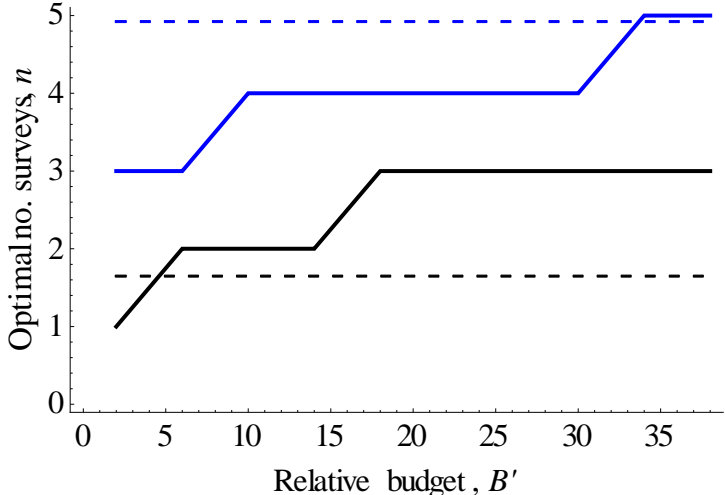


**Figure S1. Effect of scaled budget on the optimal number of surveys for objective 1.**

For a constant budget to fixed-cost ratio of 10: (a) Scaled budget  $B'$  versus the optimal number of surveys  $n$ , (b) the corresponding optimal expected probability of detection failure. Black and blue lines correspond to a coefficient of variation equal to 0.5 and 3 respectively. The solid-line corresponds to the exact solution and dashed-line to the approximate solution (Note, in figure (b) the black dashed-line is obscured by the solid black-line).

(a)



(b)

