İstanbul Üniv. Fen Fak. Mec. Seri A, 45 (1980), 131-132

## CORRECTION TO THE PAPER "A NOTE ON COMPACT CONVEX SETS WITH EQUAL SUPPORT PROPERTY" OF Ş. ALPAY PUBLISHED IN VOL. 43 (1978), pp. 29-37

Since this work [1] was submitted in 1977 and appeared in 1987, we believe some remarks as well as some essential corrections are in order,

The measure  $\mu_{y}$  in the proof of Proposition 2.1. should be  $\mu_{y} = \frac{1}{2} (\epsilon_{y} + \epsilon_{-y})$ .

In Example 2.2, x should be  $\left(\frac{1}{2} + \frac{1}{2^2}, \frac{1}{2^3}, \frac{1}{2^4}, \ldots\right)$ .

If X is a compact convex set we identify X with its canonical image in  $A(X)^*$ . If M is a weak\* closed subspace of finite codimension in  $A(X)^*$  then  $M \cap X$  is called a finite codimensional slice of X. Therefore Example 2.3. also shows that a finite codimensional slice of a compact convex set with e.s.p. need not have e.s.p.. Measures  $\mu_1, \mu_2$  of the same example should read as  $\mu_1 = \frac{1}{2} \varepsilon_{e_1} + \frac{1}{2} \varepsilon_{e_2}, \mu_2 = \frac{1}{2} \varepsilon_{e_3} + \frac{1}{2} \varepsilon_{e_4}$ .

Simple examples in the plane show that product of compact convex sets with e.s.p. does not have e.s.p.. However the remark following Proposition 2.5. shows that if the product  $\prod X_{\alpha}$  has e.s.p. then each  $X_{\alpha}$  has e.s.p..

**2.7. Definition.** A compact convex set X is  $(\alpha, n)$ -additive at  $\underline{0}$  if

 $p(x_1) + ... + p(x_n) \leq \alpha \cdot p(x_1 + ... + x_n)$  for any  $x_1, ..., x_n$  in X.

Proposition 2.10. and its Corollary should read as follows:

2.10. Proposition. A compact convex set X with e.s.p. is 1-conical at each isolated extreme point.

**2.11.** Corollary. Every isolated  $G_{\delta}$ -extreme point x of X is exposed.

Remarks following Corollary 2.11. indicate that compact convex sets with s.e.s.p. are CE-compact convex sets. However a square is a CE-compact convex set that does not have the s.e.s.p. If X has the s.e.s.p. and  $\pi: X \to X'$  is a continuous affine surjection with  $\pi^{-1} \pi(F) = F$  for each closed face F of X then X' has also the s.e.s.p. [<sup>2</sup>]. However the condition  $\pi^{-1} \pi(F) = F$  on closed faces of

Ş. ALPAY

X is indispensable as seen by projecting a tetrahedron onto a rectangle in a one-to-one fashion on the extreme boundary.

Let us note, before giving condition (\*), that if X has the e.s.p. and  $\{x_{\alpha}\}$  is a net in  $X_e$  converging to  $x \in X$  then  $\{x_{\alpha}\}$  structurally converges to z for each z in  $\Phi(x)$ .

Part of proof of Proposition 3.4. where F = conv R is shown to be a face, can be shortened considerably if Theorem 1.4 in [<sup>3</sup>] is used.

a in Corollary 3.5. should be taken as  $a \ge 0$ .

3.6. Corollary. Let X be a metrizable compact convex set with e.s.p. A subset E of  $X_e$  is structurally sequentially compact if and only if it is structurally compact.

We note that compact convex sets with e.s.p. were also studied in [4] and [5].

## REFERENCES

[1]	ALPAY, Ş.	A Note on Compact Sets with Equal Support Property, Rev. Fac. Sci. de l'Univ. Istanbul 43 (1978), 29-37.
[²]	GROSMAN, M.W.	Facial Quotients of Bauer Simplexes, J. London Math. Soc. (2), 11 (1975), 337-380.
[*]	McDONALD, J.N.	Compact convex sets with the equal support property, Pacific J. Math. 37 (1971), 429-443.
[4]	ALPAY, Ş.	On the projective tensor product of compact convex sets with the strong equal support property, J. Pure and Appl. Sci. 11 (1978), 237-242.
[ <sup>5</sup> ]	ALPAY, Ş.	A Localization of the equal support property, J. Purc and Appl. Sci. 11 (1978) 232-25

132