

THE TRAGEDY OF THE PRIVATIZATION OF THE COMMONS¹

Sung-Bae Kim², Sung Bong Cho*³

In the governance of common pool resources, there are two types of error. For one, the type 1 error is concerned with the case where unrestricted use of common pool resources leads to over-utilization and depletion of the resources. This is the well-known problem of the tragedy of the commons. We refer to this as a type 1 error, because a tragedy of the commons happens if a community mistakenly claims a certain resource as commons when, in fact, the resource would be better utilized as private property.

For another, a type 2 error refers to the case where the erroneous privatization of common pool resources results in inefficient resource allocation or “race to the bottom” situation. Therefore, this problem can be termed as *the tragedy of the privatization*. In this case, an optimal governance strategy may be to use the resource as a common property resource rather than a private property such that it may be governed either by the state or a self-governing community. In the real world, there are numerous cases where type 2 errors occur when common pool resources are governed.

This study addresses the issue of the tragedy of privatization, which happens if the consent of a community is not well defined when in fact it should have been for the optimal use of the resource. In a sense, the tragedy of the privatization is the opposite case of the tragedy of anti-commons where the consent of a community is defined to excessively result in the under-utilization of the resource.

We can find diverse ways to avoid the tragedy of the privatization. For example, we can interpret a firm as an organization in which employees voluntarily yield their private efforts to the employer preventing the potential tragedy of privatization by restraining their own use of work hours. Another example is a local government which quite often uses a mandate to restrict the way its constituents utilize their properties to prevent the tragedy of privatization.

Specifically, we will do three things: first, we will explore several cases of the tragedy of the privatization of the commons in a historical context. Second, we will attempt to classify these cases based on the current status of governance. Finally, we will identify the determinants of the governance types. An effort of this nature would enable us to further expand the horizons of our understanding of the issue of common pool resource governance.

Keywords: the tragedy of the commons, the tragedy of the privatization, the tragedy of the anti-commons, firm, government, governance types

The authors agree to allow the Digital Library of the Commons to add this paper to its archives for IASC conferences.

¹ This work was supported by the Human Resources Development of the Korea Institute of Energy Technology Evaluation and Planning (KETEP) grant funded by the Ministry of Trade, Industry and Energy (No. 20144010200660).

² Professor in Department of Public Administration, Soongsil University, graal@ssu.ac.kr

³ Professor in Department of Economics, Soongsil University, sbcho@ssu.ac.kr

I. Introduction

In the governance of common pool resources, there are two types of error. For one, the type 1 error is concerned with the case where unrestricted use of common pool resource leads to over-utilization and depletion of the resources. This is the well-known problem of the tragedy of the commons. We refer to this as a type 1 error, because the tragedy of the commons happens if a community mistakenly claims a certain resource as commons when, in fact, the resource would be better utilized as private property.

For another, a type 2 error refers to the case where the erroneous privatization of common pool resources results in inefficient resource allocation or a “race to the bottom” situation. Therefore, this problem can be termed as *the tragedy of the privatization*. In this case, an optimal governance strategy may be to use the resource as a common property rather than a private property such that it may be governed either by the state or a self-governing community. In the real world, there are numerous cases where type 2 errors occur when common pool resources are governed.

In a sense, the tragedy of the privatization is the opposite case of the tragedy of the anti-commons where the consent of a community is defined to excessively result in an under-utilization of the resource. Public waters that are not allowed to be used privately to increase the benefit to the community or society as a whole in the context of a public trust doctrine is an institutional remedy to prevent the tragedy of the privatization. Creating a national park or placing it under the umbrella of national property for the benefit of the community as a whole is a similar case.

Most of the goods subject to a public trust doctrine are owned by public entities such as national government, local government, or a public institute. However, as institutional remedies for the tragedy of the privatization we can include more comprehensive cases in which not only public but also private economic agents are involved through interactive and common economic activities.

In this paper we provide some conceptual frameworks to study how the tragedy of the privatization occurs, under which conditions we would be able to notice the tragedy of the privatization, how human organizations find ways to address it, and the price for such arrangements.

In the next chapter we outline diverse phenomena that occur during the process in which property rights are being formed. In chapter III, we suggest a formal definition for the tragedy of the privatization. In chapter IV, we present some examples of situations in which the tragedy of the privatization could take place or could be avoided through counteracting institutional arrangements. In chapter V, we specify governance issues to address the tragedy of the

privatization. In chapter VI, we conclude.

II. The evolution of property rights

Our understanding of the tragedy of the privatization would be deeper and wider when we consider diverse issues on the property rights and evolutionary path of property rights we may imagine. One good starting point is the tragedy of the commons.

The tragedy of the commons takes place when individuals acting independently according to their self-interest could harm the interests of the whole group by depleting the commons. In general, the tragedy of the commons⁴ happens as common resources do not have a specific owner. This is the reason for which the tragedy of the commons is usually understood to be a matter for which we could not define appropriate property rights.

Regarding this issue, Ostrom *et al.* (1999) summarizes four types of property-rights systems used to regulate commons, i.e., open access, group property, individual property, and government property. Converting the commons into individual property is privatization designed to prevent the over-use of the common resources by allowing exclusive use of the property. However, when we allow a given resource to have too many owners, whether it is a natural resource or an artificially designed resource such as intellectual property rights, another peril may await us—the tragedy of the anti-commons⁵. A tragedy of this nature takes place when there are either too many owners or when it is not possible to exclude all the stakeholders involved. For instance, a key technical breakthrough in the IT industry may not be available when there are many patent holders who are unable to agree on the specific use of the patent. In this sense, the tragedy of the anti-commons is the opposite extreme of the tragedy of the commons in which case there are no owners. The tragedy of the anti-commons happens as it is too costly to exclude the right of all the parties involved to use the resource. The tragedy of the anti-commons results in the under-use of the resource involved, whereas the tragedy of the commons results in its over-use.

Another remedy for the tragedy of the commons is to convert it into a government property as summarized by Ostrom *et al.* (1999). One such type of government property is a public trust, which involves the preservation of public resources for public use. Navigable streams and lakes for drinking and recreational purposes, national or state parks, intertidal zones, and so on, are some examples of government property subject to public trust.

One way to interpret the tragedy of the privatization is that it could be the result of an

⁴ The tragedy of the commons is named after the title of an article by Hardin (1968).

⁵ The tragedy of the anti-commons is named after the title of an article by Heller (1998).

inappropriate remedy for the tragedy of the commons. Confronted by the depletion of common resources, efforts to allocate property rights to individual owners may, in turn, result in problems of the opposite nature, thereby reducing the societal value of the resources or disturbing the harmonized interests of the surrounding or neighboring community.

III. The tragedy of the privatization defined

One area in which we can find the tragedy of the privatization rather frequently is where local interest collides with global interest. For instance, although hosting a factory could be the way for a local area to maximize its economic benefit, preserving the environment by creating a national park might be a better way from the viewpoint of national perspective. In this case, should the local area or the local government decide to host a factory it may be considered the tragedy of the privatization from the viewpoint of national interest. One way in which to prevent the tragedy of the privatization is to subsidize the local area by the amount by which they would have benefited by hosting the factory. In this sense, the tragedy of the privatization takes place because it may not be possible to provide sufficient cross-subsidization to the local area from the central government. Alternatively, it may happen when the central government is unable to override the decision of the local government.

In <Table 1>, local area A would be better off by hosting a factory rather than preserving the environment, although the nation as a whole would be better off by preserving the environment. In the ideal case of zero transaction costs we can reach a social optimum through cross-subsidization as Coase (1960) describes. In this case another area could subsidize an amount between [50, 100] to obtain the consent of local area A not to host a factory. However, if the transaction costs are not zero, or more specifically, if it is not possible to find any way to implement such a cross-subsidization plan politically and legally, it may not be easy to attain a global optimum, thereby resulting the tragedy of the privatization.

<Table 1: Local Interest vs. Global Interest>

	Local Area A	Other Area	Nation as a whole
Hosting a factory	150	600	750
Preserving environment	100	700	800

This type of analysis is not always in favor of the environment though. The tragedy of the privatization would still occur if we exchange the title of ‘Hosting a factory’ and ‘Preserving environment’ in <Table 1>. As a matter of fact, Coase (1960) emphasizes development and industrialization rather than preservation of the environment in his classic paper as he quotes “I know no general rule of common law, which ... says, that building so as to stop another’s prospect is a nuisance. Was that the case, there could be no great towns; and I must grant

injunctions to all the new buildings in this town...”⁶ He also quotes the statement of an American judge saying “Without smoke, Pittsburgh would have remained a very pretty village”⁷ implying that the benefit of industrialization outweighs its costs.

As <Table 1> can be seen as a typical example of external diseconomy one may enquire as to the difference between external diseconomy and the tragedy of the privatization. Although the tragedy of the privatization can include the case of external diseconomy, it is a wider concept. Assuming we replace the title of ‘Preserving environment’ with ‘Building an amusement park’ in <Table 1> and just assume that there is no external side effect for either ‘Hosting a factory’ or ‘Building an amusement park.’ In this case the tragedy of the privatization remains an issue to resolve, whereas the external diseconomy is no longer an issue. The tragedy of the privatization can be more formally defined as a case for which the global interest cannot be optimized.

Our main concern is neither the environment nor industrialization. What is interesting to us is the conditions under which such a collision of local interest vs. global interest remain unresolved. We can begin by commenting that the concept of *local* and *global* is quite arbitrary as well as relative. It could be a member of a family vs. the whole family, a store vs. the whole shopping mall, and a city vs. the whole nation to name a few. It is not too difficult to imagine that, in general, unified decision-making would be easier in the case of a smaller community for various reasons. Smaller geographic areas, similar historical and/or cultural backgrounds, and the same administrative districts or jurisdictions would mean such conflict between local and global interests could be resolved more easily through economic or political negotiation and/or integration. On the other hand, for larger communities and parties with huge differences of interests, it becomes tougher to avoid the tragedy of the privatization. For instance, international talks on mitigating greenhouse gas allow us to observe that drawing voluntary agreement through negotiation is a prohibitively costly process.

IV. Cases of the tragedy of the privatization

(1) Outdoor store sign

Even within a small geographic area and the same administrative district, it is sometimes possible to observe cases of the tragedy of the privatization. One visual example is the coordination of outdoor store signs along a shopping street or in a shopping mall. We can easily

⁶ Attorney General v. Doughy, 2 Ves. Sen. 453, 28 Eng. Rep. 290 (Ch. 1752), recited from Coase (1960) p. 20.

⁷ Prosser (1955), *The Law of Torts*, p. 413, recited from Coase (1960) p. 20.

find, within the same city, a *messy* shopping street with chaotic signboards of stores and/or brand names and a *neat* shopping street with clean and small store signboards that even form an appealing harmony with the image of the street.

What distinguishes a *messy* street from a *neat* street? In many cases, a *neat* shopping street has a relatively strong control mechanism and/or ownership structure to command and coordinate many stores with different interests, whereas a *messy* shopping street has neither such control tools nor an appropriate ownership structure to coordinate different stores. In a newly established shopping street named *Garosu-gil Road* in the southern part of Seoul, store signboards are conspicuously minimalist in terms of their number and sizes. On the other hand, the traditional shopping street named *Myung-dong Road* is overflowing with huge and distracting store signboards. As one can easily imagine, *Garosu-gil Road* appears clean and attractive to young couples, whereas *Myung-dong Road* appears disorderly and messy, even though it is filled with shoppers and tourists as it is well known with a reputation as a traditional Korean shopping street.



Figure 1: *Myung-dong Road*



Figure 2: *Garosu-gil Road*

As we can see in the case of *Myung-dong Road*, a *messy* shopping street is a case of the tragedy of the privatization in terms of store signboards. Outdoor store signboards are an easy victim of the tragedy of the privatization because it would be easy to think that a store signboard is a private good with its size and outlook at the hands of the storeowner. Store signboards are usually attached around the entrance of a store indicating the location and the name of the store. However, uncoordinated display of outdoor store signboards could result in a sub-optimal situation; for example, a *messy* shopping street such as *Myung-dong Road*.

As a matter of fact, people devise diverse arrangements to coordinate outdoor store signboards. In many cases, local communities of stores get together to discuss various issues for the benefit of the shopping street or shopping mall as a whole, including outdoor store signboards. These communities voluntarily draft guidelines for outdoor store signboards to prevent them from harming the overall impression of the shopping street. In other cases, the government regulates through legislation. For example, in the Republic of Korea, we have a law named *Outdoor Advertisement, Etc. Control Act* to regulate outdoor signboards. It requires registration with or permission from the local government to install an outdoor signboard. It also allows local government to regulate outdoor advertisement through the voluntary agreement of the local community. Additionally, through this law, a local government can regulate outdoor advertisements by appointing a specific area as a ‘Model Area for Outdoor Advertisement Organization.’

On what conditions do we expect to observe a *neat* shopping street rather than a *messy* one? In the case of *Garosu-gil Road* and *Myung-dong Road* in Seoul, there are some noticeable differences between them. First, whereas *Garosu-gil Road* is a relatively simple single straight street, *Myung-dong Road* is quite a complex combination of streets in a comparatively larger area. Second, *Garosu-gil Road* has a relatively short history with fewer stakeholders before the shopping street was formed, compared to *Myung-dong Road*, which has a long history with a large number of existing stores. From these differences between the two shopping streets in Seoul, one may imagine that it would be easier to voluntarily agree on the size of outdoor store signboards when a smaller area has to be covered. This is not a new point worth mentioning as this case is similar to the previous case of local interest vs. global interest. A more interesting point is the historical background of the community involved. In the case of the older shopping street it would not be easier to control existing stakeholders to fit their outdoor store signboards according to the designed guidelines, as changing the store signboards abruptly may be a risky business strategy resulting in the loss of existing customers. In a newly established shopping street, on the other hand, as there would not be as much interest at stake it would not be that difficult to persuade each of the stores for the benefit of the shopping street as a whole.

Another point to consider is the degree of competition. In most cities of the Republic of Korea, shopping streets are located near the central business district of each city. In larger cities there would be opportunities to observe *neat* shopping streets, whereas in smaller cities there may not be much competition among shopping streets, and we may end up finding *messy* shopping

streets. We can conjecture that, from this finding, competition among shopping streets encourages them to clean up appearances and environments.

(2) Department store and a residual claimant

Analyzing the case of a *neat* and a *messy* shopping street, the thought may occur of the possibility of one store simply buying out all the other stores along the street and disposing of distracting store signboards. Actually, this is the case on which we want to focus now. One opposite extreme of a *messy* shopping street is a department store within which a firm operates many in-house stores and controls them by enforcing a strong hierarchical order. A department store, by definition, is not subject to the tragedy of the privatization as, through maintaining strict order, it would be able to eliminate situations in which one of the stores would not agree to forfeit its *local* interest.

The case of a department store reminds us of the concept of the residual claimant from the firm theory. As conceptualized by Alchian and Demsetz (1972), in a team production environment, a residual claimant monitors and controls all the other team members and her share is determined by the remainder after all the other team members are paid their shares. To maximize her own share she tries to enhance the efficiency of the team production and monitors the efforts of each team member. Such a team with a residual claimant is one way to explain the nature of a firm. In the case of a department store, the owner or CEO orchestrates the inputs of employees in a way to maximize the profit. Just as a member of an orchestra would not be able to provide a solo performance without considering the contribution of the whole orchestra, an employee of a firm should provide her inputs consistent with the production activities of the other employees of the firm under the order and control of the residual claimant. In this sense, we can interpret a firm as an organization that has to find ways to address the tragedy of the privatization. In our case involving a shopping street, the CEO of a department store controls the store signboards and, of course, other inputs from the participating members. According to our interpretation, a firm is an organization in which participating members voluntarily give up their rights to control their private inputs in exchange for the consistent and productive performance of the team.

There could be other ways, such as partnerships and cooperatives, to regulate participants' inputs instead of allowing a residual claimant to exercise full control. In these cases, these organizations allow more discretion in the use of their own inputs and more rights in terms of the share of the final products. Alternatively, there may be a contract between a mall operator and a participating store regarding the conditions of store facilities, such as store signboards, and common facilities and services, such as the parking lot, restrooms, security, cleaning services, utilities, and rent and fees for services provided by the mall operator.

In another case, a local government or an autonomous community could provide a solution by regulating participants' inputs for enhanced economic performance of the community involved. An industrial complex, tourist facilities complex, or shopping districts are some examples.

(3) Agency problem

Other examples of the tragedy of the privatization are found when a property has more than one owner. For instance, when there are many owners, each with a small share of the property, it is common to find that one of the owners effectively controls the property when the other owners do not pay much attention in exercising their due share of property rights. This typically happens when the other owners' share is sufficiently small enabling them to escape attention. One classical example is the case of political apathy in a democracy. As each person with voting rights thinks that exercising their voting rights would not change the result of the election anyway, voter turnout typically remains quite low. The emergence of a dictator from within the midst of such political apathy is an example of the tragedy of the privatization. The sudden rise of the despotic emperor out of the peaceful democracy described in the movie *Star Wars* is a typical example. Likewise, a minority shareholder may pay less attention to the management of a company than a majority shareholder. As a result, one attentive owner may rise as a dominant player while owners with a small share or minority shareholders remain indifferent.

We can find such examples in many corporations and non-profit organizations. A recent controversy in Korean corporate governance is the unbalanced power of Korean *chaebol*⁸ managers who have a relatively large ownership as the extent to which they exercise their shareholders' rights exceeds the shares they are due, thereby possibly damaging the interests of other shareholders. Some⁹ criticize Korean *chaebols* for their lack of transparency which magnifies the problem of expropriating the dispersed minority shareholders by the controlling shareholders.

Similar problems occur in some churches. A typical situation occurs when a charismatic pastor, whose initial contribution was crucial in establishing the church in the local area, virtually privatizes the church and even tries to arrange for his own son to become his successor.

⁸ *Chaebol*, a form of diversified conglomerates, is the prevalent form of large Korean firms such as Samsung, LG, Hyundai Motor and SK.

⁹ See, as an example, Park, Shin and Suh (2008).

V. Governance of the tragedy of the privatization

We oftentimes observe the tragedy of the privatization when there are numerous local owners whose interests do not coincide with global interests. Could there be a way to improve the governance structure to address this problem? One good starting point would be the four types of property-rights systems described in Ostrom *et al.* (1999) and listed in <Table 2>, which are open access, group property, individual property, and government property. Open access indicates the absence of enforced property rights and, obviously, forms the source of the common pool problems. The other three property-rights systems could be used as a way to address the tragedy of the privatization.

<Table 2: Types of property-rights systems>¹⁰

Property rights	Characteristics
Open access	Absence of enforced property rights
Group property	Resource rights held by a group of users who can exclude others
Individual property	Resource rights held by individuals (or firms) who can exclude others
Government property	Resource rights held by a government that can regulate or subsidize use

(1) *Property-rights systems to cope with the tragedy of the privatization*

Let us start from the bottom of <Table 2>. Nationalization is an intuitively easy way to prevent the tragedy of the privatization. Converting a property into public property or a public trust automatically prevents it from being abused or inefficiently used by one of the individual owners. A typical example of such an arrangement is the public trust doctrine,¹¹ which ensures that certain resources are preserved for public use, and requires the government to maintain them for the public's reasonable use.

Another way to circumvent the problem of the tragedy of the privatization is through individual property. If dispersed ownership of a key resource results in less efficient outcomes, one of the owners may rise up as a firm and buy out the key resource from all the other owners to raise the productivity and prevent the problem of the tragedy of the privatization. The firm would be contracted to employ the previously dispersed owners to work for the firm and provide relevant compensation or wages according to their contributions. Such an arrangement is a typical case where a residual claimant can efficiently allocate resources and monitor whether relevant inputs were being invested for the productive behavior. Instead of uncoordinated and unorganized use

¹⁰ <Table 2> is reproduced from Ostrom *et al.* (1999).

¹¹ http://en.wikipedia.org/wiki/Public_trust_doctrine

of the resources, a firm, through efficient management and allocation of the resources, may end up with an improved result and a greater share for the participants.

Converting a property into a group property is a third way to prevent the tragedy of the privatization. Rather than separate control by each owner, a coordinated and harmonized form of control by a group of owners would be able to bridge the gap between local interests and global interests. In the case of outdoor store signs, storeowners as a group could agree that outdoor store signs are the collective property of the shopping street and, consequently, ensure that the store signs are harmonized with a neat appearance. Storeowners would follow the group decision to comply with the agreed upon size, location, color, and number of outdoor signs such that their shopping street remains neat and attractive to tourists and shoppers. As a matter of fact we often observe similar arrangements in shopping streets such as those in which shopkeepers have formed a cooperative, another typical example of an organization of which its members voluntarily yield some form of their property rights for the grand benefit of the cooperative. For example, farmers belonging to an agricultural cooperative forfeit their own right to sell agricultural products to enable the cooperative, as a group, to obtain more attractive prices for its products and to benefit from shared marketing strategies.

(2) Discussion

When is group property a better choice and when is individual property a more efficient option? Or under which circumstances would government property present the best solution? The answer depends on the situations in which the particular resource is utilized. The option that provides the most value to the participants will be the answer. It would definitely depend on the transaction costs¹² for each option. Individual property, group property, and government property each have their advantages and disadvantages. As a different environment provides a different rationale for each option we may not find a universally superior way to address the tragedy of the privatization.

Communication and cooperation among the different stakeholders with local interests is the key to address the tragedy of the privatization to ensure optimal global interests. However, even with coordinated objectives and agreements, we usually find participants confronted with shirking, violation of agreements, and moral hazards. Considering this efficient enforcement of the agreements, monitoring and penalizing, if necessary, are key factors to draw successful results. The best governance response, therefore, depends on the nature of the problems and

¹² If the transaction costs are trivial then our options would not show much difference according to Coase (1960). However, if the transaction costs are zero, our case of the tragedy of the privatization would not appear after all as there may not be a sufficiently large difference between local interests and global interests in the first place.

the relevant measures against such problems.

First, of the abovementioned ownership options, individual property rights allows for individual entrepreneurship as the most efficient way to manage the communication and cooperation of each individual stakeholder. Moreover, when the potential shirking and the possibility of moral hazards are significant, individual property ownership could be a good solution. An advantage of this form of property ownership is that it presents a strong incentive to communicate, contribute cooperation, monitor, and encourage participants as the residual claimant would benefit considerably from such activities. However, when each player tries to retain a particular portion of their property rights without yielding control of the property involved, individual property ownership would not work.

On the other hand, group property ownership is a good option when it is possible to provide an effective group incentive structure to align individual interests with global interests. If individual members were to try to retain at least part of the control they exert, it would not be easy for any particular individual to buy out the resources and emerge as an entrepreneur. In this case, group property presents an effective way to address the tragedy of the privatization. One of the problems we face in this case is that the cost of coordination and communication among the different players is typically quite large. Also, the potential for shirking and moral hazard is higher than in the case of the individual owner. Team production¹³ is in many cases the source of the moral hazard as each player wrongly believes that even if they were to exert less than the optimal effort it would not matter much. This is the typical case of the prisoner's dilemma or, more generally, the fallacy of composition.

Finally, government property would be the last resort if individual property and group property ownership would not work. If people neither want to yield their ownership to the residual claimant nor believe that voluntary agreement among the owners of the property to coordinate their control of the resources would work, they may choose the government to enforce the coordination by force. Government, whether it is local or central, may choose to nationalize the related resources as a whole or it may choose to control only the key resources that are subject to the tragedy of the privatization.

For our understanding, consider the case of outdoor store signs as an example. In chapter IV, we mentioned the unattractive and disorderly shopping street with chaotic outdoor store signs as an example of the tragedy of the privatization. One of the solutions that was suggested is a department store in which a firm buys out all the stores and cleanly rearranges the outdoor store

¹³ Holmström (1982).

signs with centrally designed coordination. This is evidently the institutional remedy through the concept of individual property ownership. Another way is the group property solution. For example, a group of stores can organize a cooperative of shopkeepers and it can announce that the outdoor space for store signs is the property of the cooperative and require each member of the cooperative to adhere to guidelines for store signs, such as size, color, form, and harmony with the street outlook. Finally, a local government may regulate the outdoor store signs directly. This is, as a matter of fact, a *de facto* conscription of the outdoor space for store signs by the local government. Any shopping street subject to the *Outdoor Advertisement, Etc. Control Act* of Korea should comply with local government regulations. Our example can be summarized as <Table 3>.

<Table 3: Types of property-rights for the case of outdoor store signs>

	Source of the problem	Institutional remedies		
Types of property-rights system	Dispersed ownership	Individual Property	Group Property	Government Property
Examples of arrangement and its result	The tragedy of the privatization when there is no regulation on the store outdoor signs: Ugly and messy shopping street with chaotic outdoor store signs	Department store: Clean outlook with centrally coordinated design by a firm	Cooperative of shopkeepers: Neat outlook by following the guideline of shopkeepers cooperative	Government regulation on the outdoor store signs: Neat outlook by government law enforcement

VI. Conclusion

The tragedy of the commons occurs as, in the absence of clearly defined property ownership, the resources involved are depleted. What if we have a clearly defined ownership? Even in this case, we may encounter other problems such as the tragedy of the anti-commons and the tragedy of the privatization. The tragedy of the anti-commons happens when a given property has too many owners. On the other hand, the tragedy of the privatization happens when private ownership results in conflict among the property owners.

This paper traces the concept of the tragedy of the privatization. The tragedy of the privatization refers to the case where the global interests cannot be attained by the pursuit of the local interests of the private owners. There are basically three areas in which the tragedy of the privatization could occur. First, when a property is divided into many parts, each of which has

a different owner, global interests may not be attained as each owner's activity may not be aligned with the global interests. Second, when we have classical externalities and we do not have an efficient mechanism to internalize the externalities we may end up with the tragedy of the privatization. Third, as can be seen in the agency problem cases, we can have another case of the tragedy of the privatization when a private owner pursues their property rights more than their due share, thereby improperly damaging the interests of others and reducing the value of the global interests as a whole.

This paper focuses on the first aspect of the tragedy of the privatization, as there are many studies examining externalities and agency problems in the economics literature. Governance arrangements to correct the first type of the tragedy of the privatization are suggested: individual property, group property, and government property rights. The role of a firm and an entrepreneur, as a residual claimant, has a new meaning in this context. A firm is a voluntary organization enabling the owner to yield their own property right over a certain production factor and to form an individual property to neutralize the tragedy of the privatization. An entrepreneur, as a residual claimant, helps to communicate and coordinate the productive activities of parties involved through economic incentives. A cooperative is an organization through which group members communicate and coordinate their activities while retaining their property right over the key resources. If neither the incentive approach through a firm nor the collective approach through a cooperative would suffice to prevent the tragedy of the privatization, we may turn to the government to regulate the problematic activities of each property owner by force.

In a way this allows us to conclude that the tragedy of the privatization takes place when certain resources are better utilized not by the sum of individual management but by a coordinated approach by a firm, a cooperative, or the government.

References

- Alchian, Armen and Demsetz, Harold (1972), "Production, Information Costs, and Economic Organization," *American Economic Review* Vol. 62, pp. 777-795.
- Coase, Ronald (1960), "The Problem of Social Cost," *The Journal of Law & Economics*, Vol. 3, pp. 1-44.
- Hardin, Garrett (1968), "The Tragedy of the Commons," *Science*, Vol. 162, pp. 1243-1248.
- Heller, Michael (1998), "The Tragedy of the Anticommons: Property in the Transition from Marx to Markets," *Harvard Law Review*, Vol. 111, pp. 621-688.
- Holmström, Bengt (1982), "Moral Hazard in Teams," *The Bell Journal of Economics*, Vol. 13, pp. 324-340.
- Mankiw, Gregory (2015), *Principles of Economics*, 7th Edition, South-Western.
- Ostrom, Elinor; Burger, Joanna; Field, Christopher; Norgaard, Richard, and Policansky, David (1999), "Revisiting the Commons: Local Lessons, Global Challenges," *Science*, Vol. 284, pp. 278-282.
- Park, Hong Y.; Shin, Geon-Cheol, and Suh, Sung Hahn (2008), "Advantages and Shortcomings of Korean Chaebols," *International Business & Economics Research Journal*, Vol. 7, pp. 57-66.