

TABLE 7.3 Effect of sample size on the width of 95% confidence intervals for simulated data

| <i>Sample size</i> | <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> |
|--------------------|-----------------------|---|--|--|--|
| 10 | 8,213.7 | 1,351.5 | 5,097.0 | 11,330 | 6,233.0 |
| 100 | 2,382.1 | 830.27 | 734.5 | 4,029.7 | 3,295.2 |
| 1,000 | 3,640.9 | 276.94 | 3,097.5 | 4,184.3 | 1,086.8 |
| 10,000 | 4,008.1 | 86.957 | 3,837.7 | 4,178.6 | 340.91 |
| 100,000 | 3,945.7 | 27.483 | 3,891.8 | 3,999.5 | 107.73 |
| 1,000,000 | 4,016.6 | 8.6950 | 3,999.6 | 4,033.7 | 34.084 |
| 10,000,000 | 3,995.8 | 2.7523 | 3,990.4 | 4,001.2 | 10.788 |
| 100,000,000 | 3,999.8 | .87029 | 3,998.1 | 4,001.5 | 3.4115 |