

Chapter 8

Towards the General Theory of Information Asymmetry

Waseem Afzal

Charles Sturt University, Australia

ABSTRACT

Information imperfections of various kinds are present around us and information asymmetry is one such kind. The phrase “information imperfection” indicates information which is less than ideal for many conceivable reasons. The concept of “information asymmetry” is different, and indicates the presence of more information at one end of an informational distribution. The purpose of this chapter is not to provide a literature review of information asymmetry but to (1) build on previous work, (2) suggest a set of concepts, and (3) describe examples of information asymmetries in order to propose a framework for a general theory of information asymmetry. To this end, this chapter provides a brief overview of the concepts of information asymmetry and information imperfection. It also proposes a set of four concepts considered to be of importance in understanding information asymmetry; describes two major categories of information asymmetries; discusses different types of informational disturbances; and finally discusses the potential effects of information asymmetries.

INFORMATION ASYMMETRY

Information asymmetry can be defined as a situation in which one party to a transaction has more information than the other party (Akerloff, 1970). This difference in distribution of information places one party at advantage (Nayyar, 1990). The notion of information asymmetry has drawn considerable attention of scholars in economics. A sub-field labeled as the “economics of information” was developed and investigates a multiplicity of issues dealing with information and economics.

In this area are studies that examine the source(s) of information asymmetry and its impacts on a transaction (see for example, Akerloff, 1970; Afzal, Roland, & Al-Squri, 2009). There are also studies that investigate problems arising out of information asymmetry and the various ways in which these asymmetries can be mitigated (see for example Stiglitz, 2002).

Before delving further into information asymmetry it will be worthwhile to discuss the notion of information imperfection. Information imperfection can be described as information

DOI: 10.4018/978-1-4666-8156-9.ch008

with uncertainty, inconsistency, and imprecision (Smets, 1999). It is important to note that Smets acknowledges that uncertainty, inconsistency, and imprecision are not the only sources of information imperfection. Instead he considers these three sources as the major aspects of an informational imperfection. Information imperfection can be considered a notion broader in scope than that of information asymmetry. A less than ideal availability of information can be considered as an information imperfection. As the availability of information will almost always be less than ideal, therefore it can be argued that there will always be information imperfections of various kinds (see for example Smets, p. 225). An information asymmetry is just one type of information imperfection—it also implies the presence of two parties/poles between which the distribution is uneven (other types include deficient or equivocal information).

Discussion on information asymmetry also remains incomplete without a mention of “distribution”. Distribution implies that there is an event or matter or something else of concern about which information is being generated and then distributed. And in case of asymmetrical information this distribution is not even, so one party in the transaction will have more information than the other. This notion of distribution also hints that there should be an action of some sort of occurrence which *disturbs* the evenness of information distribution and ultimately leads to information asymmetry. Almost any occurrence represents an event about which information will be distributed. For instance, when a person wishes to sell a computer the advertisement serves as a vehicle to distribute information. However, the extent (quantitative and qualitative) to which information has been provided in the advertisement will serve as a disturbance in the distributed information—more on this later.

It is important to note that the mere quantity of information does not give informational advantage

to a person. A case where one person has a large amount of information about various sources of information on global warming and another person has just read one scientific report on this issue presents an example in which while the first person may have more information but their information may not necessarily be quality information. And hence they may not have informational advantage. The preceding example demonstrates the point that there are certain aspects associated with information that can influence the extent of information asymmetry. These aspects can be broadly labeled as quantity and quality of information. A person merely having large amounts of information, but mostly irrelevant and of poor quality, about a matter will not have an advantage over another person who has a lesser amount but more relevant information about that matter. In this case there is an information asymmetry but it does not put the person with excess information in a favorable position. In addition to the aspects of information (quantity and quality), there are aspects of information asymmetries which require careful attention in order to develop a conceptual framework—the subject matter of the next section.

IMPORTANT CONCEPTS

I would like to first describe four concepts that are important in expanding our understanding concerning the sources of and means to create information asymmetry. Three of these concepts (proximity, change, and causal complexities) represent the sources whereas the fourth concept (disturbance) denotes means to create asymmetrical information. Concerning conventional sources of information asymmetry, such as position (e.g., social position, position in an organization) education, and experience, much has already been said (see for example Aboody & David, 2000, for discussion on insider’s informational advantage which they enjoy due to their position; Akerloff,

10 more pages are available in the full version of this document, which may be purchased using the "Add to Cart" button on the publisher's webpage:

www.igi-global.com/chapter/towards-the-general-theory-of-information-asymmetry/127127

Related Content

An Intelligent Web Search Using Multi-Document Summarization

Sheetal A. Takale, Prakash J. Kulkarni and Sahil K. Shah (2016). *International Journal of Information Retrieval Research* (pp. 41-65).

www.irma-international.org/article/an-intelligent-web-search-using-multi-document-summarization/147288

Development of the Leader Integrity Assessment

J. Alan Marshall (2013). *Online Instruments, Data Collection, and Electronic Measurements: Organizational Advancements* (pp. 219-244).

www.irma-international.org/chapter/development-leader-integrity-assessment/69743

User-Oriented IR Research Approaches

Iris Xie (2008). *Interactive Information Retrieval in Digital Environments* (pp. 1-28).

www.irma-international.org/chapter/user-oriented-research-approaches/24522

Twitter Users' Classification Based on Interest: Case Study on Arabic Tweets

Noura A. AlSomaikhi and Zakarya A. Alzamil (2020). *International Journal of Information Retrieval Research* (pp. 1-12).

www.irma-international.org/article/twitter-users-classification-based-on-interest/241915

Online Survey Software

Jason D. Baker (2013). *Online Instruments, Data Collection, and Electronic Measurements: Organizational Advancements* (pp. 328-334).

www.irma-international.org/chapter/online-survey-software/69749