

# The characterization of affine maximizers when there are only two alternatives : A technical note

T. Marchant  
Ghent University  
thierry.marchant@ugent.be

D. Mishra  
Indian Statistical Institute  
dmishra@gmail.com

[Roberts(1979)] showed that every implementable social choice function satisfies a condition named PAD (Positive Association of Differences). Conversely, when there are at least three alternatives and the domains are unrestricted, he showed that PAD implies that the social choice function is an affine maximizer. When there are two alternatives only, it is well-known that Roberts' Theorem does not hold because there exist social choice functions satisfying PAD on unrestricted domains and that are not affine maximizers. In this paper, we show which conditions must be imposed on top of PAD in order to characterize the affine maximizers.

## Références

[Roberts(1979)] K. W. S. Roberts. The characterization of implementable choice rules. In J.-J. Laffont, editor, *Aggregation and Revelation of Preferences*, pages 321–348. North Holland Publishing Company, 1979.