p-Value as a Function of Sample Size for a Well-Designed System 1.0 -**─** Median *p*-Value \rightarrow 95% Quantile of *p*-Value **---** p-Value = 0.05 (Significance Level) 8.0 0.6 *p*-Value 0.4 0.2 0.0 -5000 15000 10000 20000 25000 30000 Sample Size (n)