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Integrating social conflict into economic theory

Mehrdad Vahabi*

The generalisation of Coasian theorem to the power relationship amounts to depicting conflict as a bargaining process between conflictual parties that are, simultaneously, both partners and adversaries. This perspective leads to different models of 'rational conflicts' i.e. a threat of conflict without any real clash. An alternative approach is developed by different models inspired by the Public Choice School, which build upon the logic of coercive power within the framework of a self-interested behaviour. The integration of 'social conflicts' in a narrowly defined individual cost/benefit theoretical framework has resulted in reducing 'social conflict' to real private (but not social) conflict. In other words, economic theory has considered social protesters either as potential or actual looters but rarely as a group of people struggling for a common cause. Integration of social conflict into economic theory will require: (i) abandoning the ubiquitous market model when describing conflictual relationships; (ii) accepting the logic of force or coercive power as a starting point; and (iii) expanding the idea of interest to include encompassing (including class) interest.

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JEL classifications: D74, H41, H56

1. Introduction

In the 1921 movie *The Kid*, Charlie Chaplin's little tramp finds an ingenious way to support himself and his adopted son. The tramp and the kid go to a middle-class area where the kid throws a stone, breaks the window of an apparently well-to-do apartment and makes his escape. Then the tramp appears as a glazier and is hired to repair the broken window. In this way, the kid's deliberate destruction of a window creates a market for the tramp.

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Address for correspondence: email: mehrdad.vahabi@wanadoo.fr

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It is not only deprived populations that use their destructive power to generate income: strong states sometimes pursue imperialist policies to dominate other countries. The destruction of colonised countries may create new markets for the 'civilized' states. However, there are crucial differences between Chaplin's story and imperialist policies: the former involves only broken windows, while the latter usually involves butchering people and dismantling states. A broken window (analogous to a broken economy) can be repaired, but who can repair a broken state? This puzzle remains to be solved, but as Hirshleifer (2001) noted, conflictual activities or 'the dark side of the force' can create outlets both for generating income (or *property*) and *new rules* or *new institutions*.

Social conflict has two different functions: *appropriative* and *rule-producing* (Vahabi, 2004). In its *appropriative* role, social conflict redistributes wealth without the mutual consent of all participants. In its *rule-producing* role, it is the source of institutional change. This paper will show that economic theory cannot yet contend with both functions of social conflict. The extension of Coasian theorem (Coase, 1960) to social conflicts and the narrow definition of self-interested private conflict have reduced the former either to rational conflict (i.e., a threat of conflict without any real clash or destruction) or to real self-interested private conflict. In other words, according to economic theory, social protesters are considered *potential or actual looters*; they are rarely seen as a group of people struggling for a common cause.

Mainstream economics has rejected Marxian theory, including Marx's insightful remarks about social conflict. Despite this exclusion, economic theory has incorporated a particular type of conflict. Since any competitive activity implies a certain type of conflict of interest among agents, the neo-classical school[1] has developed theories of conflict that may be called 'system neutral' or 'pro-systemic' (Gupta, 1990) according to which conflicts remain *within the rules of the market economy.* Competitive, oligopolistic and monopolistic strategies have been analysed by Cournot, Edgeworth, Richardson, Stackelberg, Von Neumann, Morgenstern and others on the basis of some fundamental behavioural assumptions such as rationality and maximisation.

Neo-classical economic theory does not deny conflictual or antagonistic interests caused by scarcity. But as Varoufakis and Young (1990) aptly pointed out, this general opposition or antagonism must be distinguished from conflictual activity involving the use of resources (including time) to resolve competition between contending interests. In other words, antagonistic interests need not necessarily develop into open confrontation.

The critical assumption of neo-classical economics postulates that conflicts of interest in the economy are resolved in contracts that are either voluntarily observed or are enforceable at no cost to the exchanging parties. According to Bowles and Gintis (1988, 1990), if some aspect of the object of exchange is too complex or difficult to monitor, to the degree that comprehensive contracts are not feasible or are feasible only by a third party, then the exchange is contested. Contested exchange entails conflicts that cannot be resolved through voluntary contracts and the Coasian theorem (Coase, 1960) is no longer applicable.

[1] I follow the broad and strict definitions of the term by Stigler (1941, p. 8) and Hahn (1984, pp. 1–2) so that a dialogue can be established between the neoclassical economists and critics (for a detailed history of the term, see Aspromourgos, 1986). In this paper, I use the term 'neo-classical economics' to mean a particular strand of marginalist theory with specific focus on individual rational choice and equilibrium state. It should be added that individual rational choice is usually interpreted in terms of utility and profit maximisation (Hirshleifer, 2001; Weintraub, 2002). Although several neoclassical models do not follow maximisation, most of them adopt the assumption.

The theory of contested exchange is one of the pioneering formulations of contractual incompleteness.[1] Bowles and Gintis (1990, p. 166) conceded that 'exchanges may be solved political problems where contracts are comprehensive and enforceable at no cost to the exchange parties'. By 'solved political problems', they meant the absence of power relationships.

However, 'the exchange is *not* a solved political problem' (Bowles and Gintis, 1990, p. 167) in the presence of (i) contractual incompleteness and (ii) non-cleared markets. The distinction between incomplete and complete contracts is one of the theoretical tenets of the power relationship in a contested exchange. But if, as Maskin and Tirole (1999) argued, the incomplete contract theory is deadlocked and all incomprehensive contracts can be transformed into comprehensive ones, then why can power relationships not be totally dismissed? In other words, whether or not contractual incompleteness entails power relationships is an open and controversial issue that hinges upon the possibility of reducing incomplete contracts to complete contracts.[2] Hence, contractual incompleteness is not the central assumption in a contested exchange.

The central assumption in Bowles and Gintis's theory of contested exchange, which they explicitly acknowledged, is the existence of non-cleared or rationed labour and capital markets. Short-sided power in markets signifies that conflictual interests could lead to conflictual activity. This result is consistent with non-clearing markets or out-of-equilibrium states.[3]

Unlike market-type conflicts, which are carried out within a voluntary exchange framework, social conflicts involve coercive power and domination. This point is clearly demonstrated not only by authors who define power in terms of sanctions (Bowles and Gintis, 1988, 1990), but also by other theorists (Milgram, 1969; Schlicht, 2008) who, instead, use a behavioural perspective (Dahl, 1957) or use the context of triadic relationships (Basu, 1986).[4] However, economic theory extends the market exchange relationship to all forms of social interactions, including ones based on explicit coercion such as slavery, feudalism or predatory allocation of resources (North, 1977). In this context, a robbery, for example, can be defined as an 'implicit contract' between the robbed and the robber: the latter preserves the life of the former in return for a certain amount of money. The exchange of goods and services can even be stretched to include

[1] Contractual incompleteness was extensively studied by Williamson (1985) and Hart and Moore (1988, 1990). It also provided a logical foundation for conflictual activity: 'Allowing for the possibility of conflict, which amounts to recognising the possibility that property rights are not perfectly and costlessly enforced, represents a significant departure from the traditional paradigm of economics' (Garfinkel and Skaperdas, 2007, p. 650).

[2] Tirole's model (1994) also shows that a power relationship is not congruent with a complete contractual setup. Moreover, in stark contrast with Hart and Moore (1999), Maskin and Tirole (1999) claimed that all incomplete contracts are reducible to complete contracts given sufficient incentive to design relevant contingencies and rational agents. Thenceforth, they argued that there is no need to 'renegotiate' the terms of contracts or postulate a hierarchical relationship in the case of incomplete contracts. For a critical assessment of this discussion, see Vahabi (2002).

[3] A contested exchange comes within the scope of the non-Walrasian equilibrium school. Bowles and Gintis provided several illustrations of contested exchange, in which the short-side agents have the strategic capacity to act as Stackelberg leaders and thus to make use of their advantageous short-side location. For a recent critical review of disequilibrium as well as non Walrasian equilibrium schools, see De Vroey (2004).

[4] Basu endeavoured to justify theoretically Havel's notion of a faceless or diffused dictatorship in which everyone is both a victim and a supporter of the system. His demonstration is based on the significance of moving from two-person to three-person relationships, that is, from the 'dyad' to the 'triad'. In the Walrasian general equilibrium, tryadic relationships are totally absent, since all decentralised agents are tied in dyad relationships with the 'crieur de prix' (or commissaire priseur). Walrasian general equilibrium is thus devoid of 'one kind of power' to which Basu refers.

the 'exchange of threats' and the market model is assumed to deal with the power relationship.

Coase's theorem (1960) can thus be applied to coercion: individuals have an incentive to bargain for the redistribution of wealth under coercion as long as they maximise their joint gains and transaction costs are not too great. Exchange of threats does not involve the actual use of coercion or destruction; it only requires threat power or the theoretical possibility of coercion. Undoubtedly, threats involve a general difficulty. Sen (1983, p. 17) convincingly argued that:

> The person who threatens to harm the other if the bargaining should fail does it at no direct advantage to himself (otherwise it won't be a 'threat' but something he may do anyway, and will be thus reflected in the fall-back position). While it is plausible to try to get bargaining advantage out of a threat *during the process* of bargaining, once the bargaining has failed, the threatener has no obvious interest in carrying out the threat. But that recognition on the part of the threatened person would call into question the credibility of the threat itself.

This is a general problem with the Nash equilibrium theory within the context of extensive games. Nevertheless, threats do actually take place; because competitive equilibrium theory (e.g., subgame perfection) does not allow for real threats, it is preferable to apply the Nash equilibrium theory in specific contexts.

Pareto (1971 [1927], p. 341) correctly noted that 'The efforts of men are utilised in two different ways: they are directed to the production or transformation of economic goods, or else to the appropriation of goods produced by others'. Economic theory first focused on integrating *rational* (rather than *real* or *social*) conflict as a source of appropriation. Haavelmo (1954) pioneered a canonical general equilibrium model of the allocation of resources among appropriative and productive activities.

Over the last four decades, the model has been interpreted in a variety of ways using game theory models of rational conflict (Boulding, 1962; Schelling, 1963) and different strands of new political economy (Hirshleifer, 1996) within a partial equilibrium framework. The goal was to explain *rational* conflict, which excludes *real destruction*. As discussed above, rational conflict refers to *threat power* and can be defined as a bargaining procedure without any real clash or conflict between the parties, which are both partners and adversaries. Examples include negotiations about nuclear power, commercial negotiations within the General Agreement on Tariffs and Trade (GATT) or World Trade Organisation (WTO) and negotiations between institutionalised trade unions and employers' organisations on wage and work conditions.

A general review of these models of rational conflicts reveals that, in equilibrium, they are *neutral* and have no effect on economic performance. Neutrality of social conflict connotes a lack of need for real clashing or conflictual action, so a redistribution of wealth or reallocation of resources may occur despite conflictual interests among agents. In a sense, in standard economics, conflict is treated like money: it is neutral with regard to economic performance and disappears in equilibrium. This neutrality is derived from Coasian theorem. This paper will show that extending the application of Coasian theorem to tackle coercion necessarily excludes real and thus social conflicts.

The founders of the public choice school, notably Olson (1980 [1965], 1982) and Tullock (1974, 1980), developed a second version of conflict theory to tackle genuine political violence. They examined not only *threat power* but also *real* conflictual situations such as revolutions, wars, terrorist activities, etc. In contrast to the Coasian paradigm, they did not begin with market exchange; their starting point was Hobbesian anarchy, where

power relationships and coercion rule. This framework is based on coercive power and self-interested behaviour. 'Clearly, we cannot understand robbery as either a voluntary act or a moral act, and thus it helps us to focus only on the self-interested use of coercive power' (Olson, 2000, p. 3). They correctly distinguished the logic of coercive power[1] that cannot be adequately explained through voluntary transactions. They found that power frequently brings about compulsory compliance, involving compelling authority and the capacity to coerce. Therefore, they incorporated *real* conflicts in the neo-classical analysis and provided a theoretical framework for a new political economy.

Real conflicts are not neutral, and have a clear impact on economic performance, since they come within the scope of rent-seeking activities. However, *real* conflicts should not be confused with *social* conflicts. Proponents of this approach criticise the Marxian concept of class struggle (Buchanan, 1979; Olson, 1980 [1965]), maintaining that social conflict as a form of collective action is subject to the free-riding dilemma and is impossible without devising a mechanism geared to private self-interest:

> Even if revolution is in the best interest of the proletariat, and even if every member of the proletariat realizes that this is so, so far as its members act rationally, this class will *not* achieve concerted revolutionary action. This shocking conclusion rests on the premise that concerted revolutionary action is for the proletariat a public good in the technical sense. By a public good is meant any object or state of affairs such that if it is available to every other member of the group, including those who have not shared in the costs of producing it. (Buchanan, 1979, p. 63)

Buchanan did not simply argue that a proletarian mass movement should be regarded as the sum of individual properties. In fact, given the free-riding problem, a concerted revolutionary action would be literally impossible. This 'shocking conclusion' derives from the fact that every rational member of the proletariat eschews bearing the cost of revolutionary action as a public good. In contrast to Marx's theory, this theory states that masses do not create history, since they rationally should prefer political passivity. Only self-interested elite groups are rationally prone to partake actively in history making, since they could enhance their private interest under the banner of so-called 'public interest'. Revolutions would therefore be palace revolutions undertaken by the ruler's agents or by a competing ruler or small elite Leninist-type group. Accordingly, 'institutional innovation will come from rulers rather than constituents since the latter would always face the free rider problem' (North, 1981, p. 32).

The free-riding problem, at least in its earlier version,[2] pertains to passivity of masses and omnipotence of elites. This asymmetrical position between masses and elites is justified on the basis of a narrow definition of private interest precluding any common or class interests. Hence, the inclusion of public choice makes it necessary to reject extension of the Coasian theorem to coercive power, thereby integrating real conflict into economic theory. However, its narrow definition of private interest leads to the exclusion of social conflict.

Although the free-riding dilemma is a useful way to distinguish between collective interests and collective action, integration of social conflict into economic theory needs to

[1] Coercive power is not the only form or meaning of power. Lukes (1974) noted that the use of power does not need to involve coercion. This might be true for visible forms of power, but the critical dimension of power is based on the possibility to shape preferences via values, norms and ideologies. Power in all social interaction (including voluntary transactions) resembles more closely what is commonly called 'influence', which is an invisible form of power.

[2] Later in this paper, I will show that Olson's later distinction between 'narrowing and encompassing interest' radically revises this limited interpretation of the free-riding problem.

transcend this dilemma. By transcending, I do not simply mean overcoming this dilemma by defining how *private interest* is incorporated in *collective action*. This type of resolution necessarily reduces social protestors to looters. Transcendence requires explaining how *collective interest* is incorporated into *individual actions*. Boulding (1969), Hirschman (1974), North (1981) and Gupta (1990) have proposed using ideologies and heroic ethics as complementary factors when calculating individual economics. Nevertheless, Olson's later distinction between *narrow* and *encompassing* interest (Olson, 1982, 2000; McGuire and Olson, 1996) is particularly noteworthy with regard to transcending the free-riding problem. This latest Olsonian invention brings the public-choice perspective of self-motivated private interest closer to the Marxian concept of class interest. Marx considered class interest to be inseparable from class consciousness, which is the foundation of transforming a social class *in itself* into a social class *for itself*.

This remainder of this paper is organised into three main sections. Section 2 highlights how the extension of Coasian theory excludes real conflicts in rational conflict models; in this perspective social protestors are depicted as potential looters. Section 3 discusses the specific contribution of the public choice approach; it rejects the extension of the Coasian theorem to coercive power and integrates real conflicts into economic theory on the assumption of a strictly self-motivated private interest. From this perspective, social protestors are considered actual looters, but not as people struggling for a common cause. Section 4 shows that integrating social conflict into economic theory is incompatible with a narrow definition of interest as individual private self-interest. It also discusses some alternative perspectives regarding the integration of social conflict into economic theory, particularly focusing on the importance of the Olsonian notion of 'encompassing interest', which incorporates some key Marxian concepts. Section 5 concludes.

2. Rational conflict and the extension of the application of Coasian theorem

While economic literature often focuses on the appropriative function of social conflict, it does not clearly distinguish between the *appropriative* function and the *rule-producing* or *institutional* function of social conflict. When researchers apply standard microeconomic assumptions they consider markets to be a ubiquitous and invariable form of economic organisation and implicitly assume that any economy can be *translated* into market terms. As noted above, this line of thought makes it necessary to stretch the content of the concepts of 'voluntary exchange' and 'mutual gain from trade' to embrace 'exchange of threats'. Therefore, the extension of the application of Coasian theorem to conflict depicts it as a bargaining process between conflictual parties who are simultaneously partners and adversaries. The problem with this type of extension is that, even at an abstract level, 'market exchange' (voluntary or involuntary) cannot be equated with an 'exchange of threats'. To distinguish between these two cases, it suffices to compare them with *a state of autarky*. A voluntary or involuntary market exchange is preferable to autarky, but autarky is preferable to the exchange of threats.

Given the available common resources available for capture, marginal utility theory can be applied to *appropriative* activity due to the trade-off between productive and appropriative activity. Two different frameworks have been developed to this end. The first was based on a *general equilibrium* model with no fictitious auctioneer (imperfect competition); the basic model was set out by Haavelmo (1954) and focused on interregional relations. The second framework is *partial equilibrium*, which was developed on a *Cournot equilibrium* model (duopoly) and is known as 'the paradox of power'

(Hirshleifer, 1991). This type of reasoning is inspired by rational conflict models of non-zero-sum game theories, in which players are simultaneously adversaries and partners who follow mixed strategies of conflict–cooperation (Schelling, 1963).[1]

Both methodologies exclude perfect competition; agents in these models have rivals, whose actions affect how well they do. However, agents acting simultaneously as producers and fighters are *not price takers*. When they optimise,[2] they consider how their actions will affect the redistribution of income. Increasing quantities of appropriative (grabbing) effort will lead to less wealth. Hence, it *seems* that grabbing activity is subject to marginal utility theory of value; however a closer investigation of Haavelmo's model shows that this is not the case.

2.1 Haavelmo's general equilibrium model

Haavelmo (1954) studies interregional relationships. In discussing the *input capacity* of a region, he assumes that the volume of output (Y) is uniquely related to the size of population (N), the amount of available capital (K) and the level of know-how (S). If there are n regions, and if Y_i corresponds to the *input capacity* of region i, (where $i = 1, 2, \ldots, n$), it follows that:

$$Y_i = F_i(N_i, K_i, S_i),\ i = 1, 2, \ldots, \mathrm{n} \tag{1}$$

If X measures global output of all regions, we assume that it is given by a 'production function':

$$X = \Phi(Y_1, Y_2, \ldots, Y_i, \ldots, Y_n) \tag{2}$$

We interpret X as the global product resulting from productive activities within each region *and* from trading activities between the regions. We assume that X has a maximum value for each set of values of the variables Y_i, and that this maximum is given by equation (2). The way this global product is distributed among different regions depends on the strategic position of each region in the network. To solve the problem of distribution, Haavelmo (1954, pp. 88–9) defines a set of characteristic 'allotment functions' as follows:

$$X_i = \coprod_i(Y_1, Y_2, \ldots, Y_i, \ldots, Y_n) \tag{3}$$

Satisfying the identity

$$\Sigma i = 1\mathrm{n} \coprod_i \equiv \Phi \tag{4}$$

For all values of $Y_1, Y_2, \ldots, Y_i, \ldots, Y_n$.

The assumption that expression (4) is an *identity* and not just another equation of the system means an *a priori* restriction of admissible *allotment functions*. Put differently, we assume that if a global product is brought out, there is a given mechanism by which the allotment takes place so as to exhaust the whole product.

Haavelmo (1954, pp. 91–2) then assumes that the total *input capacity* of a region may find an outlet in two directions, one leading to a larger global output of goods and services, another towards securing a larger share in the total. Hence, each region can choose between 'creative' activity (production and exchange) and 'grabbing–protective' activity.

[1] Although Hirschleifer (1991) does not refer to Schelling (1963), it was Schelling who pioneered this type of modelling.

[2] It is noteworthy that according to Haavelmo (1954), agents are not necessarily optimisers.

Since each region's total share of product hinges upon the amount of its *creative* and *grabbing–protecting* activities, then we assume that part of the total share is obtained by *creative* activity, while another part is obtained by *grabbing–protecting* activity.

Of central importance to Haavelmo's model is that the existence of 'allotment functions' due to *grabbing activities* 'must be expected *generally to lead to a reduction in global output* with the case where all efforts go into production'. According to Haavelmo (1954, p. 94):

> In a 'free-for-all' system . . . there would be two kinds of constraints that could prevent a region from turning all its capacity into pure grabbing operations. One constraint would be the fact that it is usually more profitable to spend at least some effort in the direction of creative production. Another constraint is the fact that the unproductive activities of other regions make it harder to gain anything that way for everybody.

The effort wasted on grabbing activities could be reduced through agreements of mutual protection between some or all regions.

According to the model, the diminishing returns of grabbing activity are justified by (i) the trade-off effect between grabbing and creative activities and (ii) the assumption that increasing grabbing activity will lead to less wealth, since competition between different regions makes it harder for any region to gain by grabbing. This latter argument is only valid if no region has the monopoly power on the use of sophisticated military weapons. If one or more regions could have an overwhelming supremacy in fighting efforts, then instead of diminishing returns, one could speak of increasing returns to grabbing activity.[1] Nevertheless, in a competing situation with no decisive conflictual power for any party, diminishing returns to grabbing will prevail.

Moreover, in a situation of competition, grabbing activities will lead to *a reduction in global output*, since the common pool available for capture is reduced. In other words, increased grabbing effort will result in less wealth. Hence, it *seems* that grabbing activity is subject to the marginal utility theory of value. However, the similarity only exists in *appearance* and not in *essence*, since fighting or grabbing effort has no proper utility except for the fact that it can appropriate other goods. In other words, unlike other goods, it has a *derived utility* dependent on the utility of other goods.

According to the marginal utility theory of value, the utility of a product or a service will diminish when its quantity is augmented. However, grabbing activity has no utility of its own: its utility depends on its power to redistribute wealth that is created by productive activity. Put differently, increased grabbing activity will not reduce the marginal utility of this activity, but instead results in a diminished amount of wealth redistributed by such activity. Grabbing activity resembles *fiat money,* which has no utility in itself, and only finds utility as a means to facilitate the exchange of commodities.

Patinkin tried to integrate *fiat money* into a general equilibrium theory of goods and services through its real purchasing effect and concluded the *neutrality* of money. There is no equivalent theory for grabbing activity and Haavelmo's model does not explicate why marginal utility theory can be applied to grabbing activity.

[1] Hirshleifer (1996, pp. 19–32) demonstrates that an important condition for the sustainability of anarchy is when 'conflict is not decisive'. In this circumstance, no one can completely overtake others and, at the same time, there are some incentives to devote some resources to production. This corresponds to Haavelmo's model of 'interregional competition' with no decisive conflictual power for any region. By contrast, under increasing returns for fighting effort (when conflict is more decisive), the party that can devote more resources to fighting may win and replace anarchy for a 'Hobbesian "vertical" contract' or an autocratic or dictatorial rule (Hirshleifer, 1996, pp. 36–9).

2.2 Hirshleifer's 'paradox of power'

Hirshleifer's 'paradox of power' (POP) can be regarded as a new attempt to integrate grabbing activity into the marginal theory of value. In a market economy, initial wealth disparities in endowments or income do not necessarily tend to reduce or to widen. In contrast, in military or political struggles it might be expected that the initially stronger would get stronger and the weaker would grow weaker. What is coined as 'paradox of power' (Hirshleifer, 1991) is the observation that very often the reverse holds true: poorer or weaker contenders improve their position relative to richer or stronger contenders. The theoretical basis for this contention is that the initially weaker or poorer contestants are typically motivated *to fight harder*, that is, to devote relatively more effort to appropriative (conflictual) effort. In other words, the marginal payoff of appropriative activity to productive effort is typically greater among those with low income.

Hirshleifer's (1991) model was similar to that of Haavelmo (1954), in that agents can choose to divide their efforts between 'productive' and 'appropriative' (or fighting) activities. However, unlike Haavelmo, Hirshleifer adopted a *partial* equilibrium (rather than a *general* equilibrium) framework. He studied two-party interactions and employed the Nash–Cournot solution[1] in which the parties simultaneously cooperate and compete: (i) the resources devoted to productive activity mainly determine the total income available; and (ii) the contenders' relative commitments to fighting (or appropriative) activity mainly decide how the total income will be distributed between them.

Furthermore, following Gordon Tullock (1974), Hirshleifer adopted standard economic assumptions regarding agents' behaviour in conflictual activity: 'Conflict interactions, like all economic interactions, involve equations of *optimisation* on the decision-making level and of *equilibrium* on the society-wide level' (Hirshleifer, 1994, p. 18). Hirshleifer's model is very similar to Schelling's rational conflict theory of non-zero-sum games (Schelling, 1963). It excludes total war, and in accordance with the limited-stakes assumption, 'the underlying resources themselves are supposed invulnerable to destruction or capture. Only the income generated by productive use of resources is at issue'. (Hirshleifer, 1991, p. 179). Moreover, apart from opportunity costs in the form of foregone production, *fighting is assumed* to be *non-destructive*.

The model is inappropriate for the analysis of conflicts dominated by single overwhelming or irreversible events like the Pearl Harbour attack, the Hiroshima and Nagasaki bombardments, and the second Gulf War. In the military domain it is more applicable to protracted cold wars or to continuing low-level combats like those between city-dwellers and nomads in early times, or among the small states of pre-imperial China.

In the model, 'fighting' activity is *integrated into the utility function* of agents as a redistributive mechanism. Decision-makers on each side collectively make rational choices aimed solely at maximising group income. Each side $i = 1, 2$ must divide its exogenously given resources R_i between productive effort E_i and fighting effort F_i:

$$E_1 + F_1 = R_1$$
$$E_2 + F_2 = R_2 \qquad (5)$$

[1] Hirshleifer (1991) makes no allowance for Stackelberg leadership or for the use of threats and promises.

The productive technology can be defined by an aggregate production function showing how productive efforts E_1 and E_2 combine to determine income (I):

$$I = A\left(E_1^{1/s} + E_2^{1/s}\right)^s \tag{6}$$

The production function is thus characterised by constant returns to scale and constant elasticity of substitution. Parameter A is a *total productivity index*. Parameter s, which plays a crucial role in the analysis, is a *complementarity index*: as nations become more closely linked by international trade, the value of s rises.

A *technology of conflict* parallels productive technology. The technology of conflict translates commitment of resources during a struggle into distributive success. Inspired by Tullock (1980), Hirshleifer (1991, pp. 180–1) defined a 'contest success function' that uses fighting efforts F_1 and F_2 as inputs and distributive shares p_1 and p_2 ($p_1 + p_2 = 1$) as outputs. The outcome of the struggle depends only upon the *ratio* of the parties' fighting efforts F_1 and F_2, indexed by a single 'mass effect' parameter (m):

$$\begin{aligned} P_1 &= F_1^m / \left(F_1^m + F_2^m\right) \\ P_2 &= F_2^m / \left(F_2^m + F_2^m\right) \end{aligned} \tag{7}$$

The mass effect parameter measures the decisiveness of conflict, namely the degree to which a higher input ratio F_1/F_2 translates into a higher proportionate success ratio p_1/p_2.

Finally, the model applies income distribution equations defining the income level of each party, namely I_1 and I_2:

$$\begin{aligned} I_1 &= p_1 I \\ I_2 &= p_2 I \end{aligned} \tag{8}$$

Equations (7) and (8) together imply that all income falls into a common pool available for capture by either side.

In this model, the POP emerges when a preponderant resource ratio $R_1/R_2 > 1$ is not reflected in a correspondingly large achieved income ratio I_1/I_2.

The POP *allegedly* can provide a rationale for the marginal theory of appropriative activity. The marginal payoff of fighting activity is higher for the poorer side, whereas the marginal payoff of productive activity is higher for the richer side. Hence, when the poorer side redistributes more resources through fighting, the marginal payoff of its fighting activity decreases more and the marginal payoff of its productive activity increases more.

This implies that an individual's marginal utility of fighting activity *increases* when his/her income *decreases* or when his/her income differential with the other party *increases*. Conversely, the marginal utility of fighting activity *decreases* for an individual when his/her income *increases* or when his/her income differential with the other party *decreases*. If each additional fighting effort can be translated into an additional amount of income redistribution, then the POP implies that the marginal utility of each additional fighting effort will decrease with the increasing amount of conflictual efforts. The marginal utility theory appears to be applicable to *conflictual* activities in its appropriative function.

However, this conclusion is not valid because the *POP does not hold universally*. Durham, Hirshleifer and Smith (1998, p. 970) acknowledged that the POP does not hold universally, either empirically or theoretically:

In some social contexts, initially richer and more powerful contenders do exploit weaker rivals. Affluent aristocracies often use their power to extort even more resources from the lower classes. So the question is, when does and when does not the paradox of power hold?

In fact, in Hirshleifer's model, the validity of the POP hinges upon the value of parameter m, which represents 'decisiveness of conflictual effort'. When decisiveness is low, the rich focus on producing a larger social pie of income even though this means that the poor will acquire an improved share. However, when conflictual superiority entails a considerable difference in achieved income, for instance when the battle is 'winner takes all', the rich avoid allowing the poor to win the contest over distributive shares. Accordingly, high *decisiveness* is more advantageous to the better-endowed parties, since they can invest more heavily in 'fighting technology' and be in a better position with regard to contest power.

Hence, Hirshleifer stressed that the POP may apply to 'limited contests that take place within nation-states (class struggles) or firms (labour-management conflicts) or families (sibling and generational rivalries)' (1991, p. 197). Even in these cases, it is more logical to assume that the 'richer' side has an advantage in terms of 'fighting technology' over the 'poorer' side. But this military advantage cannot delay the outbreak of social movements indefinitely. Given the limits of the POP when marginal utility theory is applied to social conflict, researchers developed another line of argument based on collateral damage to explicate the general validity of the theory in the case of fighting effort.

2.3 Collateral damage argument

In his analysis of pressure groups competition, Becker (1983) showed how 'deadweight loss' tends to limit the extent of conflict. Grossman and Kim (1995, 1996A) expanded on this work to account for damage due to fighting. They formulated the concept of 'collateral damage', which measures the destructiveness[1] of appropriative ('predation' in their terminology) activity.

According to these authors, predation is destructive in the sense that in any appropriative interaction, the predator gains less than the prey loses. For example, a predator's gain may be subject to deterioration during shipment, or require processing to be usable. Specifically, if agent A_i (prey) loses a fraction $(1 - p_i)$ of its endowment, agent A_j (predator) gains only a fraction $(1 - \beta)\ (1 - p_i)$ of the endowment of agent A_i (prey), $0 \leqslant \beta \leqslant 1$. Parameter β represents the destructiveness of predation or collateral damage.

It is noteworthy that the destructiveness of predation deters predation. Usher (1992) also invoked deadweight loss as one of the four costs of theft or grabbing. In his model of anarchy, Usher incorporated deadweight loss by distinguishing between types of goods (such as food) that must be defended against bandits and types of goods (such as clothing) that are intrinsically secure. In this model, deadweight loss is incurred because people produce and consume too much of the good that is safe from theft (clothing) and too little of the stealable good (food) (Usher, 1992, pp. 78–89).

In contrast to Grossman and Kim (1995, 1996A), Usher distinguished between deadweight loss and pure waste or destructiveness due to theft. Pure waste is another possible cost of theft, which may stem from the lack of a more amicable way of transferring property from victim to thief. For instance, when robbing someone a thief may consider it necessary to assault the victim physically to reduce his/her ability to defend his/her property, or even go so far as to accidentally or intentionally kill the victim. Grossman and

[1] Destructivity should not be confused with destructiveness: the former refers to the capacity for real destruction, whereas the latter measures collateral damage.

Kim (1995, 1996A) excluded this type of cost because their model does not account for real destruction.

Hirshleifer (1991) did not include collateral damage or parameter β, since the POP provides an alternative explanation for the limits of fighting effort. The POP is not *universal*, but collateral damage may be regarded as a universal property involved in any conflictual activity.

Nonetheless, the concept of collateral damage does not imply that *conflictual activity involves violence and destruction*. Like Hirshleifer (1991), Grossman and Kim (1995, 1996A) studied rational conflict without any real destruction. Collateral damage only refers to potential deterioration due to the deadweight costs of the transfer process. These costs set limits upon how far any beneficiary group can advantageously push for redistribution. Of course, one problem with rational conflict is that it lacks the signalling power of social conflict, which involves real clash and destruction.

It should be noted that in social conflicts normal voting procedures are not a sufficient indicator of the balance of power between the contenders because voting systems do not reflect the intensity of desire among participants in a social conflict. Instead of a voting system or *voice* mechanism (in Hirschman's terminology), a *scream* or infliction of real destruction is often the only barometer of the real power of social protesters (Vahabi, 2006). This signalling value of conflictual activity is not included in the type of modelling under discussion. But the choice of *rational* conflict instead of *social* conflict is not a simple question of modelling strategy; it is more closely related to the theoretical coherence of applying standard assumptions of cost/benefit analysis to conflictual activity.

In fact, collateral damage can provide a *universal rationale* for the diminishing returns to fighting activity in the absence of radical technological innovations in military weapons.[1] Once diminishing returns are assumed, any *real* conflict can be avoided: the potential amount of wealth that may be transferred through conflict is known in advance and can therefore be contracted away. Thus, there is no logical need for real destruction.

In this sense, conflictual activity disappears in equilibrium. The application of marginal utility theory to conflictual activity reduces *social* conflict to *rational* conflict and entails the neutrality of conflict. Out-of-equilibrium situations are certainly relevant to analyses of conflictual activities and several mainstream theorists have explored disequilibria (Hargreaves-Heap and Hollis, 1990; Young, 1990). However, out-of-equilibrium states are irrelevant to the exploration of whether the marginal theory is valid. Therefore, this critical assessment does not include disequilibria.

3. Real conflict and self-interested private interest

Generally speaking, public choice theorists have not used the market model to explain power. Instead of beginning with voluntary transaction or Coasian bargaining, they have built on the logic of coercive power within the framework of self-interested behaviour. During the 1980s and 1990s, a neo-classical theory of political violence emerged; it can be regarded as a branch of public choice theory with a particular application to political violence. This empirical and theoretical literature tackled real conflict.

[1] The extent of collateral damage is influenced by two opposing technological trends: greater destructive power and improved aiming precision. Grossman and Kim (1995, 1996A) formulated a positive parameter (θ) that indicates the effectiveness of offensive weapons against defensive fortifications.

3.1 From rational conflict (threat power) to real conflict

In economics, the recent literature that deals with political violence is known as the new political economy of 'socio-political instability' (Drazen, 2000, pp. 500–13; Persson and Tabellini, 2000, pp. 351–61, 377–9); in insurance theory, it is termed 'political risk' (Habib-Deloncle, 1998).

No single definition exists for 'political instability'. Alesina and Perotti (1994, p. 355) claimed that the concept can be defined in two ways. The first involves constructing an index of socio-political instability (SPI) that summarizes several indicators of more or less violent forms of political protest and social violence. The SPI approach begins with a list of variables that identify events such as riots, political demonstrations against the government, and assassinations. For example, Perotti (1996) used the following index of SPI:

$$\text{SPI} = 1.60\text{ASSASS} + 2.33\text{DEATH} + 7.29\text{SCOUP} + 6.86\text{UCOUP} - 5.23\text{DEM}$$

where: ASSASS = number of political assassinations per million population per year; DEATH = violent deaths per million population per year; SCOUP = number of successful coups per year; UCOUP = number of unsuccessful coups per year; DEM = a dummy variable [1 for countries with an average value of Jodice and Taylor's (1988) democracy index of greater than 0.5, and 0 (zero) otherwise]. In this approach, weights are chosen by the method of principal components.

The second way that Alesina and Perotti (1994) defined political instability focused on executive turnover: the frequency of governmental collapse. Economists have used both of these methods to test empirically how political violence affects economic growth.

Insurance literature uses a third measure, which is directly linked to the security of property. This measure is a subjective indicator of the 'country risk' assessed by specialised firms, particularly English, American and French private insurance companies. Country risk includes several indicators such as sovereign default risk, risk of nationalisation or expropriation, inconvertibility or non-transferability of currencies, protection of expatriate staff, measures related to the rule of law and the enforceability of contracts and level of bureaucracy and corruption.

Since the late 1970s, private insurance companies such as Lloyds of London have insured foreign branches of multinational corporations against political risk in countries where such risks are considered to be high. Each insurance contract is confidential and covers risks related to unpredictable events such as revolutions, political or governmental changes, war and civil war.

Since 1996, the global market of political risk has radically increased. In 1998, the total capacity of this market in case of non-enforceability of contracts amounted to US$100 million and the insurance sum in case of expropriation of capital goods exceeded US$700 million (Habib-Deloncle, 1998, p. 1216). This third measure, country risk, has been used by researchers including Knack and Keefer (1995), Mauro (1995) and Svensson (1998).

The growing body of literature about political instability is related to practical considerations related to the costs and benefits of political violence and the security of property rights. In contrast to *rational* conflict theory, this literature deals with *real* or genuine political violence.[1]

This literature cannot be criticised for ignoring real social conflict, and it gives the impression that neo-classical theory has finally embraced the classical (Ricardian or

[1] For a detailed survey of socio-instability models, see Vahabi (2004, ch. 2).

Marxian) tradition of political economy. Nevertheless, a closer comparison of rational conflict theory with political instability literature reveals that rational conflict theory does not actually present realistic conflicts. It mainly focuses on rational conflict or threat as part of a bargaining procedure between parties who are presumed to be both partners and adversaries. Therefore, the assumptions of rationality and maximising assumptions are incompatible with *realistic* conflicts, but are entirely consistent with a *normative* theory of *rational* conflict.

Political instability theorists have focused on *realistic* rather than *rational* conflict, but have maintained the fundamental assumptions of rationality and maximisation. They have dismissed the theoretical inconsistency between real conflict and expected rationality assumptions by postulating individual-maximising behaviour for rioters or revolutionary militants (Olson, 1980 [1965]; Tullock, 1974; Popkin, 1988; Taylor, 1988; Tong, 1988; Grossman, 1991).[1] In other words, they usually rule out particular political, psychological or social motivations for political violence and assume pure individual economic motivation for participants in political violence in order to identify the utilitarian dimension of political violence. Consequently, *social protesters are regarded as looters* and the distinction between 'revolutionaries' and 'bandits' becomes blurred:

> The analysis that follows defines insurrection generally to include any forceful action against the established system of property rights and taxation. This definition does not distinguish between rebels or revolutionaries . . . and bandits or pirates . . . In actual cases, this distinction can be blurred (see, for example, the discussion of pre-modern China in James Tong [1988]). (Grossman, 1991, p. 913)[2]

This neutrality regarding the institutional identity of contenders (blurring frontiers between bandits and social protesters) in addressing real conflicts is consistent with narrowly defined self-interested behaviour. It is also related to what is termed 'the social dilemma' (Tullock, 1974) or 'free-riding problem' (Olson, 1980 [1965]). If any individual can benefit from a collective action without sharing the costs of actively participation, there can be no revolution made by masses for a common cause.

Olson claimed that revolutions could only be made by 'small conspiratorial groups': 'It is natural then that the "Marxian" revolutions that have taken place have been brought about by small conspiratorial elites that took advantage of weak governments during periods of social disorganization' (Olson, 1980 [1965], p. 106). An assumption of self-motivated individual behaviour can clarify real conflict as long as it is individual and *not social.*

3.2 The free-riding dilemma and the passivity of masses

The free-rider problem explains why some changes occur at the margins in precisely the ways predicted by individual cost–benefit analysis (i.e., changes in individual costs and benefits result in automatic changes in behaviour), whereas others will not. For example, it would not be in the interests of an individual urban worker to riot and thereby incur potential danger to him/herself. The privately-motivated individual (selfish *homo*

[1] It is noteworthy that Gurr's (1970) 'relative deprivation theory' regarding social conflicts was not based on rationality and maximising assumptions. Gupta (1990), like Haavelmo (1954), maintained the rationality postulate but rejected maximising behavior.

[2] Perhaps the distinction between revolutionaries and bandits was blurred in pre-modern China, but it is hard to blur this distinction in the American Revolution for independence (1776), the French Revolution (1789), the Russian Revolution (1917), the recent Iranian Revolution (1979), and all other major revolutions.

œconomicus) would sit back and let someone else do it. Similarly, it would not be worthwhile for a farmer to incur the costs of organising an appeal to government to change property rights, nor would it be beneficial for losers to organise and contest such a change. In every case, the free-rider dilemma would suggest a different result.

Marx was aware of this problem when he distinguished 'class in itself' as a sheer economic reality. In stark contrast with other German leaders of worker groups such as Willich-Schapper and Blanquist, Marx foresaw the transformation of the proletariat from a shapeless, non-united, competing group of people into a united conscious class capable of promoting collective (class) interests over partial (individual) interests as a long protracted, historical process (Draper, 1978). Lenin's concept of a party as a well-disciplined small elite group of 'professional revolutionaries' with ideological clarity may also be interpreted as a solution to the free-riding problem.

Olson (1980 [1965]) and Buchanan (1979) pointed out this problem. Olson's pioneering work extended the neoclassical paradigm to identify what forms of group behaviour would exist in a neoclassical world. He theorised that small groups would exist in which the individual benefits of an action would exceed the cost, or in which individuals could be coerced into action. In addition, he theorised that large groups (for example, the American Medical Association and trade unions) would continue if members could receive exclusive individual benefits not available to outsiders. He demonstrated that when large groups are organised to promote change, but do not provide exclusive benefits for members, they tend to become unstable and gradually disappear. In essence, rational individuals will not incur the costs of participating in large group action when individual benefits can still be received through free-riding.

Thus, individual cost–benefit analysis can explain how people acting in their own self-interest behave, or why some people do not bother to vote, or why, as a result of the free-rider problem, people will not participate in group action when individual gain is negligible. However, it cannot explain effectively the reverse side of the coin: behaviour in which calculated self-interest is not the motivating factor. What causes altruistic behaviour such as blood donation or sacrificing one's own life for a greater cause with no apparent evidence of personal gain (i.e., the many individuals and groups throughout history who have incurred prison or death for abstract causes)? What causes the large percentage of the population to vote and what explains the enormous amount of voluntary work where individual return is small or negligible? In brief, how can we explain great sacrifices for major causes?

There are at least two possible solutions to this problem.[1] First, purely individual cost–benefit analyses may fail to apply to social conflict. Then, altruistic behaviour is acknowledged as an undeniable social and economic fact and the orthodox selfish economic man is proven to be one-dimensional (Collard, 1978). Behaviour is shaped by emotions as well as reason (Frank, 1988), so human motivation might better be explained using a broader perspective including both social good and one's own wellbeing (Frank *et al.*, 1993).

Psychological research has proven the connection between extrinsic motivation (remuneration) and intrinsic motivation (happiness) (Frey, 1997; Frey and Stutzer, 2002). The rational selfish *homo œconomicus* may thus be replaced by an individual agent capable

[1] Some authors argue that where a rebellion is financially and military feasible it will occur regardless of the motivation of rebels: 'Feasibility rather than motivation is decisive for the risk of rebellion' (Collier *et al.*, 2009, p. 23).

of feeling emotions, intrinsic pleasures and an interest for altruism and reciprocity (Kolm and Ythier, 2006). Within this framework, the free-rider dilemma is not a *universal* problem of collective action but rather a *particular* problem that might appear under certain specific *motivational* or *historical* conditions where conflictual activity is conducted on a purely utilitarian basis. This solution modifies the orthodox utility function of individual agents used in mainstream economics.

The second solution, advocated by the public choice school, is to deny the *theoretical* relevance of 'great sacrifices for major causes'. Of course, the theory does not deny the *reality* of such sacrifices as an empirical fact, but it tries to elucidate the dynamics of conflicts on the basis of some private self-interested individual behaviour. In this way, the theory dismisses 'great sacrifices' as a motivational factor, and explains a mass movement by the activities of small interest groups (for instance, an elite or leading minority or conspiratorial groups) behaving as 'political entrepreneurs' who are capable of fomenting people in the name of 'public interests' but for the sake of their own rent-seeking private interests:

> It will be noted that . . . the individuals will ignore the public good aspects of the revolution in deciding whether to participate and on which side to participate. The important variables are the rewards and punishments offered by the two sides and the risk of injury during the fighting. Entertainment is probably not an important variable in serious revolutionary activity. People are willing to take some risks for the fun of it, but not very severe ones. (Tullock, 1974, p. 39)

In other words, the free-riding dilemma is solved by defining how *private interest* is incorporated into *collective action*. This type of resolution necessarily reduces social protestors to looters. By denying the theoretical relevance of 'great sacrifices', the public choice school does not need to explain the dynamics of sacrifice at all. However, the theory should justify to what extent *collective interest* is incorporated in *individual actions* unless it denies the very existence of any collective interest (or 'major causes'), apart from narrowly defined individual interests.

The major problem with traditional public choice arguments is not its denial of 'great sacrifices', but its denial of 'major causes' since the theory impoverishes the notion of 'interest' to individual interest and ignores collective interest. Olson subsequently solved this theoretical inconsistency of public choice theory by distinguishing between 'narrow' and 'encompassing' interests (Olson, 1982, 2000); this distinction will be discussed in Section 4.

According to the public choice school, historical change (political and economic) will occur only when private return exceeds private cost; otherwise, the free-rider problem will prevent adjustment. This condition severely restricts the willingness of constituents to adjust. While it helps explain the persistence of inefficient property rights, it obviously cannot explain the action of large groups to alter the property rights structure when private returns are negligible or negative.

The free-rider problem has at least one major implication for institutional change: masses are not the history-builders and social conflict is not the source of institutional change. In fact, the free-rider problem may explain the stability of states throughout history:

> The costs to the individual of opposing the coercive forces of the state have traditionally resulted in apathy and acceptance of the state's rules, no matter how oppressive. An historical counterpart of the low voter turnout in many current democracies is the failure of individuals to act as classes and of large groups to overthrow societies in the past . . . the ruler will, on his side, continue to

innovate institutional change to adjust to changing relative prices since he has no free-rider problem. Thus a change in the relative scarcity of the land and labor which made labor scarcer would lead the ruler to innovate institutional changes to appropriate increased rents from labor. These motivations will be carried out as long as the opportunity costs of labor do not change (that is, there is no change in potential competition from other rulers). (North, 1981, pp. 31–2)

The free-rider problem thus stresses the asymmetrical position of rulers and constituents: rulers are motivated to initiate institutional innovation, but collective action by masses is hindered. The stability of political regimes throughout history is thus enlightened by the impossibility of 'concerted revolutionary action' (Buchanan, 1979, p. 69). As noted above, this conclusion might be shocking, but it has been explicitly acknowledged by the public choice school.

4. Social conflict and expanding the idea of interest

Individual private cost–benefit analysis is limited to instances where net private gain (in narrowly construed economic terms) can be identified:

It will be noted that. . .the individuals will ignore the public good aspects of the revolution in deciding whether to participate and on which side to participate. The important variables are the rewards and punishments offered by the two sides and the risk of injury during the fighting. Entertainment is probably not an important variable in serious revolutionary activity. People are willing to take some risks for the fun of it, but not very severe ones. (Tullock, 1974, p. 39).

Acknowledgment of the 'fun factor' is not synonymous with a martyr's pleasure in sacrificing him/herself for a cause. As the name suggests, the 'fun factor' plays a marginal role; it can be reinterpreted in terms of altruistic motivation. For example, Collard (1978) defined altruism as enjoyment derived from the enjoyment of others. Incorporation of this altruistic factor into utility algebra and diagrams makes it possible to explain collective action and public choice.

Thus, an alternative solution to the problem of 'great sacrifices for major causes' is to amend individual cost–benefit analysis by questioning the ubiquitous assumption of maximising self interest. Gupta (1991) expanded on Sen's work on additive utility function, explicitly introducing *ideology* or group welfare as another aspect of the maximand. In this way, Gupta integrated altruistic or ideological behaviour into an individual's utility function. This type of modelling[1] supports North's contention that ideology is a solution to free-riding (North, 1981, 2005).

However, this type of argument suffers from two major shortcomings. First, a utilitarian approach fails to explain 'great sacrifices for major causes' due to what Hirschman has called the transformation of costs into benefits:

It is in the nature of *the* "public good" or "public happiness" that striving for it cannot be neatly separated from possessing it. This is so because striving for public happiness will often be felt not so much as a cost, but as the closest available substitute for it. We all know that participation in a movement to bring about a desirable policy is (and, unfortunately, may be for a long time) the next best thing to having that policy. Uncertainty is an important element in this strange transformation of means into ends, and of costs into benefits. Success in the advocacy of a public policy is always uncertain: nobody knows the size of citizens' advocacy or protest that is needed to

[1] Roemer (1985) was one pioneer of this type of modelling. He theorised that free-riding in revolutionary coalitions is indeed overcome by a change in an agent's preference: from the prisoner's dilemma to the assurance game, in which each agent derives more utility from cooperating rather than from defecting, provided that the other agent cooperates.

impose, change, or stop a given public policy. If a citizen feels strongly, he may therefore experience the need to *negate the uncertainty about the desired outcome by the certainty of participation in the movement to bring about that outcome*. (Hirschman, 1974, pp. 9–10, the last emphasis is added)

Social protests, wild strikes, revolutions and patriotic wars are excluded from benefit-cost calculus due to this transformation of costs into benefits. The revolutionary who struggles for a great cause cannot be sure whether s/he will see the victory. In this sense, the benefit is *uncertain*, whereas the cost (including the possibility of loss of life) is *certain*. Given the uncertainty about victory, the next best solution is to feel victory through strife. Here, cost becomes benefit (for a detailed analysis of this phenomenon, see Vahabi, 2004, p. 53, 69–74, 190–6). In its extreme form, this gives rise to saints and martyrs of all faiths, religious or secular, but it is not limited to such dire instances. Quiet heroism may take place in marriage, child rearing, employment and other aspects of daily life without which the normal functioning of the economy might completely collapse. Given the extent of the phenomenon, it is important to distinguish the type of decision making when the situation cannot be understood using a utilitarian approach.

This brings up the second problem with the simple amendment to the utilitarian argument. In some situations, the decision-maker chooses a course of action not based on possible 'effects' or probability of success, but on who he/she 'is' (self-identity). According to Boulding (1969), this type of decision-making is based on a 'heroic' ethic that should be differentiated from an 'economic' ethic. However, an elaborate theory of 'heroic' ethics has yet to be developed. Moreover, the empirical existence of a heroic ethic does not imply its theoretical relevance, as discussed in the preceding section.

Once again we are back to an 'economic' ethic—but the goal was to expand the idea of interest to include 'collective interest' ('major causes'). Given the shortcomings of ideology as a way to expand the idea, Olson's (1982) distinction between 'narrow' and 'encompassing' interest may be helpful. This distinction captures the different rationales of a roving bandit versus a stationary bandit. The roving bandit has such a narrow stake in any loss or benefit to society that he ignores the harm to society caused by his marauding. In this sense, his interest regarding the overall effect of his actions to society is *narrow.* In contrast, a stationary bandit controlling a territory (e.g., a Mafia family or a state) monopolises crime or coercive means in a community, so this bandit will have a moderately *encompassing* interest in the income of that community. Accordingly, this bandit takes into account the overall effects of its actions to society when resorting to coercive power.

Olson applied this distinction to explain the origin of autocracy. Roving banditry means anarchy, and replacing anarchy with government brings about a considerable increase in output. Although Olson failed to discuss an 'ordered anarchy' as an intermediary state between order and anarchy (Vahabi, 2009), his explanation of the autocrat or stationary bandit's incentive to provide public goods while maximising the rate of tax theft is a seminal contribution. Although shifting from roving to stationary banditry increases the benefit to both the bandit leader and the population, in stark contrast with Coasian bargaining, this benefit does not stem from social contract or any other voluntary transaction.

Social interest is not the goal of voluntary market transactions, but when a roving bandit leader settles down and appoints himself king, output increases and mutual benefits appear as the result of what Olson (2000) terms 'the invisible hand on the left':

The improvement in outcomes that arises when there is a shift from the destructive to the constructive use of power-as Hobbes's 'war of all against all' is replaced by the order provided by

an autocratic government—is due to another visible hand. This invisible hand—shall we call it the invisible hand on the left?—that guides encompassing interests to use the power, at least to some degree, in accord with the social interest, even with serving the public good, was not part of the intention. This second invisible hand is as unfamiliar and perhaps counterintuitive as the first hidden hand was in Adam Smith's time, but that does not mean it is less important. There can be no satisfactory theory of power, of government and politics, or of the good and the harm done by governments to economies, that leaves out the second invisible hand. (Olson, 2000, p. 13)

However, once this 'second invisible hand on the left' is introduced, why can we not revisit the Marxian distinction between 'individual interest' (*narrow* interest) and 'class interest' (*encompassing* interest) as a way to transcend the free-riding dilemma? For example, during a financial crisis, why is it that the *narrow* interest of individual capitalists cannot make them plea for state intervention, while their *encompassing* interest as a capitalist class warrants such an intervention? In this case, a bourgeois state as a stationary bandit has an *encompassing* interest because it takes into account the general effects of a systemic crisis that individual financial capitalists might lack. Interestingly, Olson's second invisible hand supports not only Marx, but all classical political economists whose notion of 'interest' includes class interest instead of only individual interest. From this perspective, social conflict is thus conflict over *encompassing* (including class) interests and should not be reduced to individual conflict over *narrow* interests.

5. Conclusion

Our critical review of economic literature since the pioneering work of Haavelmo (1954) has shown that the application of the marginal utility theory and narrowly-defined individual cost–benefit analysis to social conflicts has not been successful. Attempts have either reduced *social* conflict to *rational* conflict or to *real* self-interested private (but not social) conflict. This reductionism is based on two critical assumptions: (i) conflict disappears in equilibrium and is neutral with regard to economic performance (in accordance with Coasian theorem) and (ii) social conflict has no bearing on institutional change due to the free-riding problem. These assumptions explain the exclusion of social conflict from economic theory.

The revisiting of social conflict within economic theory calls into question the narrow notion of interest as 'individual self-interest' and gives credence to an alternative theory of group or class interest. Integration of social conflict into economic theory will require: (i) abandoning the ubiquitous market model when describing conflictual relationships; (ii) accepting the logic of force or coercive power as a starting point; and (iii) expanding the idea of interest to include encompassing (including class) interest.

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