In analogy with Proposition 1, one implication of Proposition 2 is that it throws a bridge between the income share elasticity and Lorenz dominance. While obviously the discussion of Proposition 1 applies also to case (a) of the proof (which actually delivers first order SD), case (b) is connected with Shorrocks' generalized Lorenz dominance: as is well known, if the function $S(y,\theta)$ used in the proof does not change sign, generalized Lorenz curves never intersect (e.g., Lambert, 2001, p.55).[5]

3 Concluding remarks

The notion of income share elasticity can have useful economic applications, for example when dealing with the relationship between income distribution and the price elasticity market demand (Benassi *et al.*, 2002). In this note we have outlined the relationship between (first and second order) stochastic dominance, and the way income share elasticity depends on the distribution parameters; this also allows to see some related implications in terms of Lorenz dominance.

References

[1] Benassi C., A.Chirco and M.Scrimitore (2002): Income Concentration and Market Demand, *Oxford Economic Papers*, forthcoming.

[2] Esteban, J. (1986): Income Share Elasticity and the Size Distribution of Income, *International Economic Review*, **27**, 439-44.

[3] Hirshleifer J. and J.G.Riley (1992): *The Analytics of Uncertainty and Information*, Cambridge University Press, Cambridge.

[4] Lambert, P.J. (2001): *The Distribution and Redistribution of Income*, Manchester University Press, Manchester.

[5] This can be directly seen by defining the generalized Lorenz curve as $L(p,\theta) = \int_0^p y(p,\theta)dp$, where $y(p,\theta)$ satisfies $F(y,\theta) = p$ so that $dp = f(y,\theta)dy + F_\theta(y,\theta)d\theta$. By implicit differentiation, $y_\theta(p,\theta) = -F_\theta(y(p,\theta),\theta)/f(y(p,\theta),\theta)$ so that $L_\theta(p,\theta) = \int_0^p y_\theta(p,\theta)dp = -\int_0^p F_\theta(y(p,\theta),\theta)/f(y(p,\theta),\theta)dp = -\int_{y_m}^y F_\theta(y,\theta)dy = -S(y,\theta)$. As established above, the latter is positive in case (b) of the proof of Proposition 2.