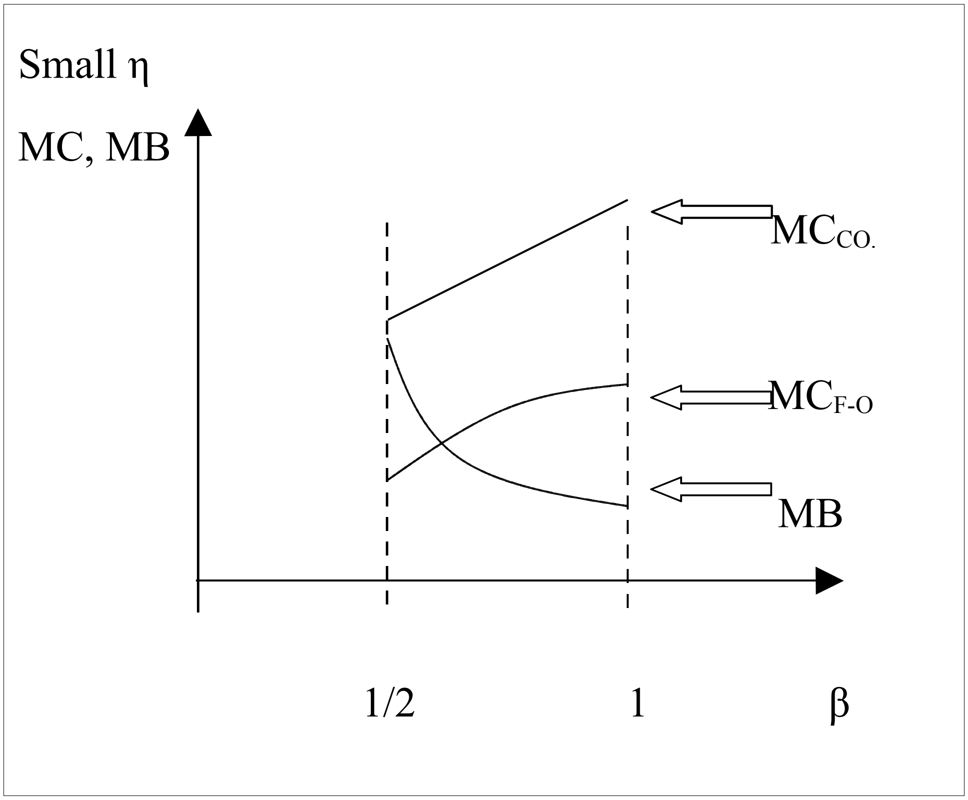

Figure 2(a): The β that maximizes U^A_β (the payoff of player A under conventional arbitration) equals ½; the marginal cost $MC_{CO.}$ exceeds the marginal benefit MB. The marginal cost $MC_{F\text{-}O}$ is lower than $MC_{CO.}$, so β that maximizes V^A_β (the payoff of player A under final-offer arbitration) may be higher than ½.

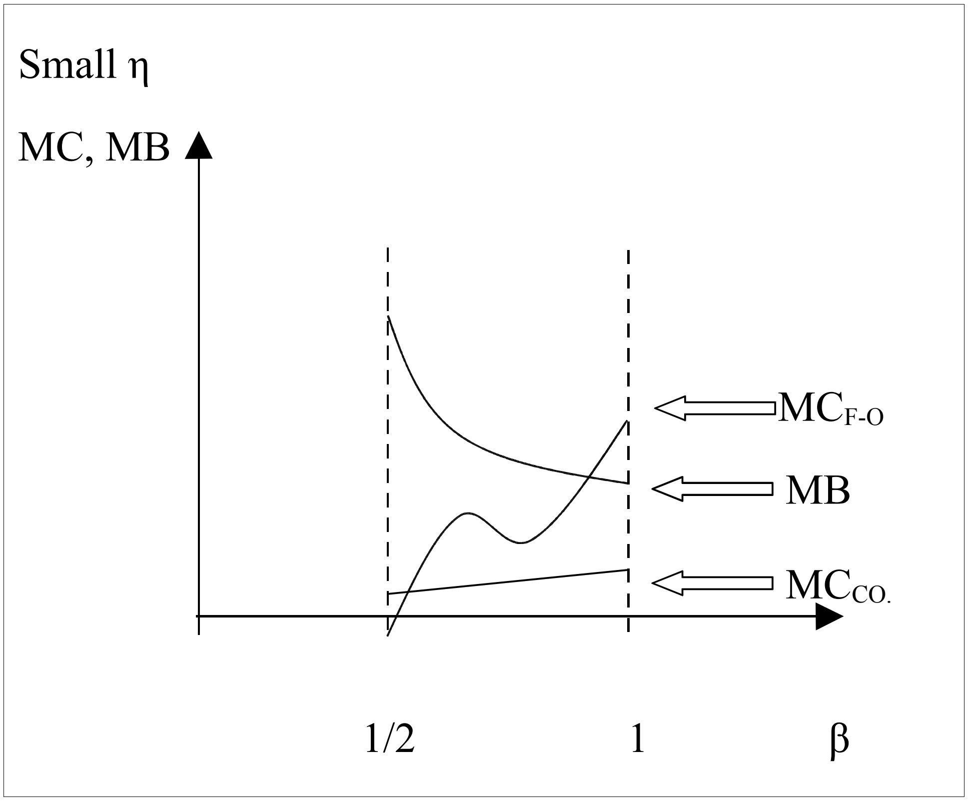

Figure 2(a): The β that maximizes U^A_β (the payoff of player A under conventional arbitration) equals 1; the marginal cost $MC_{CO.}$ is very close to 0, and it falls below the marginal benefit MB. The marginal cost $MC_{F\text{-}O}$ is higher than $MC_{CO.}$ (except a neighborhood of 1/2) so β that maximizes V^A_β (the payoff of player A under final-offer arbitration) may be lower than 1.

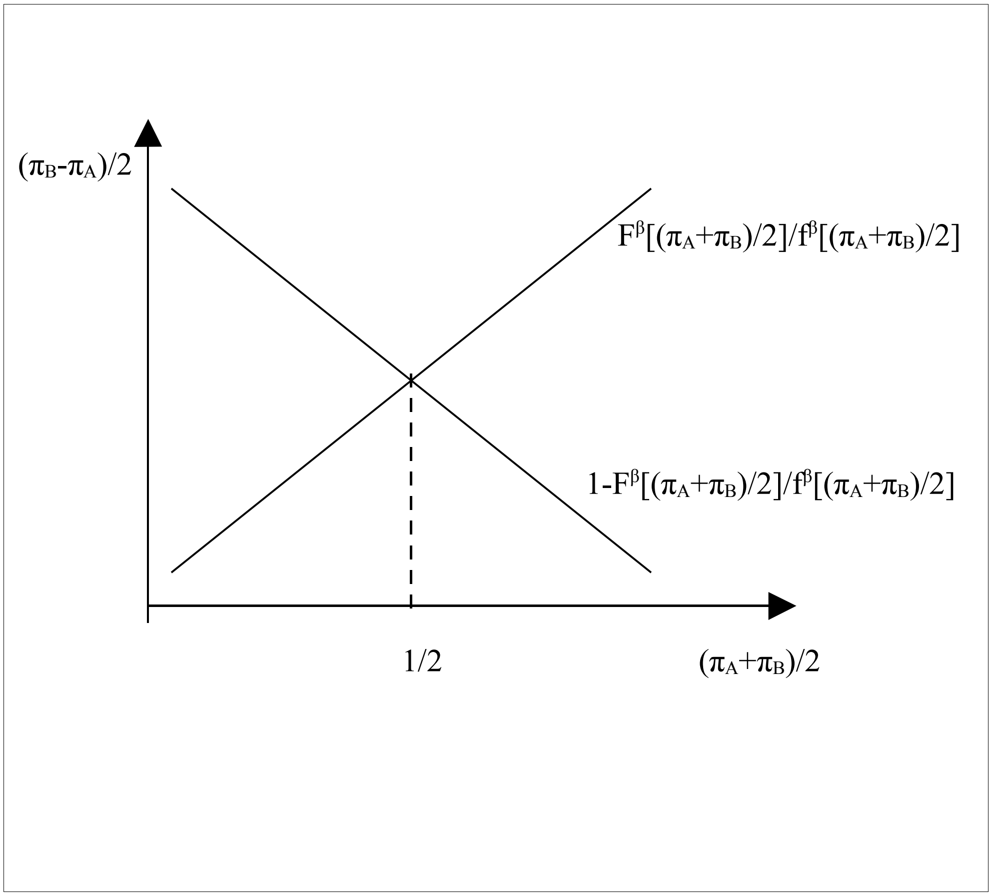

Figure 1(a): The determination of the equilibrium offers π_A and π_B in the final-offer arbitration game for a given β in the pooling equilibrium in which each agent plays the best-response to her opponent's offer.

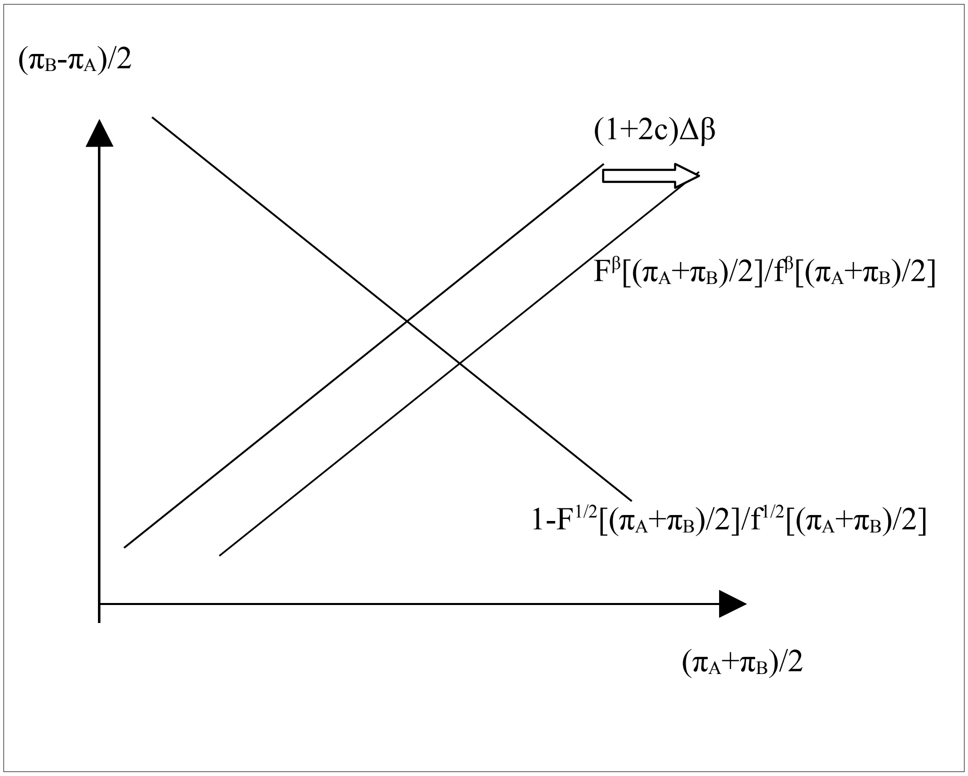

Figure 1(b): The determination of the equilibrium offers π_A and π_B in the final-offer arbitration game for a given β in the pooling equilibrium in which agent A plays the best-response to her opponent's offer assuming that F^β is cdf of the arbitrator's peak points and agent B plays the best-response to her opponent's offer assuming that $F^{1/2}$ is cdf of the arbitrator's peak points. Notice that β increases by Δβ, the upward-sloping curve moves by (1+2c)Δβ. Since the downward-sloping curve does not move,

$$\Delta(\pi_A+\pi_B)/2 < (1+2c)\Delta\beta,$$

and since

$$\Delta(\pi_B-\pi_A)/2 < 0,$$
$$\Delta\pi_B = \Delta(\pi_B-\pi_A)/2 + \Delta(\pi_A+\pi_B)/2 < (1+2c)\Delta\beta.$$