A. Baseline parametrization: $\alpha=0.36$, $\beta=0.96$ Value for N Std. dev. loss function Value loss function Value loss function (last periods) Cumulative execution time (sec) bc-MC N*, T=100 10^{-2} 12 bc-MC N=100, T=100 10^{-3} bc-MC N=20, T=100 10 6×10^{-7} 10^{-3} bc-MC N=2, T=100 10^{-4} 60 10^{-4} 6 10^{-5} 4×10^{-6} 40 10^{-5} 10^{-6} $3 \times 10^ 10^{-6}$ 0 3000 2600 2800 3000 Iterations Iterations **Iterations Iterations** Iterations B. Parametrization $\alpha = \beta = 0.99$ Value for N Std. dev. loss function Value loss function Value loss function (last periods) Cumulative execution time (sec) 2.4×10^{-5} 2.2×10^{-5} 1280 10^{-2} 2×10^{-5} 10 10^{-3} 1.8×10^{-5} 60 8 10^{-3} 1.6×10^{-5} 40 1.4×10^{-5} 10^{-4} 10^{-4} 1.2×10^{-5} 10^{-5} 10^{-5} 10^{-5} 2000 3000 0 2000 1000 2000 1000 2000 3000 0 1000 1000 3000 2600 2800 3000 0 3000 Iterations Iterations Iterations **Iterations** Iterations C. Parametrization $\alpha=\beta=0.995$ Value for ${\sf N}$ Std. dev. loss function Value loss function Value loss function (last periods) Cumulative execution time (sec) 10^{-1} 10^{-2} 4×10^{-5} 80 10^{-2} 10^{-3} 3×10^{-5} 60 10^{-3} 40 2×10^{-5} 10^{-4} 10^{-5} 1000 2000 3000 1000 2000 3000 0 1000 2000 3000 2600 2800 3000 0 1000 2000 3000 0 Iterations **Iterations** Iterations Iterations Iterations D. Parametrization $\alpha=\beta=0.999$ Value for N Value loss function Std. dev. loss function Cumulative execution time (sec) Value loss function (last periods) 10^{-1} 10^{-2} 10 80 10^{-2} 10^{-4} 60 10^{-3} 10^{-3} 40 10^{-4} 10^{-4} 1000 1000 3000 2000 3000 0 2000 3000 2600 3000 0 10002000 3000 1000 2000 2800 Iterations Iterations Iterations Iterations Iterations