{W}$ a set $\mathcal{M}(\bar{b}, \overline{\omega})$ on which the correspondence P s lower semicontinuous at $(\bar{b}, \overline{\omega})$. It is also argued that lower semicontinuity of $P : \mathcal{W} \to R^L$ fails at all points (b, ω) where $P(b, \omega)$ is not a half line.

The final main result in the paper, Proposition 5.1 characterizes the set $X(b, \omega)$.