Ramsey Pricing Revisited

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Abstract:
We study optimal price regulation in a monopoly pricing problem in the Ramsey tradition without restricting the monopoly to set market-clearing prices. Under our perfect regulation benchmark a regulator that seeks to maximizes a convex combination of the monopoly's profit and social surplus operates the firm, subject to the same incentive compatibility and individual rationality constraints as the firm. We determine what instruments enable the regulator to implement this benchmark, assuming that the firm otherwise selects the optimal selling mechanism, which may involve price discrimination. Interestingly, when the firm engages in price discrimination, binding price floors can increase both consumer surplus and social surplus. Moreover, when the firm sells a fixed endowment of goods, optimally chosen price floors and price ceilings allow the regulator to achieve the perfect regulation benchmark. However, when the regulator must account for the firm's incentives to produce output, appropriately chosen price ceilings (which induce the firm to produce more output) become relatively more effective than price floors (which discourage the firm from producing) and the regulator may also need to introduce output quotas.