Omitted Variable Bias

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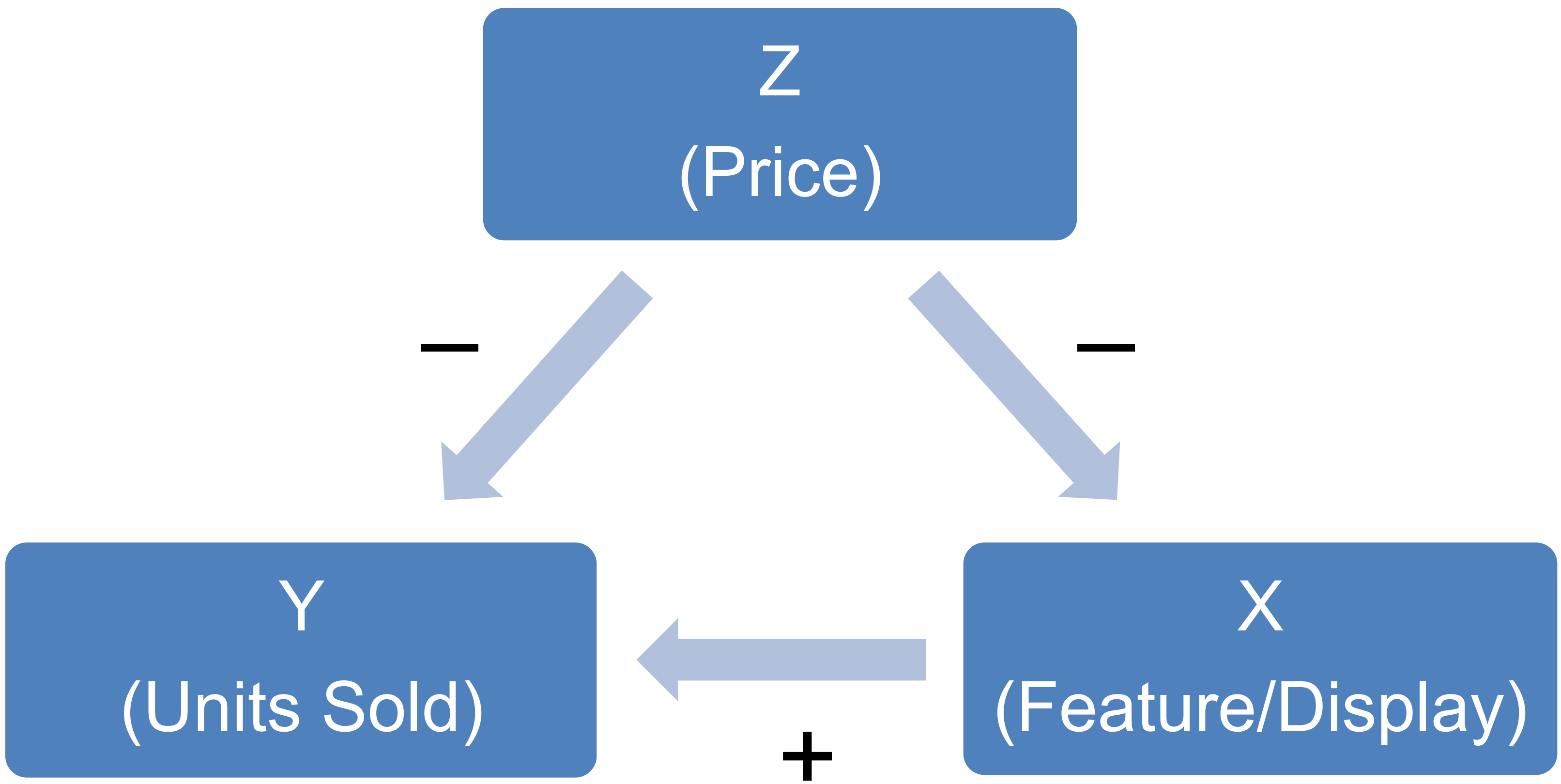
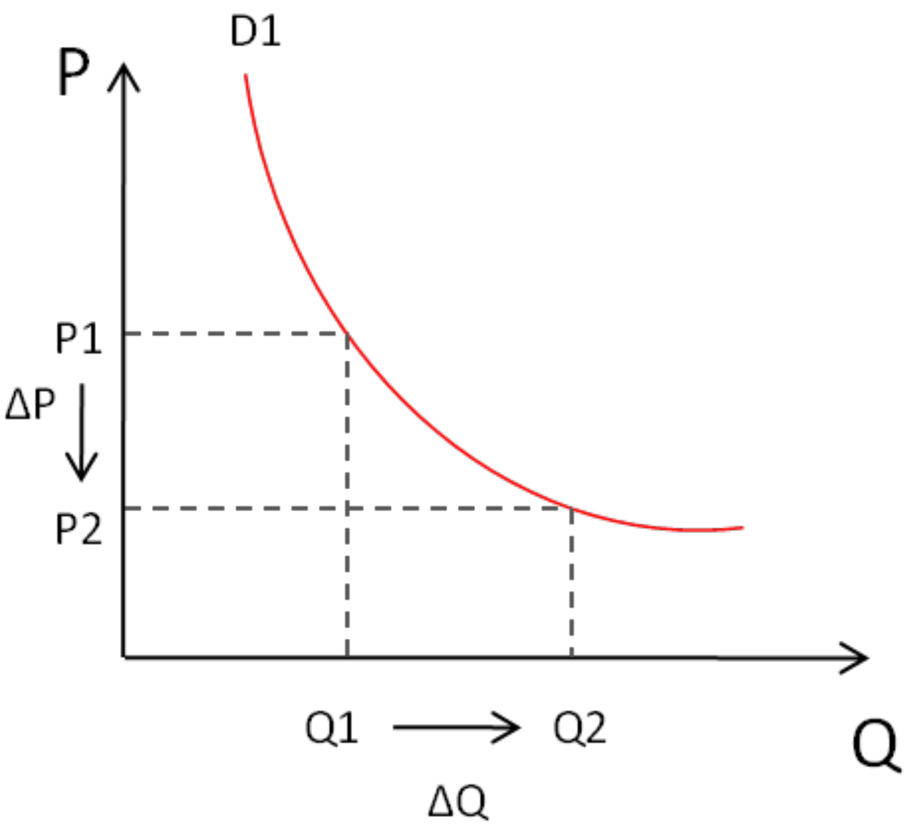


Simulated Shopper Card Data: Correlation Matrix

	Price	Feature	Display	Units Purchased
Price	1	-0.25	-0.24	-0.98
Feature		1	-0.09	0.45
Display			1	0.32
Units Purchased				1

Price Elasticity



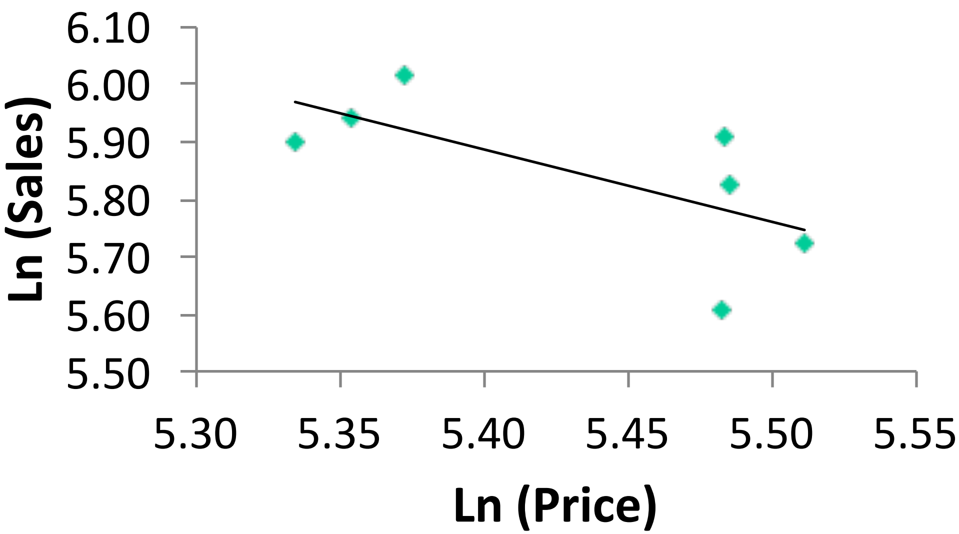
Price elasticity can be derived as the ratio of change in quantity demanded (%ΔQ) and percentage change in price (%ΔP).

PED = [Change in Sales/Change in Price] × [Price/Sales] = $(\Delta Q/\Delta P) \times (P/Q)$

Belvedere Vodka

Year	Sales (units)	Ln(Sales)	Price (US dollars)	Ln(Price)	Advertising (US dollars)	Ln(Advertising)
2007	410	6.016	215.44	5.373	20486.1	9.93
2006	381	5.943	211.45	5.354	2923.5	7.98
2005	365	5.900	207.45	5.335	4826.3	8.48
2004	369	5.911	240.87	5.484	13726.6	9.53
2003	339	5.826	241.33	5.486	10330.2	9.24
2002	306	5.724	247.55	5.512	13473.6	9.51
2001	273	5.609	240.48	5.483	9264.6	9.13

Belvedere Price Elasticity



Regression Statistics	
Multiple R	0.67536
R-Squared	0.45611
Adjusted R	
Square	0.34733
Observations	7

	Coefficients	Standard Error	t Stat	P-value
Intercept	12.686	3.340	3.798	0.013
Ln(Price)	-1.259	0.615	-2.048	0.096