Complementary cumulative distributions AdamOptimizer **ONGOptimizer** β_1 =0.9, β_2 =0.99, ε =10⁻⁸ approx='block-diag', λ =0 1.0 stepsize=0.01 stepsize=0.01 stepsize=0.025 stepsize=0.025 Probability of occurrence stepsize=0.05 stepsize=0.05 0.8 stepsize=0.075 stepsize=0.075 stepsize=0.1 stepsize=0.1 stepsize=0.125 stepsize=0.125 0.6 stepsize=0.15 stepsize=0.15 stepsize=0.175 stepsize=0.175 stepsize=0.2 stepsize=0.2 0.4 stepsize=0.225 stepsize=0.225 stepsize=0.25 stepsize=0.25 0.2 (b) (a 0.0 MomentumOptimizer MomentumQNGOptimizer ρ =0.9, approx='block-diag', λ =0 $\rho = 0.9$ 1.0 stepsize=0.01 stepsize=0.001 stepsize=0.025 stepsize=0.003 Probability of occurrence stepsize=0.005 stepsize=0.05 0.8 stepsize=0.075 stepsize=0.007 stepsize=0.1 stepsize=0.009 stepsize=0.125 stepsize=0.011 0.6 stepsize=0.15 stepsize=0.013 stepsize=0.015 stepsize=0.175 stepsize=0.2 stepsize=0.017 0.4 stepsize=0.225 stepsize=0.019 stepsize=0.25 stepsize=0.021 0.2 (d)0.0 0.3 0.2 0.3 0.0 0.1 0.2 0.4 0.0 0.1 0.4 quality ratio quality ratio