



## **TEACHING NOTES**

### **MARKET FAILURE: NOTES ON TEACHING MICROECONOMICS WITH ISLAMIC PERSPECTIVE**

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#### 1. INTRODUCTION

In teaching Principles of Microeconomics, the discussion on market failure is introduced after students have grasped the idea of free market economy. Once students understand the importance of market in achieving efficiency, they are then presented with the facts on problems and shortcomings of the market. Chapter title such as 'Market Failure and Government' is usually given to the discussion. The discussion, for example, appears in Chapter 5 in McConnell, Brue and Flynn (2012) and Chapter 6 in Parkin (2013).

Focus of discussion on market failure is usually the role of government. Learning outcomes of the topic basically require students to have clear understanding of: (i) the characteristics and importance of public goods, (ii) the types of externalities arising from market activities, (iii) roles of government in correcting negative externalities, (iv) the Coase theorem, its significance, and the conditions necessary for it to work, and (v) the concept of asymmetric information, moral hazard and adverse selection problems (McConnell, Brue and Flynn, 2012; Parkin, 2013).

Given the wide range of topics, instructors who want to bring Islamic perspectives into the discussion may feel overwhelmed by the diverse issues and at the same time are constrained by the limited contact hours. The proposed points related to Islamic perspectives on market failure could be discussed with students in selective manner. The points are not intended to be comprehensive with in-depth details; rather they suffice to equip students with awareness of the Islamic perspective. More specialized courses such as the Foundation of Islamic Economics (ECON 1710), as taught at the Kulliyah of Islamic Economics and Management Sciences,

International Islamic University Malaysia, should be the best platform for further elaboration.

This paper starts with the definition of market failure and issues related to it. The discussion is crucial in putting into perspective the correct economic concepts on the subject, so that the idea of market failure from the conventional view is not misrepresented. In Section 3, market and government roles in Islam, with focus on how to minimize the problems arising from market failure are deliberated. Islamic perspective on externalities is discussed in Section 3.1. In Section 3.2, the issue of asymmetric information and its connection to *gharar* is elaborated. The last section is on concluding remarks.

## 2. MARKET FAILURE AND RELATED ISSUES

Market is a meeting place between buyers and sellers to undertake exchange activities. Three important functions of market are to provide the mechanism for resource allocation, to set price and to generate and distribute income and wealth via functional distribution. In theory, both productive and allocative efficiencies are possible under a perfectly competitive market.

Market failure is a situation in which a free market is no longer efficient and effective in playing its role, leading to misallocation of resources in producing goods and services. Several factors such as time-inconsistent preferences, information asymmetries, non-competitive markets, principal-agent problems, externalities and public goods are among the common issues associated with market failure (Mrozek, 1999).

In addition, inefficiency arising from market failure is a consequence of a market participant who pursues for his or her pure self-interest (Ingela and Jürgen, 2013), resulting in, for example, environmental pollution (negative externality). Under such condition, correction to make one party better-off will result in someone else being worse-off. The outcome of market failure, therefore, is not Pareto optimal. Hence government intervention is considered necessary to rectify the problem (Lee and Clark, 2013).

## 3. MARKET AND STATE IN ISLAM: AN INTEGRATED APPROACH TO TACKLE MARKET FAILURE

In teaching market failure from the Islamic perspective, many articles can be introduced to students related to the nature of market

in Islam (Ahmad, 2009; Reda, 2013; Salman, 2013; Siddiqi, 2001) and roles of the state in Islam (Chapra, 1979; Hasan-uz-Zaman, 1991; Naqvi, 2013).

At the outset of the discussion, instructors need to inform students that although Islam prefers markets, the nature of market in Islam is not the same as in capitalism, at least in two major assumptions. First, the demand and supply follow the Islamic rules of the game and second, the economic agents are Islamic man (Hossain, 2014; Mannan, 1984). These two assumptions are long topics to be discussed in the classroom. Instructors, nevertheless, need to emphasize the two assumptions as the key differences between the nature of market in Islam as compared to capitalism. Once the system is put under the *shari'ah* framework (Islamic rules of the game) and being operated by *shari'ah* compliant economic agents (Islamic man), problems in the market and issues related to market failure are minimized.

Students also need to be cautioned that even under such settings, problems and issues related to market failure are impossible to be entirely eliminated. Instructors then can bring in the discussions on the roles of government or state in Islam. In general, there are three important roles of state in relation to establishing and sustaining the Islamic economic system (Askari and Taghavi, 2005: Faridi, 1983; Oran, 2010: Siddiqi, 1996). First, the state must put in place the Islamic system to govern society. Islamic system here includes the Islamic legal frameworks, and institutions as well as mechanisms considered important to realize the goals of Islam (to bring mankind to *al-falāḥ*). Second, the state needs to provide a conducive environment for Islamic man to exist and prosper. Among the essential conditions required for developing the Islamic man are good education, pious individuals, caring and inclusive society, harmonious living environment and economic prosperity. Third, the state must ensure justice and fairness prevail in the system – social justice, economic justice and legal justice.

The above three points relate to the central roles of the state in establishing the Islamic framework for the Islamic system to exist. The following points are specific economic roles of state in relation to addressing the problem of market failure:

- i) Provision of public goods: Essential infrastructure such as roads, hospitals, schools and many more public goods are unprofitable for private firms to produce. The state, therefore, needs to provide public goods.

- ii) Regulating monopoly: Monopoly must be regulated. Other market structures, such as monopolistic competition and oligopoly, also require close supervision and regulation. Students need to be informed regarding the possibility of allowing natural monopoly (regulated) to operate, as that could be the way to ensure proper resource allocation. This natural monopolist, however, is subject to government supervision. To say that Islam prohibits monopoly is an erroneous statement. Rather, Islam prohibits exploitation of monopolistic position for the monopolist's own interest.
- iii) Tax and subsidy: The discussion on tax and subsidy can be more effective by way of real examples familiar to students. Students need to be informed that government may impose tax and/or introduce subsidy for certain objectives, in particular, on matters related to the protection of public interest, or the five elements of *maṣlahah* (life, faith, intellect, wealth and lineage). Under the free market theory, tax and subsidy distort market efficiency but in practice, they are crucial to address many economic and social issues.
- iv) Polluter pays principle: The principle stipulates that the person who damages the environment must bear the cost of such damage. In order to minimize negative externalities, such as pollution from industrial activities, the state has to regulate firms' behavior via fines, summonses or penalties for emitting waste into the environment (Huber and Wirl, 1998; Luppi and Parisi, 2012). The expectation is that when Islamic values are strongly practiced by the economic agents (now Islamic man) and the Islamic system is in place, regulatory fines, summonses and penalties would be less applied since Islamic man is a law-abiding citizen. Nevertheless, the regulations shall remain in place to hinder problematic behaviors.
- v) Supervising market: Regulatory agencies set by the state need to supervise the market from time to time. The agencies must ensure that firms follow the standards set. Producers of halal food, for example, need to be monitored to ensure that they follow proper requirements of halal production.

- vi) Restoring market failure: any form of market failure necessitates state intervention. An extreme case such as natural disaster can totally ruin the market. Under such situation, the state needs to restore the economy and market operations.

Two areas where instructors can discuss some Islamic perspectives directly related to market failure are issues of externalities and asymmetric information. I provide brief notes on the two issues with several examples.

### 3.1 EXTERNALITIES: POSITIVE AND NEGATIVE

From the Islamic perspective, positive externalities are encouraged because of their external benefits to the third party. Any positive outcome from market activities to society do not just contribute to material benefits, but more than that, will be rewarded as promised by Allah for spreading goodness; this is something for which muslims must strive. The followings are several examples of positive externalities in line with Islamic values:

- i) Production of electric vehicle reduces pollution emissions and improves local air quality leading to better environment and health quality.
- ii) A beekeeper keeps the bees for their honey. The bees become catalysts for pollinating surrounding crops. The value generated by the pollination is a positive externality to society and may be more important than the value of the harvested honey itself.
- iii) An individual who maintains and improves the conditions of his/her residence creates positive externality to neighbors in the form of increased market value for their properties as well as a pleasant neighborhood.

Negative externalities, on the other hand, are outcomes from market activities that result in negative effects on a third party. They create an external cost to society. The following are examples of negative externalities deemed contradictory to Islamic values:

- i) All forms of environmental pollution (air, water, noise etc.) arising from market activities. Water pollution from industrial activities, for instance, contaminates the sources of water, harming plants, animals, and humans.
- ii) Overfishing by fishing companies depletes the stock of available fish (common property). In the absence of

ethics and appropriate environmental governance, the issue may lead to the tragedy of the commons.

Islam condemns any act that may harm society. This condemnation is in line with the *maqāṣid* of *sharīʿah* (objectives of *al-sharīʿah*). The two main objectives of the *sharīʿah* are to promote *maṅfaʿah* (benefits, e.g. positive externalities) and to prevent *mafsadah* (harm, e.g., negative externalities). If a particular act is done with a clear understanding of the negative effects, the act is unlawful and thus, prohibited. Islam, therefore, condemns activities that lead to negative externalities but promotes activities that lead to positive externalities.

### 3.2 ASYMMETRIC INFORMATION

Transparency and free flow of information are vital elements for market efficiency. Asymmetric information hampers market efficiency. Rational decision cannot be made when one party in a transaction has more or superior information compared to another party. Asymmetric information may lead to exploitation because one party can take advantage of the other party's lack of knowledge.

One classic example of asymmetric information is in the second hand car transaction. The seller often has more knowledge about the conditions of the car and tends not to reveal the car's bad condition to the buyer. The buyer might end up paying for a car that he would otherwise not purchase had he been well-informed.

Another example of asymmetric information is in the transaction of health insurance. In this transaction, the buyer has more knowledge about his health and tends not to reveal all to the insurance company in order to avoid paying high premium.

Given these examples, instructors can then relate the problem of asymmetric information with the element of *gharar*. Literally, the Arabic word *gharar* means deceit, fraud, uncertainty, danger, peril, delusion, or hazard that might lead to destruction or loss. Technically, *gharar* refers to any transaction in which existence or characteristics of the item are not certain, due to lack of information, ignorance of essential elements in the transaction to either party, or uncertainty of the ability of one party to honor the contract (El-Gamal and Mahmoud, 2001). *Gharar* may occur due to the ignorance of either party who do not care to get sufficient information before undertaking a transaction. It is important to note here that Islam prohibited major *gharar* due to its unfair outcomes. Minor *gharar*, however, is tolerated such as in the case of

uncertainty regarding the real conditions of item inside a packaging. Information on the package should be sufficient for buyers to make decision without having to request the seller to open the package.

In teaching Microeconomics topics on market failure and government roles in the economy, the discussions thus far relate key Islamic concepts and perspectives on the topics. The discussions are intended to be a supplementary note to instructors in teaching Microeconomics from the Islamic perspective.

#### 4. CONCLUSION

Islamization of human knowledge requires instructors to integrate Islamic knowledge with secular knowledge. In teaching Principles of Microeconomics with Islamic perspective, instructors often face the issue of limited time to discuss the Islamic perspective related to the chapters taught. I am of the view that the core contents of the Principles of Microeconomics course should be emphasized. Integration should come when students have a better understanding of the topic being taught and this usually happens after the instructors have finished teaching one particular chapter. Students then should be ready to be exposed to the Islamic perspective relevant to the chapter.

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