$$X_{hs} = \sum_{g=1}^{P_s} \left(\frac{T_{gs}}{N_s} \times \frac{\sum_{i=1}^{n_{gs}} \left(X_{gis} \times V_{gis} \times SG_{gis} \right)}{\sum_{i=1}^{n_{gs}} \left(V_{gis} \times SG_{gis} \right)} \right)$$