

Figure A1: Replicate Figure 1(a) with VBTS by Chakraborty et al. (2023).

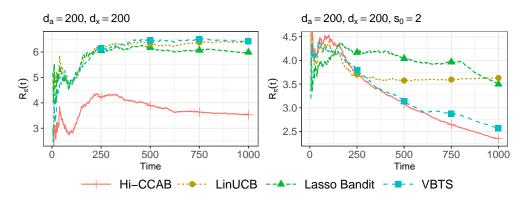


Figure A2: Non-sparse (left) and sparse (right) settings with  $d_a=d_x=200$ .

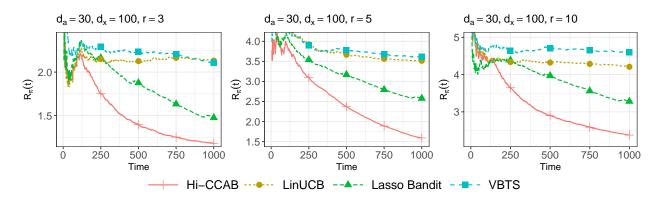


Figure A3: Sensitivity analysis of the rank r = 3, 5, 10 with  $d_a = 30$  and  $d_x = 100$ .