$$\mathbf{D}(aX + bY) = a^2\mathbf{D}X + b^2\mathbf{D}Y + 2abcov(X,Y)$$

$$\mathbf{D}X = g_x''(1) + g_x'(1) - (g_x'(1))^2$$

$$\mathbf{D}X = \frac{N-n}{N-1}n\frac{M}{N}\left(1 - \frac{M}{N}\right)$$