

FOUR SECTOR MODEL OF TAX INCIDENCE

	Propylene	Polypropylene	Cumene	Phenol
	-----	-----	-----	-----
1983 Quantity	5788.00	1577.33	1215.00	969.00
1983 Price	494.00	803.00	507.06	573.20
Supply Intercept	283.66	197.38	480.94	300.23
Supply Slope	0.0363	0.0510	0.0215	0.0370
Demand Intercept		991.94		1063.12
Demand Slope		-0.12		-0.51
Tax Rate	13.82	0.00	0.00	0.00
New Tax in \$/MT	9.87	0.00	0.00	0.00
After-tax Quantity	5677.47	1540.92	1208.51	963.83
% Change	-1.91%	-2.31%	-0.53%	-0.53%
After-tax Price	499.85	807.36	509.26	575.82
% Change	1.18%	0.54%	0.43%	0.46%

B5: 5788

B6: 494

B8: +B6-B9\*B5

B9: 0.03634

B13: 4.87

B14: (B13-4.87) / (2000/2204.623)

B16: (1.0631\*C16+0.4\*D16) \* (B5 / (1.0631\*C5+0.4\*D5))

B17: (B16-B5) / B5

B18: +B8+B9\*B16+B14

B19: (B18-B6) / B6

C5: 1577.33

C6: 803

C8: +C6-C9\*C5-1.0631\*B6

C9: 0.051

C10: +C6-C11\*C5

C11: -0.1197854453

C13: 0

C14: +C13 / (2000/2204.623)

C16: (C10-C8-C14-1.0631\*B18) / (C9-C11)

C17: (C16-C5) / C5

C18: +C10+C11\*C16

C19: (C18-C6) / C6

D5: 1215

D6: 507.06329  
D8: +D6-D9\*D5  
D9: 0.0215  
  
D13: 0  
D14: +D13/(2000/2204.623)  
  
D16: (E16/E5)\*D5  
D17: (D16-D5)/D5  
D18: +D8+D9\*D16+0.4\*(B18-B6)  
D19: (D18-D6)/D6

E5: 969  
E6: 573.20198  
  
E8: +E6-E9\*E5-0.48\*B6  
E9: 0.037  
E10: +E6-E11\*E5  
E11: -0.5055894966  
  
E13: 0  
E14: +E13/(2000/2204.623)  
  
E16: (E10-E8-E14-0.48\*B18)/(E9-E11)  
E17: (E16-E5)/E5  
E18: +E10+E11\*E16  
E19: (E18-E6)/E6

→