Covid-19 evolution, 15 most affected countries (data from JHU CSSE, 9/7/21) Growth rate (%) of confirmed  $\left(\frac{\Delta confirmed}{confirmed}\right)$ Total number of confirmed Total number of confirmed (log scale) 1e7 4.0 1.75 3.5 1.50 3.0 1.25  $10^{7}$ 1.00 2.0 0.75 0.50 0.25 0.00 01/01 01/04 01/07 01/10 01/01 01/04 01/07 01/10 01/01 01/04 01/07 01/10 01/01 01/04 01/07 01/10 01/01 01/04 01/07 01/10 01/04 01/07 01/10 01/01 Acceleration of confirmed  $\left(\frac{\Delta^2 confirmed}{(\Delta^2)^2}\right)$ confirmed by day  $\left(\frac{\Delta confirmed}{\Delta t}\right)$ confirmed by day  $\left(\frac{\Delta confirmed}{\Delta t}\right)$  (log scale) 350000 10000 300000 250000 5000  $10^{5}$ 200000 150000 100000 --5000 50000 -1000001/04 01/10 01/01 01/01 01/01 01/04 01/07 01/10 01/01 01/07 01/01 01/04 01/07 01/10 01/04 01/07 01/10 01/04 01/10 01/10 01/01 01/04 01/07