

Measures of Dispersion - (7)

Merits and Demerits of Range.

Merits.

(1) Simple: →

It is a very simple measure of the dispersion of the series. It is simple to calculate as well as understand.

(2) Wide Application: -

Range is widely used in statistical series relating to quality control in production. Control charts are prepared on the basis of range. If the quality of goods produced is within the range prescribed in the charts then the production process is a commonly used measure of dispersion in case of changes in interest rates, exchange rates and share prices.

Demerits.

(1) Unstable :-

It is an unstable measure of dispersion. It depends upon the extreme value of the series. Any change in the extreme values or a change in the sample immediately affects the range of the series.

(2) Not Based on all values :

The calculation of range is not based on all the value of a series. It does not give importance to other values other than the extreme ones.

(3) No Knowledge of the Formation of the Series : →

Range gives no precise knowledge about the formation of series.

(4) Irrelevant for Open-ended frequency Distribution : →

Range can not be calculated in the case of open-ended frequency distributions. It just becomes irrelevant.

Thank you