

ERRATUM TO “ENDOGENOUS QUALITY CHOICE: PRICE VS. QUANTITY COMPETITION” [THE JOURNAL OF INDUSTRIAL ECONOMICS 41 (1993) 113-132]*

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IN MOTTA (1993) SECTION III (i), we have found a mistake (page 124). In this section, firms compete on prices and support a variable cost of quality improvement. In particular, the first order condition of firm 2 (when she chooses quality), which Motta calls (22'), has a mistake.

The following expression represents the correct first order condition of firm 2:

$$(22c) \quad \frac{\partial \pi_2}{\partial u_2} = \frac{u_1(u_1 - u_2 + 2\bar{v})(4u_1^3 - 19u_1^2u_2 + 17u_1u_2^2 - 2u_2^3 + 8u_1^2\bar{v} - 14u_1u_2\bar{v})}{4(4u_1 - u_2)^3}$$

We find two pairs of real values that solve system (22)-(22c), which are:

$$(u_1, u_2) = (u_H^*, u_L^*) = (4.0976, 1.9936); (u_1, u_2) = (u'_H, u'_L) = (8.2262, 3.5477).$$

However, the pair (u_H^*, u_L^*) is the only one that satisfies the second order conditions. Therefore, as in Motta (1993), the pair (23) represents a Nash equilibrium of the game.

$$(23) \quad u_1 = u_H^* = 4.0976; u_2 = u_L^* = 1.9936$$

REFERENCES

Motta, M., 1993, 'Endogenous Quality Choice: Price vs. Quantity Competition,' *The Journal of Industrial Economics*, Vol. 41 (2), pp. 113-132.

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