Title : Inflation and Price Change (Economics for Engineers)

Date: 23-03-2020

Name of Faculty: Mr. Satish Kumar Verma

Lecture No : 11.30 AM to 12.30 PM(3)

Source of information : Book from Economics for Engineers

Index Numbers

1. WEIGHTED VS UNWEIGHTED INDEX NUMBER
2. COMPOSITE INDEX NUMBER
3. SIMPLE AGGREGATIVE INDEX NUMBER
4. SIMPLE AVERAGE OF RELATED INDICES
5. LIMITATIONS

Weighted vs Unweighted INDEX NUMBERS

WEIGHTED INDEX NUMBERS

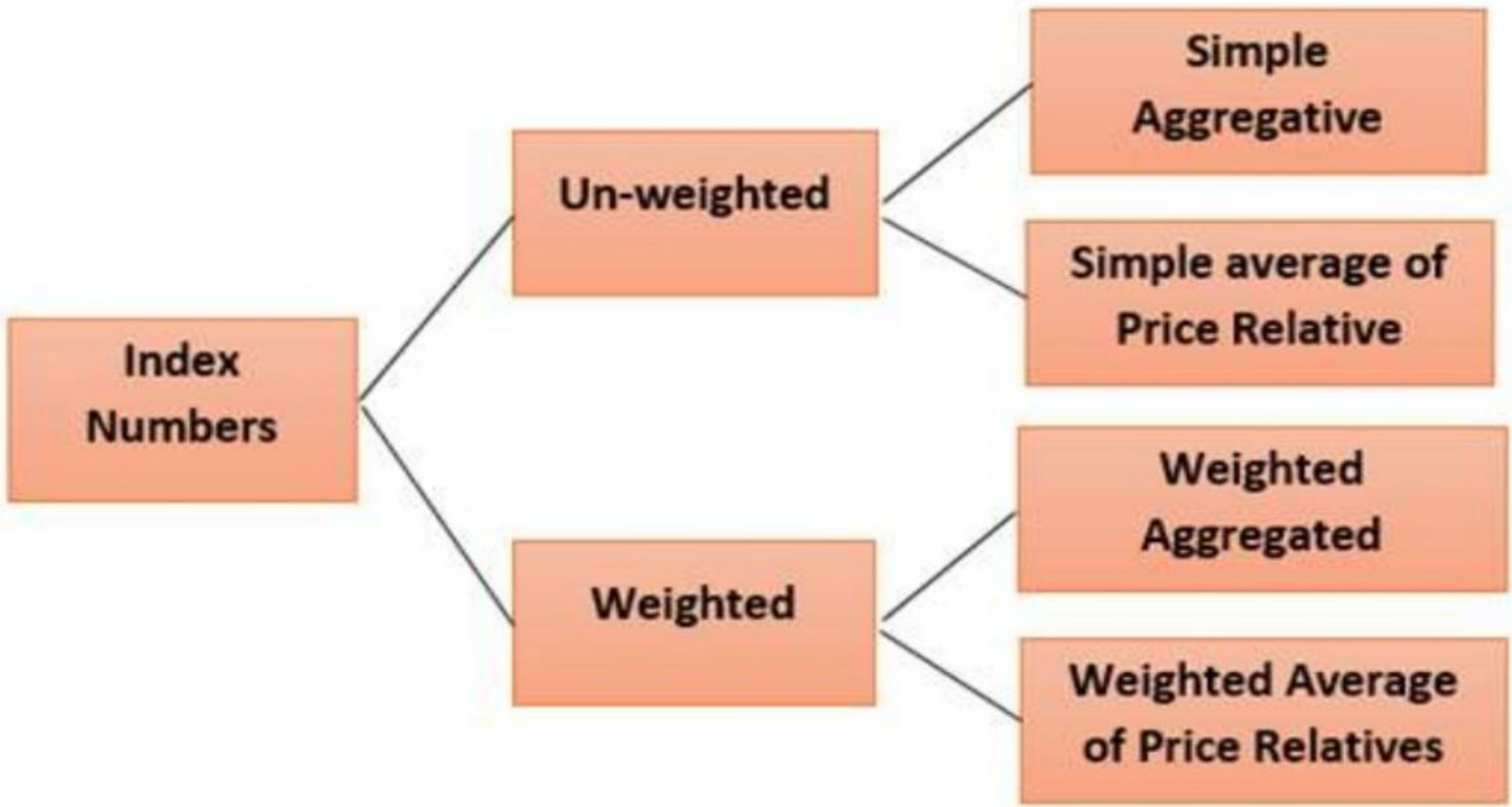
- An index where all the constituents of the index are equally weighted when calculating the index value. This has a weakness in that it tends to overstate the importance of the smaller constituents of the index. One of the few examples of this is the Dow Jones

UNWEIGHTED INDEX NUMBERS

- An index number in which the component items are weighted according to some system of weights reflecting their relative importance. In one sense nearly all index numbers are weighted by implication; for example, an index number of prices amalgamates prices per unit of quantity and the size of these units may vary from one commodity to another in such a way

Composite Index Number

- A composite index number measures the variation in the value of a composite number defined as the aggregate of a set of elementary numbers (for example, the consumer price index measures the variation in the prices of 1,000 varieties of products in a single index number).
- When index number is calculated by using group of variable, it is called Composite Index Number.


Index Numbers
Un-weighted
Weighted
Simple Aggregative
Simple average of Price Relative
Weighted Aggregated
Weighted Average of Price Relatives

Introduction

Price Index Numbers. Price index numbers measure relative price changes from one time period to another. They are so widely used that discussions related to index numbers in contract pricing normally refers to price indexes. However, other index numbers could be used in contract pricing, particularly indexes that measure productivity. Simple and Aggregate Price Index Numbers. Price index numbers can indicate price changes for one or several related supplies or services over a period of time. The Bureau of Labor Statistics (BLS) publishes numerous simple and aggregate Producer Price Indexes (PPI) that track changes in the wholesale price of products sold in the United States.

● Simple index numbers calculate price changes for a single item over time. Index numbers are more accurate if they are constructed using actual prices paid for a single commodity, product or service rather than the more general aggregated index. An example of a simple index would be one that tracks only lemons or oranges.

● Aggregate index numbers calculate price changes for a group of related items over time. An example of an aggregate price index would be one that tracks citrus fruits.

Situations for Use. You can use price index numbers to:

● Inflate/deflate prices or costs for direct comparison. You can use price index numbers to estimate/analyze product price/cost today using the price/cost of the same or a similar product in the past.

● Inflate/deflate prices or costs to facilitate trend analysis. You can use index numbers to facilitate trend or time series analysis of prices/costs by eliminating or reducing the effects of inflation so that the analysis can be made in constant-year dollars (dollars free of changes related to inflation/deflation).

● Estimate project price or cost over the period of contract performance. Prices/costs of future performance are not certain. One effect that you must consider is the changing value of the dollar. You can use index numbers to estimate and negotiate future costs and prices.

● Adjust contract price or cost for inflation/deflation. When price/cost changes are particularly volatile, you may need to include an Economic Price Adjustment (EPA) clause in the contract. The use of index numbers is one of the most popular methods used to identify and define price changes for economic price adjustment.

What Is a Commodity Index?

A commodity index is an investment vehicle that tracks the price and the return on investment of a basket of commodities. These indexes are often traded on exchanges. Many investors who want access to the commodities market without entering the futures market decide to invest in commodities indexes. The value of these indexes fluctuates based on their underlying commodities; similar to stock index futures, this value can be traded on an exchange.

KEY TAKEAWAYS

A commodity index is an investment vehicle that tracks the price and the return on investment of a basket of commodities.

- The value of these indexes fluctuates based on their underlying commodities.
- Commodity indexes vary in the way they are weighted and the commodities that they are comprised of.
- Commodity indexes differ from other indexes in one very important way: the total return of the commodity index is entirely dependent on the capital gains, or price performance, of the commodities in the index.

- Question & Answer

Q 1. What is price index?

Q 2. Explain different types of price indexes.

Hard copy submission date (31/3/2020).

- Contact Number: 8780904958