

TABLE 7.6 Effect of variation in x_i on the width of 95% confidence intervals for simulated data

<i>Regression</i>	$\sum_{i=1}^n (x_i - \bar{x})^2$	<i>Slope estimate</i>	<i>Estimated standard deviation of slope estimate</i>	<i>Lower bound of confidence interval for β</i>	<i>Upper bound of confidence interval for β</i>	<i>Width of confidence interval for β</i>
1	1,700	3,952.9	570.95	2,827.0	5,078.8	2,251.8
2	2,200	2,768.3	496.08	1,790.0	3,746.6	1,956.6
3	2,680	3,070.9	447.21	2,189.0	3,952.8	1,763.8
4	3,160	3,811.4	437.15	2,949.3	4,673.4	1,724.1
5	3,580	3,912.3	377.84	3,167.1	4,657.3	1,490.2
6	4,000	3,853.9	399.50	3,066.1	4,641.7	1,575.6
7	4,320	3,691.3	395.60	2,911.0	4,471.3	1,560.3
8	4,640	4,223.4	385.90	3,462.4	4,984.4	1,522.0
9	4,820	3,744.8	327.28	3,099.3	4,390.2	1,290.9
10	5,000	3,981.8	349.01	3,293.6	4,670.1	1,376.5