The Private Property-Common Property Dichotomy

Is There a Middle Ground in the Property Rights Theory?

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Introduction

Property rights are fundamental to market theory. The neo-classical economic theory is based on an institutional regime of private property in which all goods and services are privately (individually) utilized or consumed. Within this theoretical framework, the only other option allowed for is the extreme socialist type of state-controlled ownership of assets. More recently this dichotomous categorization of property rights regimes, proved to be very limited in accounting for the variety of ownership arrangements, formal as well as informal, existing especially in developing countries. Furthermore, empirical evidence suggests that policy prescriptions based solely on the neo-classical economic theory were not able to attain the expected outcomes for higher growth and improved welfare.

While the importance of collective or communal endeavors were long ago acknowledged, only few attempts have been made to extend the formal theoretical framework to include these middle ground ownership arrangements (mainly Buchanan 1965; Ostrom 1990). However, to this date, none of the current theories are comprehensive enough to explain the variety of property regimes endogenously formed in developing countries as well as their dynamics.

One of the most controversial debates in the current literature on property rights, especially in the context of transition economies, has to do with the transfer of ownership from state to private hands and the intricacies of institutional change implied by this transfer. Along with the privatization of public utilities, land reform was one of the most contested and sensitive policies after the fall of Berlin wall. The wide range of approaches to land privatization adopted by the transitional economies attests to the complexity of this endeavor and the narrowness of the dichotomous theoretical perspective. Moreover, while other countries managed to smoothly transition in property rights regimes, others are still debating whether land should be privatized to individual or cooperative structures and what organizational form is most likely to generate a higher value added to production as well as improved welfare for the population.

Discussions of the underling characteristics and benefits of cooperative forms of ownership are overshadowed by the widespread understanding that these types of property rights regimes are necessary associated with the failed Soviet experience. Stewart (1996) argues that "the failure of communism [is] being used to deny the critical importance of groups and collective action in development."

In this paper I propose a theoretical overview of the existing models of organization of property rights (private versus common property) as well as the main debates on intermediate forms of ownership based on cooperation/association. These alternatives to the private/common property, proved to be more appropriate for developing countries facing socio-economic uncertainties and with institutional systems still under formation, alternative forms of ownership/property rights besides the common-private property dichotomy are essential for ensuring effective results in the reform programs. Hence, the overarching theme is what type of arrangement would ensure the most productive use of available resources and the highest social welfare for the owner.

I will place more emphasis on concerns around why, and under what circumstances, would one form of property be more appropriate than others. The concepts of public versus private goods, commons versus open access resources, and market failures will be essential in framing the debate as well as an understanding of the theory of groups and collective action. Moreover, institutional change, as framed by the new institutional economics, will play an important role in understanding the emergence of different organizational forms besides the classic dichotomy (private – public). Evidence from the field will reinforce the theoretical arguments focusing more on the experience of transitional economies, especially Romania. However, examples from other countries will support and complement the variety of realities in the field.

Property Rights

The debate around private versus public organizational forms and subsequently about 'hybrid' forms, revolves around the structure of property rights and the extent of property rights in relation with other members of the society. Property rights are as much about limiting others' control over one's property as about one's use and possession of the resource itself. Hence, characteristics of excludability and rivalry in different types of rights are critical for understanding and enforcing the limits of ownership. Property rights can exclude everyone except the owner as in the case of individual private property (private goods), exclude no one as in the case of pure public goods, as well as other arrangements in between.

For the debate on the dichotomy versus variety of ownership form, an extremely important concept is property rights as a bundle of rights (Alchian and Demsetz 1973). When property rights are not clearly defined, or there is a breach in the transfer of property rights, complete consolidation of ownership forms and market developments are stalled.

While resource economists claim that technical difficulties prevent the creation of private property rights to fugitive resources, such as groundwater, oil, fish, almost all share the presumption that the creation of private property rights to arable land or grazing land is an obvious solution to degradation (Ostrom, 1990). However, since land is a good that could be either public or private, this is where the real debate about different forms of ownership begins. This leads into the discussion of where to draw the lines of exclusion and ideal forms of ownership.

An interesting point that comes across is that in order to understand why certain resources are better used individually than in common, one has to learn about the characteristics of the resource as well as who the users are. Hence, it matters how reliant people are on the use of a certain resource, what is its size, how are the boundaries defined. As far as the users are concerned, it is important to distinguish between different interests they may have, different social backgrounds, different racial or ethnic groups, as well as 'acquired' characteristics such as education, training and skills.

Theories for Cooperation

A currently popular area of research attempts to provide a theoretical framework for the ownership types in between pure private or public goods, such as land. The theory of clubs[1] is the most influential theoretical endeavor in trying to make way for goods that could be partially rival in consumption[2]. In his seminal piece "An Economic Theory of Clubs" (1965) Buchanan was first to develop a theory of cooperative membership, "a theory that includes as a variable to be determined the extension of ownership-consumption rights over differing number of persons." The central question in this theory is the size of the most desirable cost and consumption sharing arrangement for maximizing the net utility. The main assumptions are that the incentives to join the cooperative

[1] A club is defined as a voluntary group deriving mutual benefit from sharing one or more of the following production costs, the members' characteristics, or a good characterized by excludable benefits (Sandler and Tschirhart, 1980).
[2] A good is partially rival in consumption when one person's consumption of a unit of the good detracts, to some extent, from the consumption opportunities of another person.

arrangement are economic on the basis of costs and benefits, and that exclusion is possible. In the theory of clubs, Buchanan suggests that whenever the utility derived by an individual from a specific good or service is dependent on the size of the consumption group, then a club organization will supply the service efficiently while the market will not. However, this model has proved to break down in several circumstances, in the case when the optimal firm is small relative to the market so that competition results in many identical firms, and in the case where the optimal firm is large relative to the market (Berglas 1976).

Another important contribution to the theory of clubs was made by Mancur Olson (1995), who showed that clubs would form to exploit economies of scale and to share public goods. He also distinguished between inclusive and exclusive clubs. Inclusive clubs share pure public goods and require no membership size restrictions, which exclusive clubs share impure public goods and require size restrictions owning to crowding and congestion. Overall, justification for clubs has been based: on a pure taste for association (Schelling 1969; McGuire 1974), cost reduction from scale economies, cost reductions from team production (McGuire 1972), the sharing of public goods, and the sharing of public factors (Hillman 1978).

More recently, the most influential models used to provide a foundation for recommending state or market solutions for ownership are Hardin's *tragedy of the commons* (Hardin 1968), the *prisoner dilemma game* (Dawes 1973; Dawes 1975) and the *logic of collective action* (Olson 1965). All three models rely on closely related concepts when it comes to the problems faced by individuals attempting to achieve collective benefits. At the heart is the free-rider problem. However, these models are extremely useful for explaining how perfectly rational individuals can produce outcomes that are not rational when viewed from the perspective of all those involved.

Briefly, the tragedy of the commons is based on the rational individual tradition, following Adam Smith's invisible hand argument. Using the example of pastures open to all and the herdsman as a rational being seeking to maximize profit, Hardin emphasizes that each herdsman is motivated to add more and more animals in the commons because he receives the direct benefit of his own animals and bears only the share of the costs resulting from overgrazing. In effect, each man is locked into a system that compels him to increase his herd without limit, in a word that is limited; hence, the tragedy of the commons. The prisoner dilemma game is an illustration of non-cooperative behavior suggesting that it is impossible for rational individuals to cooperate, assuming complete information. Olson's logic of collective action challenges the group theory that individuals with common interests would voluntarily act so as to try to further those interests. It is argued that, on the contrary, only small groups are able to cooperate, not voluntary, but under coercive pressures.

On a different note, most of the literature so far discusses collective action in terms of external organized structures, imposed from the above. The most relevant theories here are the *theory of the state* and the *theory of the firm*. In the theory of the firm, an entrepreneur recognizes an opportunity to increase the return that can be achieved when individuals are potentially involved in an interdependent relationship. The concept of contracts is essential here as the participants become the agents of the entrepreneur and the entrepreneur retains that profits or absorbs the losses (after paying the agents). Coase (1937), Demsetz (1967), Williamson (1975; 1985) have made several contributions in shaping this theory. The theory of the state, first developed by Hobbes, is very similar, but in the context of a ruler rather then an entrepreneur. In this case the ruler obtains the taxes, labor or other resources from subjects by threatening the owners, with severe sanctions if they do not provide the resources. In both theories, the burden of organizing collective action lies on one individual, whose returns are directly related to the surplus generated. Both involve an outsider taking responsibility for supplying the needed changes in institutional rules to coordinate activities. Hence, this top-down cooperation can suffer from several problems. For example, in the case of Tanzania, once in the hands of the government the cooperatives served as instruments of planning and taxation, neglecting their role as protectors of farmers' interest (Kashuliza and Ngailo 1993). Additionally, as in the case of Israel, too much intervention from above can lead to reliance and moral hazard behavior (Kislev 1993).

In the attempt to develop further the theoretical framework for cooperation Ostrom (1990) asserts that while these models are very powerful in capturing aspects of many different problems that occur in diverse settings, when they are used as foundation for policy they are severely limited; the constraints that are assumed to be fixed for the purpose of the analysis are taken on faith as being fixed in the empirical settings, unless external authorities change them. In order to deal with these insufficiencies, Ostrom provides the most comprehensive attempt so far, to theoretically frame cases of self-organized collective action, endogenously formed in the community. By working through empirical cases in different locations and in the case of different resources, Ostrom (1990) identified various institutional factors that inform a group's cost-benefit analysis of whether to act collectively and maintain common ownership, or act privately.

These choices for different types of ownership are tightly linked to institutional change. A distinction should be made between the creation of new institutions and the change in the existing ones (North 1990). Ostrom (1990, 140) claims that "a change in any rule affecting the set of participants, the set of strategies available to participants, the control they have over outcomes, the information they have, or the payoffs is an institutional change", and the costs for institutional changes are lower than for creating new ones and the process is incremental.

When Does Collective Action Not Work?

In general, especially in transitional economies, the trend to individualization is considered to be positive because it releases producers from the inefficient arrangements of the socialist farms and creates the conditions in which markets for land and labor can allocate these resources more efficiently (Frydman and Rapaczynski 1994; Lerman, Csaki et al. 2002). The argument that private small-scale farming is superior to cooperative farming proposes that incentive problems inherent in production cooperatives – such as free-rides externalities that result from weak supervisory authority – make them inferior form of organizing agricultural production, in efficiency terms.

The literature suggests several factors that contribute to the failure of cooperation in agricultural production (Schmitt 1991): the limited amount of economies of scale in agricultural production; the difficulty of monitoring effort in agriculture which results in high transaction costs for cooperative farms; motivational advantages of family farms, among others in the provision of implicit or explicit insurance; higher dynamic efficiency of family farms due to their flexibility in allocating labor between on-farm, off-farm, and household production. Cooperatives are also argued to be an inferior method for the allocation of land and labor for the household when compared to the use of markets (Lin 1988; Schmitt 1991; Binswanger et al. 1995). The literature also suggests that in collective farms it is extremely difficult to link output to labor effort, such that work incentives for collective farm members are poor (Carter 1984; Lin 1988; Schmitt 1991). Hence, considerable principle agent problems between the management and the workforce arise, and as a result workers have an incentive to shirk, thus reducing the overall level of effort and technical efficiency of the farm.

However, a different perspective is that collective farms (especially as they still relate to the former communist structures) perform poorly not because of their alleged governance problems –as these can be solved – but because of external constraints imposed upon them, such as bureaucratic controls on input and output allocation (Johnson 1983; Putterman 1985; Lin 1990; Brada and King 1993).

Therefore, many property rights theorists presume that one of two undesirable outcomes are likely under communal ownership: the commons will be destroyed because no one can be excluded, or the costs of negotiating a set of allocation rules is too high. However, what we observe on the field is the coexistence of both private property and common property where individuals have exercised considerable control over institutional arrangements and property rights.

In summary, as Ostrom (1990) argues, the most important challenges for practive as well as theory around collective action are: the problem of supplying a new set of institutions; the problem of making credible commitments; and the problem of mutual monitoring. In Bates's (1988) view establishing trust and a sense of community are mechanisms for solving the problem of supplying new institutions.[3] External coercion is often times cited for curing the problem of commitment and monitoring (which are strongly interrelated). However, in self-organized groups, the enforcement has to come from within. Members of the group have to monitor activities themselves, and be willing to impose sanctions to keep conformance high.

[3] "Driven by a concern with institutions, we re-enter the world of the behavioralists. But we do so not in protest against the notion of rational choice, but rather in an effort to understand how rationality on the part of individuals leads to coherence at the level of society." (Bates, 1988).

When Does Collective Action Work?

Substantial research in the field of agricultural economies has explored the extent to which economic benefits accrue from collective farming endeavors. Following the economic rationale, the literature suggests that a collective farm member will leave the collective farm if the expected utility from leaving is larger than the expected utility from staying in the collective farm (Carter, 1984; Machenes and Scnytzer, 1993).

Theories around economies of scale in production and labor supervision problems in collective farming have been tested extensively (Binswanger et al. 1995; Putterman, 1985; Carter, 1985). The accepted conclusion as mentioned earlier, is that there is little robust evidence of the existence of economies of scale in agriculture, due mainly to labor incentives, free-riding, and principal agent problems. However, while these 'maladies' plague large collective farms, the persistence of associations around land in Eastern Europe and other regions may attest to some desirable aspects of cooperation within groups of land owners. For instance, the literature suggests that economically rational producers may choose collective over private farming especially in the presence of market failures, as this form might offer more efficient means of organizing production (Putterman 1980, 1981; Carter, 1987).

However, little attention has been paid to the non-economic reasons in addition to the cost-benefit rationale for cooperation under conditions of uncertainty, the possible safety net and poverty-reduction functions of such groups. Additionally, not enough research has been conducted on the role of social ties in cooperation as well as the history of cooperation and property rights in creating the environment for cooperation. A growing literature points to the importance of social networks in economic development, referring to the "features of social organization such a trust, norms, and networks that can facilitate the efficiency of society by facilitating coordinated actions" (Putnam 1993). Mearns (1996) draws on Granoveter (1985) work on "social embededness" to argue that more comprehensive understanding of the way in which economic institutions are embedded in society will greatly help in promoting successful economic changes in ex-Soviet countries.

As Sabates-Wheeler (forthcoming) points out, from the literature on institutions in society, two views of the functions of groups (or institutions) are typically presented – groups with efficiency motivations and groups with claims motivations. The former corresponds to the New Institutional Economics view of groups (North 1990) as a response of market failure of various kinds. The second category occurs when a group is formed to advance the claims of its members to power or resources. I would expect that most of the newly formed groups in former socialist economies in Eastern Europe have as a rationale a combination of the two views. Market failures in transitional economies are prevalent, especially at the beginning of the reform process. Moreover, after so many years of centrally planning, bureaucratic controls, and large scale management, individuals and smaller groups find it much harder to get access to power as well as resources until the institutional system as well as the management mentalities make way to new practices and standards.

This leads into another major reason for the prevalence of cooperation, and that is risk sharing. There are two types of risks one of which is specific to agriculture and a more general one, encountered in any type of activities. First, the risk generated by nature, specific to agriculture, creates seasonality and randomness in agricultural production. The interplay of these qualities generates moral hazard, limits the gains from specialization, and causes timing problems between stages of production. However, as indicated by Allen and Lueck (1998), "when farmers are successful in mitigating the effects of seasonality and random shocks to output, farm organization gravitate toward factory processes and corporate ownership." The other type of risk is so called economic generated by scale economies, and market failures, discussed earlier. Ellickson (1995) argues that cooperation is a risk spreading device as well as transaction costs sharing, and that when the risk is diminished, the owners will switch to private land tenure "for accomplishing small and medium events that are socially useful."

Based on evidence from a variety of cases on the field, Ostrom (1990) summarizes that several factors lead to cooperatives as superior organizational structures over private property. In uncertain and complex environments, cooperatives are more able to absorb risks and provide a more stable flow of incomes. Additionally, close proximity between the users, as well as tight social networks are also conducive to increased cooperation as well as homogeneity in the group in terms of ownership, skills, ethnicity, and knowledge. Carter (1984) adds that by virtue of size and links to marketing networks, cooperative farms offer a measure of risk sharing to its members. Moreover, I would add that in regions or communities where past experience with cooperative arrangements prevailed, people are better able to organize production and management into shared agreements (Rizov et al. 2001).

Empirical Evidence

This section will illustrate several empirical cases on the constant tension generated by the choices between different ownership forms especially in transitional economies where the pressure for institutional change prevailed after the fall of communism. These examples are going to underline the limitations in the current theories on collective action and the diversity and complexity of the existing social and economic circumstances in the community. Emphasis will be added to the presence of non-economic benefits of cooperation (not covered by the existing theory) under uncertainty and the possible social safety net and poverty reducing functions of these groups.

The process of institutional change is known as being slow, incremental and driven especially by efficiency rationale, higher benefits than costs incurred by the shift. Hence, in transitional economies, the break-up of the former collective and state farms into individual farms has been strongest in countries in which the collective and state farms were least efficient and most labor intensive (Mathjis and Swinnen 1998). Additionally, the shift also was higher in regions where at least some private farming survived during the communist rule (Rizov et al., 2001).

As we saw earlier, many theorists argue that production cooperatives are plagued with labor management and free-rider problems that ultimately lead to inefficient and low production. Much emphasis is placed on private (non-cooperative) farming as first-best solution (Binswanger, Deininger et al. 1995; Deininger 1995). Contrary to these arguments, Sabates-Wheeler shows that in the case of Romania, when farmers are resource constrained, family societies are able to provide production advantages over pure private farming strategies. This finding is confirmed for the case of East Germany as well, where as in the Romanian case, individual private farming appear to become more efficient in their use of certain inputs only after farmer's access to resources improves, and the institutional reform process advances (Mathijs and Swinnen 2001).

The choice between different ownership forms appears to be a very complex process influenced by a variety of factors. Rizov (2003) finds that human capital endowments generally have significant effect on the choice of organization mode. He shows for the Romanian case that low skilled households are more likely to adopt cooperative farming, while those with medium skills levels will be hybrid[4] farmers. Individual farmers will have even higher skills and reservation utility, which is support of the “agricultural ladder” hypothesis (Spillman 1919; Reid 1976). Moreover, Rizov finds that age does not play a significant role in the choice between different forms of farming. Besides human capital, it is fairly proven that if the factor markets and missing or ill-functioning or if land titles are insecure, farmers are better off in cooperative arrangements.

In a study on Kyrgyzstan and Romania, Rachel Sabates-Wheeler finds that the safety net, labor specialization, asset-pooling and service delivery functions of different groups[5] enable rural livelihoods to sometimes cope with and sometimes improve situations of imperfect information, sluggish labor and land markets and constrained capital markets (Sabates-Wheeler 2004). Hence, institutional barriers also constrain producers from moving into individual farming, and therefore, cooperative farming provides flexibility and resource access in resource constrained farmers, ensuring higher productivity, risk management, and sustainability.

Contrary to the criticism that cooperative farming does not allow for labor specialization, Sabates-Wheeler finds that this is actually one of the key advantages provided by medium sized groups, both by dividing tasks within the work force, and by uniting groups of workers around the relatively highly capable or skilled farmers (which could also be viewed as a self-selection effect) (Sabates-Wheeler 2004). Interestingly, David Stark (1996) points to the notion of ‘recombinant property’ in transition, which he defines as a form of organizational hedging in which actors respond to uncertainty in the organizational environment by diversifying their assets, redefining and recombining resources. While organizational hedging can be a very effective way for risk

[4] The term ‘hybrid farms’ often refers to the endogenously formed associations between farmers after property rights were redistributed to individuals. These farms are different from the cooperative farms established through the restructuring of the former collective farms.
[5] The term group is used here to include all possible formal and informal institutions and organizations, following the distinction made by Douglas North and others (North 1990).

management and labor specialization, Verdery (2004) points to adverse effects that such behavior can have on the performance of cooperatives. She observed in the Romanian case, that as an usual practice, peasants kept in individual farms the higher quality land, and gave to associations land of poorer quality, more vulnerable to flooding, or further away from the village center. In this way they reduced both their labor inputs and the uncertainty associated with farming land that was difficult or marginal. However, they undermined the association's general prospects, since it therefore worked inferior land, and its tractors had to travel farther and use more fuel. She further points to the fact that "villagers seemed not to realize that their strategies for managing risk thus increased it for the association's leaders – and that this naturally brought the risk back to themselves as association members."

Nevertheless, we can already notice that empirical evidence points to the complexity of the issue of holding the land in one form of ownership or the other(s). Verdery adds another thorn to this debate by showing that even after people opt for a certain form of production organization, it does not mean that the choice is the one that enables economic growth and social safety-net. With reference to a village in Romania (but very generalizable to other rural areas), she reveals that peasants hold to their land plot(s) even without economic gains, because of very traditional reasons, because of shame and 'peer pressure'. Even if the costs of working the land individually is much higher than the generated income, having a field of fine and well-weeded crops that all could is a way of reassessing superior status over those with less or no land. Hence, selling the land, and giving the land away to associations, would be demeaning and shameful in the face of the peasants. It appears that the social value rather than economic value of land is one of the key factors driving the choice of organizational form, contrary to Demsetz and other scholars advocating for economic rationale (cost benefit analysis) in institutional change. Therefore, associations that still managed to be productive were using different ways of transferring production risk onto the owners: by taking in only parcels that made up sizable compact fields, or would take land only from those owners who could pay the whole cost of cultivation upfront.

A different example for strategies of risk transfer between private farming and cooperative farming draws from the Russian case, where to many scholars' puzzle, collectivist forms of production continue to persist despite high and increasing rates of non-profitability. Amelina (2000) explains this phenomenon by showing that employees of collective farms maximize their profits by using in-kind transfers (payments) from collectives as inputs for private agricultural production. However, such practice can be sustained only as long as the collectives are subsidized by the government and able to provide in-kind payments since price payment would not be so effective due to inflation and extremely high input costs.

Mearns (1996) makes the case that norms of trust and reciprocity, known also as social capital, are urgently needed to make agrarian reforms work. In Uzbekistan the author finds that if informal system of social leadership and power (makhalla) were used in conjunction with Associations of Peasant Farms (APF) formed by government decree, the latter one would have been more effective in increasing productivity and promoting social welfare. Moreover, in Kyrgyzstan, total factor productivity of small groups formed on familial and social ties is higher than that of individual farms, given the uncertain environment and the resource constraints facing landholders at that point in time (Sabates-Wheeler and Childress 2004).

Conclusions

Despite the push for de-collectivization and land individualization, empirical evidence shows that across transitional economies, there remains a place for encouraging group farming, at least in the medium term, on grounds of both poverty alleviation and agricultural growth. I adhere to Sabates-Wheeler claim that the strategy to understand cooperation within groups needs to focus on dynamics between various categories of members within groups, at the same time being sensitive to hierarchy and political structures of each form of cooperation. To this end, social capital, local forms of power and trust and particular history of property rights are extremely important for shaping the organizational structure and should be integrated in the current theories of collective action.

Mearns (1996) claims that the common property resource management literature suggests that building social capital is a function of history and contingency, the relatively small size and stability of groups, and prevailing social norms. Additionally, unless debates around the institutional underpinnings of true commons are opened, there is a danger that the market model may help perpetuate “a social and institutional history which is unfavorable to good group behavior” (Stewart, 1996). Hence, if we are to explain regional and sectoral variations in the path of transition, much more research is needed on the dynamic relationship between institutional building and political and economic incentives for sustaining or transforming a certain institutional pattern (Amelina, 2000).

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