$$\mu_A = \left(\frac{\partial G'}{\partial n_A}\right)_{T,P,n_B}$$

$$\mu_B = \left(\frac{\partial G'}{\partial n_B}\right)_{T,P,n_A}$$

$n_A + n_B$.

$$dG' = \mu_A\, dn_A + \mu_B\, dn_B$$

$$\frac{dG'}{n_A+n_B} = \mu_A \frac{dn_A}{n_A+n_B} + \mu_B \frac{dn_B}{n_A+n_B}.$$

$$dG = \mu_A dx_A + \mu_B dx_B$$

$$x_A + x_B = 1.$$

$$\frac{dG}{dx_B} = \mu_A \frac{dx_A}{dx_B} + \mu_B$$

$$\frac{dG}{dx_B} = -\mu_A + \mu_B.$$

$$dn_A : dn_B = x_A : x_B$$

$$G = \mu_A x_A + \mu_B x_B$$

$$\mu_B = \frac{G - \mu_A x_A}{x_B}.$$

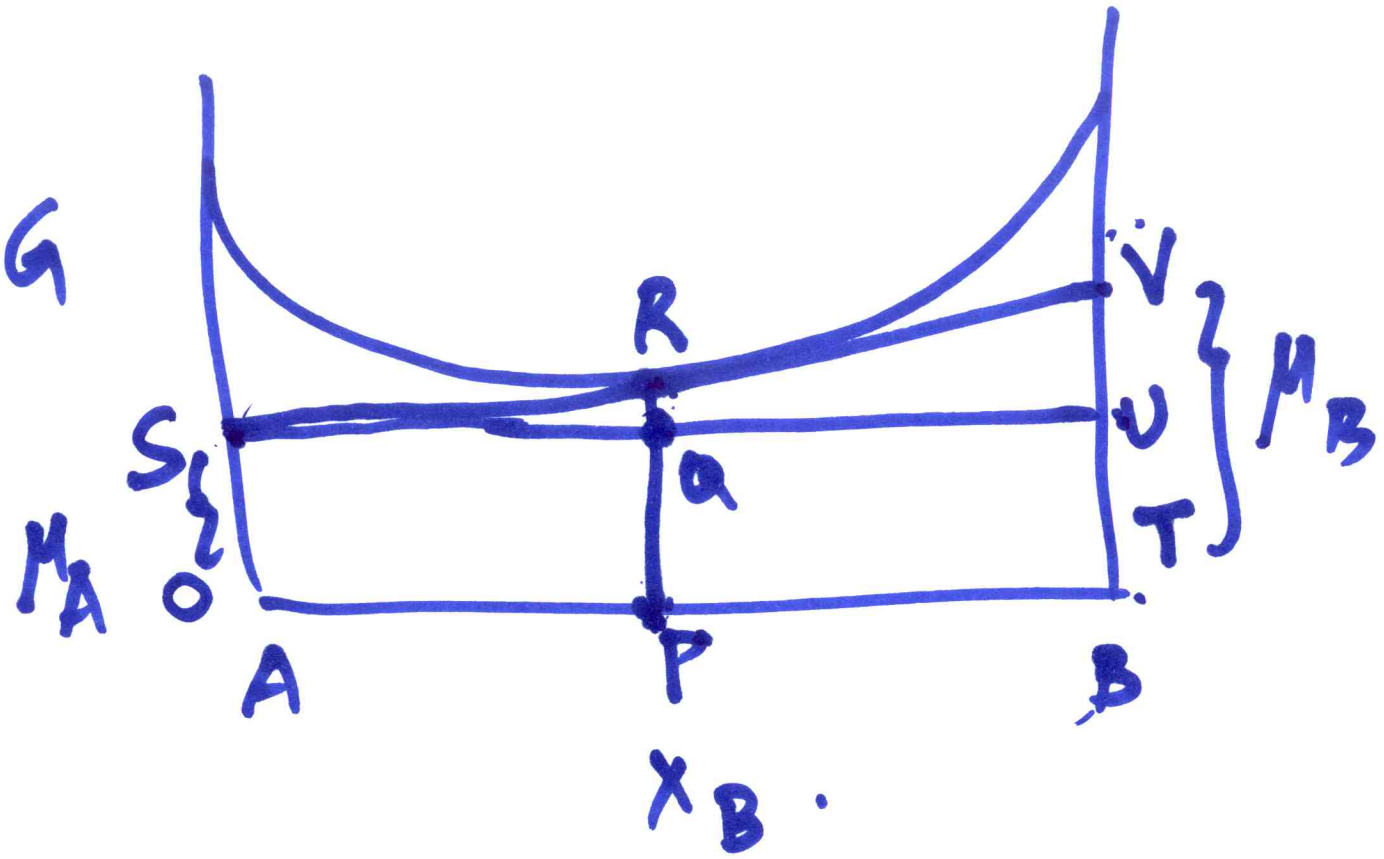
$$\frac{dG}{dx_B} = -\mu_A + \frac{G - \mu_A x_A}{x_B}.$$

$$x_B \frac{dG}{dx_B} = -\mu_A x_B + G - \mu_A x_A$$

$$= -\mu_A (x_B + x_A) + G.$$

$$x_B + x_A = 1.$$

$$\boxed{\mu_A = G - x_B \frac{dG}{dx_B}}$$



$$\mu_A = G - x_B \frac{dG}{dx_B}.$$

$$= PR - x_B \frac{RQ}{SQ \equiv x_B = OS.} = PR - RQ = PQ$$

$\mu_A \equiv$ Extrapolation of the tangent at x_B to the A line.

$$\mu_B = \mu_A + \frac{dG}{dx_B}.$$

$$= OS + \frac{UV}{US \equiv 1} = OS + UV = TV$$

$\mu_B \equiv$ Extrapolation to the B line of the tangent