

Theories of industrial location:

Weber's Theory of Location: The problems of Industrial location has been studied by number of economists. Alfred Weber a German economist gave for the first time an analytical approach to the problem of industrial location. He tried to give a modern, systematic and scientific approach for that. It was published in 1909 in German language in the year of 1929. Weber's theory of location were concerned with manufacturing location. He has classified raw materials into two groups

- (i) Ubiquities and
- (ii) localized. Ubiquities like bricks, clay and water are available everywhere but localized material is like wood, coal, or Iron are available only at certain places. Localised materials are classified into two categories pure materials and gross materials. The materials like cotton, wood etc. add the whole or bulk of weight to the finished product and are called "pure" materials other like wood, coal, or Iron, tea, Sugarcane loose their weight in the process of manufacturing are 'gross' materials. Weight losing material attract the industry to the place were it is available. All localized materials do no attract industries. According to Weber's theory the two factors are most important in determining the location of an industry,
 - (i) Transport cost and
 - (ii) Labour cost. The industrial units has to choose that location in such a way that its transport costs are minimum. It is made by two factors, weight of the goods to be transported and distance to be covered. According to him the location of manufacturing industry is determined by the ratio between the weight of localized material and weight of product that is known as a 'material index*. Industries whose material index is not greater than one usually lie at the place of consumption. If the localized material is not used in production and only ubiquitous material is used the material index will be zero; because material index divided by weight of product. The industrial location is influenced by labour cost, transport cost, agglomerative and deagglomerative factors. The transport cost and labour, cost which are called regional factors or primary factors. The agglomerative and deglomerative factors are known local factor or secondary factor. The regional factors have the greatest influence on industrial location. In this context were explains derivation of the least transport cost location by using the same framework as Launhardt that is called location triangle. He takes one point of consumption and the most advantageous deposits of the two necessary materials M_1 and M_2 The least transport-cost location is the point at which the total ton-miles involved in getting materials to 9 place of production and the finished product to the market is at a minimum. Each corner of the triangle exerts a pull on the point measured by the weight to be transported form or to that corner.

According to Weber's theory the industry may not be necessarily centred at the point of minimum. This way weber states, "A location can be moverd from the point of minimum transport cost. It can be established at the place where labour cost is minimum transportation cost to a more favorable labour location only if the saving in cost of labour

which this new place make possible or larger than the additional cost of transportation which it involves". The labour location and its power to attract industries depends on labour cost index and locaitonal weight. The ratio between cost of labour per ton of product has been termed by Weber as the labour cost index and the total weight to be transported during the whole process of production as the locaitonal weight. The extent of deviation caused by the varying labour costs can be determined by its "labour co-efficient" that is the rate of labour costs to the location at weight.

There are some limitations of the Weber's theory of location. The theory is based on wrong assumptions about labour supply, he assumed two things fixed labour centres and unlimited supply of labour. It is not correct because a rise of an industry at a place may create new labour centres and unlimited labour supply at any center is also not correct as rapid development of means of transport and communications so, here alteration is required in weber's assumption regarding labour supply. Transportation cost depending only on distance to be covered and weighs of the material to be carried requires amendment. It depends on the method of transport, nature of goods also. To make it more realistic, the actual freight rate schedules fixed for different means of transport must be taken into account. It would be incorrect to assume fixed points of consumption it is observed that consumers are spread all over all the country Location and size of markets may vary with change in the economy. Non economic factors also exert important influence on industrial location. The theory ignores the role of capital and entrepreneurship in industrialization and the classification of material is not proper. Austin Robinson considers this distinction artificial.