

Review of the Application of the Concept of Network Externalities in the Telecommunications / ICT Industry

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Abstract

The subject of Externalities is not new; it began around the 1950s but it seems to be gaining popularity in the economic and legal literature since mid 1980,s. The concept is generally recognized in theory but capturing it in practical terms seems to be elusive.

When a transaction between a buyer and a seller directly affects a third party, the effect is called an externality. Negative externalities cause the socially optimal quantity in a market to be less than the equilibrium quantity. Positive externalities cause the socially optimal quantity in a market to be greater than the equilibrium quantity. Those affected by externalities can sometimes solve the problem privately. It is urged that if people can bargain without a cost, then they can always reach an agreement in which resources are allocated efficiently. When private parties cannot adequately deal with externalities, then the Government is expected to step in . The government can either regulate behavior or internalize the externality by using Pigovian taxes.

The term Network externality means that there are benefits if many people join and use a network. It is generally appreciated that the greater the size of the network, the greater the benefit to all users and the greater the overall value of the network. Although the network externality concept and its effects on telecommunications/ICT networks and pricing are widely accepted, the development and implementation of frameworks and models to capture the network externalities effects have been limited. This paper examines the current application of the concept of the network externalities in the Telecommunications/ICT industry.