model is analogous to the model of price-taking behavior with homogeneous goods in Section II.

We now make the simplifying assumption that firms have the same cost function $h(y_i,\theta)$. Because there are n similar firms acting as price takers, the output of each firm is determined by:

$$B\left(\frac{1}{\alpha}\cdot\sum_{j=1}^{n} y_j^*\right) \equiv h_y(y_i^*,\theta)\,. \tag{10}$$

where $y_i^* \equiv y_i^*(\theta)$. Also for simplicity, we assume that an association can enforce an advertising restriction at no cost. The association will try to maximize the total profits of its members: