

are explained by the example following Remark 1.9 (see also Groh (1982a)). Therefore we concentrate on irreducible semigroups. Our main result (Theorem 1.10) extends B-III, Thm.3.6 to the non-commutative setting.

Section 2. Theorem 2.5 has its roots in the Niiro-Sawashima Theorem for a single irreducible positive operator on a Banach lattice (see Schaefer (1974), V.5.4 ). The analogous semigroup result on Banach lattices is due to Greiner (1982). The ultrapower technique in our proof is developed in Groh (1984b).