## Quantitative Methods for Business Decisions Sixth Edition John Curwin & Roger Slater ISBN: 9781844805747

## **Chapter 7 Index Numbers**

Equivilence of Laspeyres and a weighted index:

Laspeyres index = 
$$\frac{\sum P_n Q_0}{\sum P_0 Q_0} \times 100$$

Let the weights, w, equal the amount spent on items in the base year, eg.  $W = P_0Q_0$ 

Laspeyres index = 
$$\frac{\sum P_n Q_0}{\sum w} \times 100$$

If we note that  $Q_0 = w/P_0$ , then

Laspeyres index = 
$$\frac{\sum w P_n / P_0}{\sum w} \times 100$$