Efficiency and Incidence of Taxation with Free Entry and Love-of-Variety Preferences

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Abstract

We develop a theory of commodity taxation featuring imperfect competition along with love-of-variety preferences and endogenous firm entry and exit, and we derive new formulas for the efficiency and pass-through of specific and ad valorem taxes. These formulas unify existing canonical ones and feature a new term capturing the effect of variety on consumer surplus. Intuitively, if taxes reduce product varieties in the market, then the impact on social welfare depends on how much consumers value variety. As a proof-of-concept, we use the theoretical formulas to identify love-of-variety preferences in an empirical application. Our welfare analysis shows that the marginal excess burden of taxation is very sensitive to the estimated love-of-variety, which can overturn classical results on the desirability of ad valorem versus specific taxation.

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Table 5: Using Calibrations to Determine Whether Variety is Socially Optimal

	Baseline (1)	Counterfactual scenarios (2)	Counterfactual scenarios (3)
Panel A: Variety effect parameter, $\tilde{\Lambda}_0$			
	Estimated variety effect parameter		
	0.125	0.066	0.000
Panel B: Socially optimal variety calculations			
$\partial \log(q)/\partial \log(J)$	-0.751	-0.827	-0.911
Business-stealing effect, $\partial \log(q)/\partial \log(J) * (p - c'(q))/p$	-0.060	-0.066	-0.073
$\partial \tilde{W}/\partial \log(J)$ = Variety effect ($\tilde{\Lambda}_0$) + business-stealing effect (>0 implies that variety is below the social optimum)	0.065	0.000	-0.073

Notes: This table reports results using the parameter estimates from Table 4 to calibrate whether or not variety is above or below the social optimum. Column (1) uses the baseline estimate of the variety effect and the other parameters in Table 4, while columns (2) and (3) report results using other values of the variety effect but hold other parameters constant. Column (2) finds the exact value such that the business-stealing effect and the variety effect are equal (so that variety is socially optimal at current tax rates), and column (3) sets the variety effect to zero so that consumers have no love of variety.