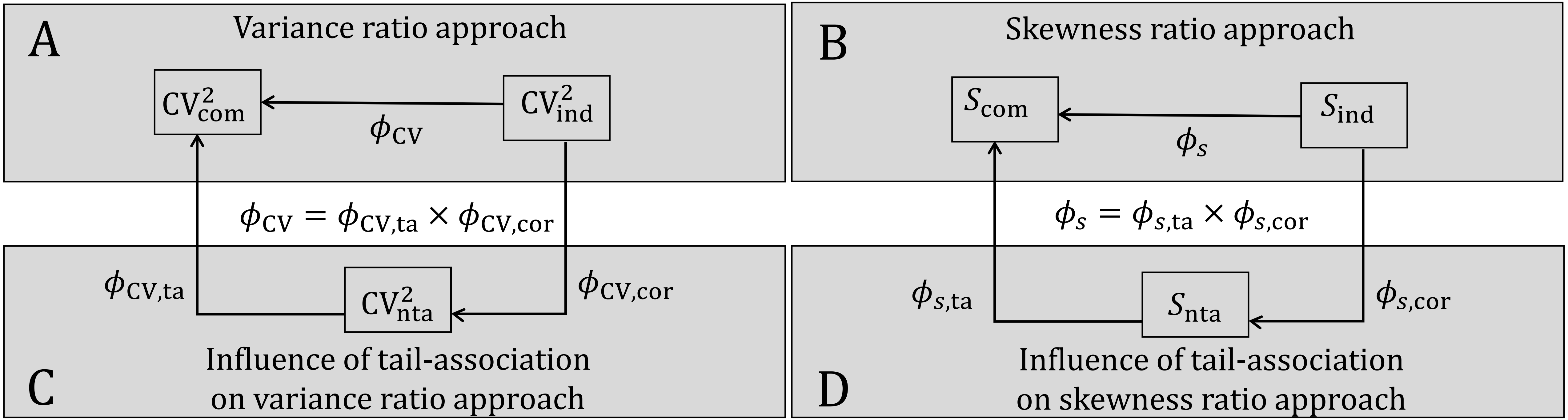

E Summary of definitions

$x_i(t)$ = species abundances, locations $i = 1, \ldots, N$, times $1, \ldots, T$.

$\mu_i = \mathrm{mean}(x_i)$; $v_{ii} = \mathrm{var}(x_i)$; $v_{ij} = \mathrm{cov}(x_i, x_j)$; $m_{iii} = 3^{\mathrm{rd}}$ moment of x_i; $x_{\mathrm{tot}} = \sum_i x_i(t)$.

$\mathrm{CV}^2_{\mathrm{com}} = \mathrm{var}(x_{\mathrm{tot}})/\left(\mathrm{mean}(x_{\mathrm{tot}})\right)^2$ = community instability measured using variance.

$\mathrm{CV}^2_{\mathrm{nta}}$ = what $\mathrm{CV}^2_{\mathrm{com}}$ would be without tail associations.

$\mathrm{CV}^2_{\mathrm{ind}} = (\sum_i v_{ii})/(\sum_i \mu_i)^2$ = what $\mathrm{CV}^2_{\mathrm{com}}$ would be without species interactions.

$S_{\mathrm{com}} = \mathrm{skew}(x_{\mathrm{tot}})$ = community instability measured using skewness.

S_{nta} = what S_{com} would be without tail associations.

$S_{\mathrm{ind}} = (\sum_i m_{iii})/(\sum_i v_i)^{3/2}$ = what $\mathrm{S}_{\mathrm{com}}$ would be without species interactions.