

# Mixed Competition and Welfare under Various Nonprofit Objectives

## Mixed Competition under Various Cost Configurations\*

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### Abstract

I study the competition between one nonprofit and one for-profit firm under various objective functions of the nonprofit firm. The two firms optimize their objectives with respect to quality and price of their products. The nonprofit firm serves one-half of the market under pure quality maximization, while it serves about two-thirds under two other objective functions that in addition to quality, include market share. In contrast, the market share and profit of the for-profit firm decrease, and consumer and total surplus increase.

For the case of quality maximization pursued by the nonprofit firm, I derive equilibria for several cost configurations. Qualities and prices offered depend on the steepness of the cost function as well as on the proportion between fixed and variable costs.

### Abstrakt

Analyzujem súťaž medzi jednou ziskovou a jednou neziskovou firmou za predpokladu rôznych účelových funkcií neziskovej firmy. Firmy optimalizujú svoje ciele vzhľadom na kvalitu a cenu svojich produktov. Nezisková firma poskytuje svoj produkt polovici spotrebiteľov pri maximalizácii kvality, kým jej podiel na trhu je približne dve tretiny pri ďalších dvoch účelových funkciách, ktoré okrem kvality zahŕňajú aj podiel na trhu. Podiel na trhu a zisk ziskovej firmy naopak klesajú, spotrebiteľský a celkový prebytok rastú. Pre prípad maximalizácie kvality neziskovou firmou odvodím rovnovážne kvality a ceny pre niekoľko špecifikácií nákladovej funkcie. Ponúkané kvality a ceny produktov závisia od sklonu nákladovej funkcie ako aj podiele fixných a variabilných nákladov na celkových nákladoch.

*Keywords:* Nonprofit, For-profit, Competition

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