

## 7. THE WORST CASE

In complete contrast with the best case, the worst case scenario is based on the assumption that resources sustain extremely heavy damage and the institutional framework of society is, for all practical purposes, completely eliminated. In the event of a massive combined counterforce and countervalue strike, this state of affairs might pertain to much of the United States

If devastation is less than totally uniform, the worst case is likely to characterize the state of affairs in those areas where the population survives but direct extensive material damage is sustained. The worst case also may apply to areas which had relied previously upon resources and government direction from other parts of the country that have been destroyed or cut off by the attack. Hence, the worst case is distinguished from the institution intensive scenario, where government and financial institutions survive effectively in areas of low resources, as well as from the scenarios where resources are plentiful. However, the worst case may exist in some parts of the country at the same time that the institution intensive and resource abundance scenarios pertain elsewhere. It is presumed that worst case areas are, at least initially, isolated from better off communities, and are unable to call on the institutional or physical resources of these other areas. However, where such contact eventually occurs, civil conflict may occur due to the difficult nature of social organization that is described below.

Of course, the worst case is unlikely to coexist with the best case, as the central government would immediately declare a state of emergency in a single stricken zone, and rush to provide material and institutional aid to maintain civil order.

It may be worthwhile to remind the reader that the worst case is defined to be exactly that. If sufficient institutional infrastructure survives at national, regional, or local level to preserve the peace and security of civil society, then we have either the best case or the institution intensive scenarios, depending on the level of surviving resources. If the reduction in population is such that the surviving resource base, although diminished, provides per capita plenty, we have the resource abundance condition, not the worst case.

### 7.1 LIFE WITHOUT CIVIL SOCIETY

Some readers may find the worst case unthinkable, therefore unrealistic. But, however unpalatable, it is thinkable and therefore, although unlikely, it provides a logical bounding condition for survival and subsequent economic recovery. In this extreme scenario more than any other, the loss of institutional continuity and customary patterns of social organization combine with extreme competition for resources to make the survival of practical pre-attack values and expectations of

consistent human behavior highly unlikely. This is in accordance with our argument about the vulnerability of so-called core values in chapter one.

The loss of institutions is assumed to include the collapse of currency and the banking system. With no records of debt and property ownership, possession is likely to become the principal determinant of ownership. Pre-attack contracts, therefore, would be likely to fall into abeyance. The absence of law-enforcement infrastructure to uphold even rights of possession would exacerbate both the insecurity of property ownership and the risks of attempting to trade, already increased by the collapse of insurance and producer/consumer legislation. Monitoring, dispute settlement and enforcement would rest with individual traders or fall upon individuals and groups with the physical power to coerce.

The emergence of warlords, armed factions, dacoits, bandit groups, and so-forth is well documented in societies that have experienced the serious breakdown of the national institutions of civil society. Disaster-relief workers give many accounts of armed groups that are often the remnants of the very institutions that normally would be used to preserve order in emergencies and to maintain the conditions for the functioning of markets or orderly allocation of relief supplies (Stephenson 1986). Units of law-enforcement agencies and military regiments have been observed (eg. in Somalia, Uganda, and Kampuchea) to act as independent economic units, collecting their own taxes on the movement of goods and appropriating services (Heder 1980). Their strength relies partly on their possession of firearms, but also on pre-existing association and identification of common interests.

Similar phenomena have been encountered throughout the development of the United States, especially under frontier conditions that parallel those of the worst case in respect to the availability of resources and institutions of civil society. Take, for example, the activities of the notorious Judge Roy Bean of New Mexico (Sonnichsen 1986), whose self-interested interpretations and enforcement of the law ensured his own enrichment. The California gold rush produced individuals such as John Sutter who, far from the reach of the state authorities, levied taxes on miners working property to which he had no title (Umbeck 1976).

It may be objected that Sutter and his ilk differed from potential survivors in the worst case scenario in that the frontiersmen were attempting to carve out a society in a land where no Europeans had previously established the rule of law. According to this view, economic development does not parallel economic breakdown. Survivors of nuclear war, it may be thought, will attempt to reaffirm the rules by which they lived before. Unfortunately, the objection is not compelling. The men and women who built the frontier society came from places where the rule of law was just as well established as in pre-attack America. By no means all were misfits or fugitives who rejected the institutions of the civilized east. If all that were necessary for continuity in the effective rule of law between eastern city and the western frontier was that the values of civil society were carried in the heads of individual settlers, why could they not carry them across

space just as effectively as our critic would have them carried across time?

The answer is that for values to become effective requires an appropriate institutional framework. Eventually, such a framework diffused from east to west across the United States. In the meantime, the institutions, like kinship, that did move with the settlers frequently substituted for the functions of civil society. At the family level, clan leaders like "Devil Anse" Hatfield and Judge James Hargis emerged as family enforcers around whom feuding groups, loosely tied by bonds of kinship and marriage, rallied for protection (Harris 1940, Jones 1948).

If, by definition, the institutions of civil society are eliminated in the worst case scenario, we must ask what could take their place. Generally, we suspect that the family will be an important model for many of the survivors. In the long term, such survivors should be able to develop appropriate institutions of civil society. In so doing, they, by definition, will lift their communities out of the worst case scenario. In the shorter term, however, survivors may have to contend with some less attractive options. For instance, survivalist groups in rural areas and territorial urban street gangs may be well adapted to step into the power vacuum left by the elimination of effective formal institutions that defines the worst case. Thus, it is reasonable to suppose that the worst case scenario would provide conditions in which the criminal variant of the associational exchange structure may flourish.

However, as Hobsbawm (1969) points out, not all banditry is motivated purely by personal gain. The phenomenon of social banditry, where goods are expropriated from unwilling owners for distribution among the wider population has been found in diverse times and places from the medieval Robin Hood to the James Gang of frontier America. Jesse and Frank James gained a strong following in Mid-America after the Civil War, for their activities against the unpopular banks and railroads (Settle 1966). More recently, neither the Mafia nor the Carabinieri para-military police were equal to the challenge of Salvatore Giuliano who exerted control over rural areas of Sicily in the years immediately following the second world war (Hobsbawm 1969).

Gang leadership is likely to be a major outlet for entrepreneurship of a certain sort. Other kinds of enterprise would be opened up by the removal of pre-disaster institutions and interregional markets, alongside a wholly changed demand/supply environment. However, the profit opportunities would have to be extremely large, relative to investment, to compensate for both the economic risk of coordinating resources and the personal risk of having them expropriated by coercive threats or force (Knight 1921). Indeed, a likely cost to an individual or community attempting to meet agricultural or manufacturing demands will be that of security, whether this is incurred by hiring mercenaries (pace the Seven Samurai) or by organizing, training, and maintaining an armed militia. Citizens wishing to protect themselves from predatory gangs and who are unwilling to accept the patronage of social bandits may well choose the collective self-help option of organizing their own

defense. However, the problems of egalitarian cooperative organization have been well documented (Olson 1965, Henry 1988). This option is likely to be facilitated by the charismatic leadership of individuals possessing the gifts of inspirational rhetoric and organizing skills to establish effective vigilante groups.

The vigilante solution to the problem of maintaining civil order where the formal legal institutions are weak has been a ubiquitous feature of American history. The first recorded indigenous American vigilante movement occurred in South Carolina in 1767 as a response to the problem of maintaining law and order far from the centers of effective government jurisdiction. It was a pattern repeated time and again beyond the Appalachians, culminating in vigilantism's most famous failure, the Wyoming cattlemen's regulator movements that precipitated the Johnson County War of 1892 (Brown 1979).

An alternative source of dispute settlement may develop around charismatic holy men, corresponding to the Swat Pathan saints described by Barth (1959). Leaders of rival groupings may recognize that the transaction costs of settlement through violent confrontation are bound to be high. If the followers of A and B kill each other off in a feud, both parties may be weakened in respect to a third contender. Powerful leaders may, therefore, prefer to submit disputes to some form of arbitration by a normatively disinterested third-party who derives authority from sacred, rather than secular power. Another source of arbitrating authority may come from the possession of technical skills that confer power over natural resources, rather than from coercive power over individuals or groups. In either case, physicians and priests, for example, may well prove capable of maintaining a market peace free from intervention by rival parties who rely on the arbitrational powers of these individuals. Peasant-marketplace exchange structures may, therefore, emerge.

Arbitrators are not the sole alternatives to violent confrontation. Large-scale exchanges of prestige goods and competitive feasting are examples of "Fighting With Property," (Codere 1950) that have supplanted warfare in places as diverse as the American Northwest Coast and Papua New Guinea (Strathern 1971). This activity is paralleled in nineteenth and twentieth century America by the competitive philanthropy of robber barons and multi-millionaires, who enhanced the power and influence of their families by establishing the foundations and endowing the hundreds of university chairs that bear their names. Hence, the prestige exchange structure is likely to be highly significant in establishing a pecking order for dispute settlement between individuals competing for leadership roles either in gangs or in self-protective communities.

The bandit, brigand, or dacoit gang may be an important unit of consumption (by appropriation) and of exchange, through both prestige and criminal markets. It also may be a provider of military or security services and a regulator of economic activity through taxation and provision of a market peace. Thus, peasant marketplaces may emerge under the patronage of an enforcer (as well as an arbitrator) who is capable of maintaining civil order and arbitrating smaller disputes among traders. However, in all of these cases, the principal unit of

production is likely to be the extended family (including people treated like kin) which will account for the exchange and consumption of subsistence goods through intimate and associational exchange networks.

Hence, it certainly is not the case that all exchange under the worst case scenario would be subject to coercion. Neither would all contracts be enforced through threats of violence. However, the true free market does not seem to be an important option here since most exchanges will be conducted according to socially defined webs of obligation that will hold together the self-protective community just as surely as they bind the charismatic leader to his followers.

The risk-reducing benefits of intimate and associational trading relationships will be especially appreciated in a climate of high uncertainty (Mintz 1961). Such relationships are likely, therefore, to encourage preferential trading partners in the peasant marketplace, which seems to be the closest to the free market that society can hope to aspire while the worst case conditions apply. Until conditions improve such that the worst case bounding conditions are alleviated, preferential trading relationships seem likely to be maintained despite the danger that this may result in a decline in the quality of goods traded (Wilson 1980). In summation, subsistence, prestige, and peasant-market exchange structures, all heavily influenced by intimate and criminal associational exchange, are likely to displace almost, if not all, formal market activities in the event that the worst case is realized.

## 7.2 HIGH RISK AND SCARCITY

Subsistence production under the worst case is not likely to be "the original affluent society" that, as we noted in chapter four, Sahlins (1972) ascribes to the Kalahari Bushman. It may be that Bushmen have adopted a "zen road to affluence" by restricting wants to that limited range of resources that is plentiful in the desert for those with appropriate skills. We may be able to emulate a Bushman restraint on wants under the resource intensive scenario where certain goods are abundant. However, despite superficial similarities arising from the narrow variety of resources available to both Bushmen and worst case survivors, other factors render the comparison tenuous.

For the Bushman, restriction of wants depends upon living where other groups do not put competing pressures on resources. True, where others see only desolation in the desert, the Bushman may see wild orchards and abundant game (Lee 1969). But this was not always so, Bushmen have learned their ability to extract plenty from scarcity because stronger groups forced them out of places where nature's bounty is more obvious. Bushman affluence depends upon acquired skills and restricting populations, as well as upon their former persecutors not following them into the desert to compete for its simple fruits.

The worst case instantly places everyone in the desert competing for what resources remain. There will be no transition period and no time to acquire new skills to extract plenty from scarcity and to learn

to view the world of goods in a new way. Rather, the initial phase of the worst case is likely to be an undignified scramble for surviving resources to sustain life in the short term. This will be accompanied by the formation and dissolution of shifting alliances between individuals and groups, as community stalwarts, former politicians, religious leaders, entrepreneurs, criminals, policemen, and military units vie with each other to establish control over local populations.

The first priority of worst case survivors is likely to be salvage; finding shelter, uncontaminated food, water, medications, tools, and weapons. As the extent of devastation becomes clear, and it is realized that there will be no foreseeable external relief, the initial urge to scavenge probably will expand beyond goods necessary for immediate survival to include items that may be useful for future barter or for modification to other uses as new skills are developed.

However, the quantity of surviving resources thus assimilated probably will be limited to those that can be carried by persons, beasts of burden, or on handcarts. Where electromagnetic pulse (EMP) has not rendered motor vehicles inoperable, gasoline supplies (according to our definition of resource destruction) are likely to be extremely limited. A further limitation on stockpiling by individuals, groups, or communities will be the necessity to defend acquisitions from seizure by others. This will provide the motivation for ordinary citizens to organize vigilante groups or to seek membership in gangs, or the protection of enforcers.

The initial phase of extreme competition for surviving goods is likely to be limited by their finite supply. Those that are durable may enter the prestige sphere and be used in dispute settlement or to pave the way for the trade of non-prestige goods between rival groups (Malinowski 1922, Singh Uberoi 1962). Survivors probably will soon develop a domestic mode of production, adapting remaining artifacts to new uses and learning new skills for subsistence agricultural production. The domestic mode of production, combined with the vulnerability of civil society is likely to yield six major problems for exchange within the worst case scenario.

- o The collapse of currency and scarcity of surviving resources will drastically reduce purchasing power. Scarcity of agricultural and domestic productive capacity will lead to dramatically escalating relative prices for food. Prices, initially, would be only a means of communicating comparative value, no money would actually change hands since barter, or currency substitutes such as precious metals, may completely displace cash transactions. Items and quantities exchanged soon are likely to replace cash equivalencies as indicators of value.
- o Initially, demands on surviving resources will escalate, as these are consumed for short-term survival. As conditions improve, rising demand may continue as traditional technologies are adapted to replace lost raw materials or productive capabilities and new skills are developed. Credit,

within a barter economy, is likely to prove problematic given the high uncertainty of the worst case environment. Where long-term trading relations are established between preferred trading partners and where prestige exchanges develop between leaders or communities, credit will be available, but it is unlikely that there will be an open market or general use of credit among traders.

- o Given the loss of vital resources, there are likely to be binding time constraints on all production and exchange activities in order that the surviving population can assure its own survival.
- o There is likely to be an abrupt shifting of demand and supply as supplies are damaged and preferences altered by the disaster. Market power balances may be shifted decisively, as goods once valued and representative of wealth are reevaluated. Their owners may be instantly poor while others, particularly those with coercive power or skills essential to survival, become wealthy and powerful.
- o The loss of population, destruction or unavailability of records of property ownership and loss of the institutions to enforce pre-attack contracts, also may lead to dramatic changes in the distribution of wealth as debtors are freed of their obligations at the expense of creditors.
- o The resultant free-for-all is very likely to produce considerable conflict based on perceived injustices and the scramble for control of surviving resources.

### 7.3 FUNCTIONS

Under the worst case scenario, the subsistence, peasant-marketplace, criminal variant of the associational and prestige exchange structures may fulfill the necessary and facilitating functions of a market. In describing the mechanisms that accomplish those functions, it is appropriate to consider the institutions available or creatable to operate the mechanisms. Clearly, under the worst case scenario, the ability to perform functions will depend upon: (a) the transferability of functions from destroyed institutions; (b) the perceived legitimacy of the functions and of any institutions established for carrying them out; and, (c) the time taken to adapt mechanisms and develop alternative institutions for the performance of the necessary functions. These are dealt with below.

1. Define property rights. The scarcity of resources and destruction of infrastructure render it questionable that pre-attack patterns of land-tenure will survive. Possession of land and the power to protect it may prove to be the criteria of ownership for agricultural production. Subsistence production/consumption units probably will be able to farm as

much land as they have labor power within the family unit as extended to include close friends and their kin.

The subsistence structure is so closely dependent on membership of a multi-purpose social group that rules governing shared property rights actually constitute major social bonds. Internally, therefore, there is no need for an extra-market legal system and rights will be defined and enforced internally by kinsmen and coresidents. Externally, property rights probably will be enforced by vigilante groups or gangs, although neutral mediators (such as religious leaders or doctors) also may participate in their definition. Personal private property is likely to be very limited in scope.

Similarly, property rights in the prestige structure depend strongly on custom and kinship. Violators of rules defining these rights are excluded from transactions by other members of the market. However, in some cases, extra-market sanctions may be brought to bear by enforcers to decide disputes over property by force of arms.

Property rights in the peasant-marketplace structure probably will be defined through the development of customary rules interpreted by community or gang leaders, who allocate disputed resources, and market patrons (sometimes the enforcers, but also religious figures, guilds, etc.) who maintain the market peace. These are extra-market mechanisms.

2. Convey supply-demand information. The subsistence and peasant marketplace structures effectively convey information. The subsistence structure does this through intimate face-to-face interaction, while the peasant marketplace structure brings traders to a common marketplace, precisely to reduce information costs. The prestige market structure provides motives to restrict information since the object is to effect status-enhancing exchanges, usually at the expense of rivals (Codere 1950, Strathern 1971).
3. Provision of opportunities for legitimate transaction. These may be provided by a variety of institutional mechanisms, primarily kin and friendship based trading networks. Also, certain sites such as churches or their remains might provide safe locations for trade with members of other such networks, especially if presided over by community leaders or holy men to keep the market peace. The purpose of peasant marketplaces is to provide transaction opportunities, reduce information costs, and mitigate risk.

Mechanisms such as blood brotherhood (Barth 1959) or patronage (Eisenstadt and Roniger 1984) might provide security for itinerant traders or those venturing into territory beyond the immediate community.



Exchanges internal to the production/consumption group are likely to be legitimated through rules that specify continuing social relations. Mealtimes may be the most formal occasion of exchange here. Just as in all exotic and industrial societies, religious festivals, rights of passage, weddings and anniversaries frequently are occasions for prestige prestations (Douglas and Isherwood 1978).

4. Limitation of provisions of legitimate contracts. In the subsistence structure, this is done by the rules of distribution within the production/consumption group. Peasant marketplace structures combine traditional trading patterns with the extra-market controls of landowners and market patrons. The rules of prestige exchange limit legitimacy in that system.

Within these broad limitations, the provisions of legitimate contracts are likely to be largely a matter of individual negotiation between traders, although customary rules of conduct and demands made by kin and friendship networks, churches, and community associations are likely to constrain the terms of contracts made within the group. Contracts with outsiders or members of other communities probably will be less constrained, except in the burdens placed on the whole network by the undertakings of a single member. If an individual defaults on an obligation, it is likely that his/her entire production/consumption unit will be called upon to make redress by the injured party's community group or powerful patron (Gluckman 1955).

5. Enforcement of contracts other than by physical coercion. Ultimately, the threat of coercion by the possessors of military force seldom will be far from the minds of major disputants. However, all of the exchange structures imply some sort of enforcement of contracts. The nature of enforcement varies from social pressure and shaming in subsistence and prestige structures, to a combination of the desire for repeat transactions and extra-market constraints from market patrons in peasant marketplaces.
6. Dispute settlement. There is only a very limited range of sanctions and appeals available in the worst case scenario. In subsistence and prestige structures, settlement is achieved by threats of exclusion as well as through shaming and ostracism. In peasant and criminal-associational structures, these mechanisms are supplemented by extra-market agencies. As stated above, the neutrality of holy men and their separation from the daily power struggle may be respected by parties to a dispute. Oracular mechanisms may be employed to make decisions without their attribution to human agency (Evans-Pritchard 1937). Another mechanism is contest, including fighting, tests of physical endurance, or the giving away of a valued endowment in the prestige structure. Settlement-directed talking (Roberts 1979), on the other hand,

might include third-party adjudication imposed by a judge or arbitrator, mediation by a go-between or holy man, and consensus formation through extensive debate (Rayner 1988).

7. Maintenance of civil order. The subsistence structure depends on the intimate relations of the production/consumption group to maintain civil order. This is also a strong factor in the prestige and peasant structures. Because of the weaker social bonds between exchanging partners in the peasant system, it also relies strongly on extra-market agencies, such as military leaders or priestly market patrons, to maintain market peace. Ultimately, civil order will depend on those who have the guns, whether they are community vigilantes, entrepreneurial mercenaries, or former police and military units.
8. Legitimation of other functions. Subsistence structures legitimate all internal functions through their multi-purpose social relations. Social relations based on coresidence, kinship, or established trading relationships are also important in prestige and peasant marketplace structures. However social relations are supplemented by the extra-market control system. In the criminal-associational exchange structures, legitimation relies on the interplay of threatened coercion and promised protection from outsiders to the group.
9. Guarantees of currency and close substitutes. There are no currencies in subsistence structures. In the prestige structure, the prohibition on exchanging down prestige goods for subsistence goods guarantees their value as close currency substitutes (Bohannon 1959, Douglas 1967). In general, peasant markets use currencies that are either guaranteed by market forces (eg. precious metals) or else are externally guaranteed by extra-market forces, such as the state. By definition, the backers of fiat currencies are absent in the worst case scenario. Guaranteeing emerging currencies or substitutes therefore will depend, to some extent, on the existence of survivors with appropriate assay skills. Experience in Kampuchea and Uganda indicates a strong likelihood that gold and gemstones will emerge as currencies when paper money fails (Hader 1980). Some guarantor of authenticity will be required.
10. Administration of distributive justice. Subsistence structures administer distributive justice through sharing rules. Prestige structures rely on the needs of the status seeker to coordinate the accumulation of goods to exchange. Regressive distribution of resources will occur where communities are at the mercy of enforcers who levy taxes in exchange for protection.
11. Monitoring and modification of operations in response to changing circumstances. This function is performed by all of the exchange structures in the worst case. There is likely to

be a tendency for fixed allocational rules in both the subsistence and prestige structures to change slowest, once they have become established. However, the low level of resources suggests that many rules will have to be flexible or the groups will perish.

12. Mitigation of risk. This will depend primarily on information and risk spreading activities on the part of traders. In all four exchange structures, mitigation of risk is achieved by trading with established trading partners. Although not a requirement in peasant marketplace structures, small traders frequently display a preference for developing a limited number of steady customers to whom they give a small advantage (Mintz 1961). However, they avoid selling to only one customer in order to disperse risk (Scott 1976). Ex ante payments also are used to reduce risk in peasant markets. Peasant producers reduce risk by use of multiple seed varieties, farming on scattered strips, etc. Formation of multiple trading units, consisting of multiple households or communities, can distribute losses, but also will require a disbursement of gains from trade. Preference for a series of small transactions over a few large ones may increase transaction costs but reduce the size of potential losses through default of payments, fraud, or short-term price fluctuations.
13. Exploitation of comparative advantage, specialization, and division of labor. These do not exist in subsistence exchange structures. In prestige and peasant structures, there is a clear tendency to exploit such differences where possible, however, traditional patterns of work and low levels of technology constrain this possibility. Where it occurs, exploitation of specialization is likely to depend upon what skills survive. Those who are in a position to enforce civil order or provide medical care, for example, may be able to extract a premium in transactions, even when they do not directly involve use of those special skills. This is a form of credit used to create long-term obligations that make goods or services more widely available.
14. Reduction of transaction costs for intertemporal or interregional transactions. Fixed allocation rules reduce transaction costs in subsistence structures. Where the imperative is to feed every group member and maintain group cohesion, haggling over who gets what is counterproductive. Peasant marketplaces reduce transaction costs by seeking to reduce information costs. Prestige exchange structures reduce information costs by public display associated with wealth transfers. However, transaction costs associated with interregional trade will be largely a function of those maintaining civil order. Payment of protection money or tariffs to enforcers will be one way to reduce transaction costs by mitigating risks of attack or theft. To the same

end, blood-brotherhood institutions could be instituted between itinerant and resident traders.

#### 7.4 CONCLUSION

The definition and maintenance of property rights under the worst case seems likely to be extremely problematic. Whilst participation in subsistence production and consumption may be predicated on kinship and close friendship, the ultimate enforcers of the collective property rights of the subsistence group will be those who command the resources of the prestige sphere and those who control the peasant marketplace by virtue of military strength.

Currency will be displaced by barter for everyday exchanges of subsistence goods. Within the production/consumption group, equivalent values are likely to be established as a system of fixed allocations, perhaps initially based on perceived special needs of children, or on bonds of affection to the elderly. In the peasant-marketplace exchanges, values will be established through negotiation according to supply availability, transaction costs, and demand. Currency is likely to be confined to the prestige sphere, or for obtaining particularly lumpy goods, and probably will consist of precious metals and gems.

Major shifts in demand and supply are likely to result from the prevalence of worst case conditions. There will be a strong incentive for communities voluntarily to restrict the range of wants among members in order to avoid the disruption of demands that cannot be satisfied. In chapter four we referred to the social methods of income leveling and restraints on conspicuous consumption among West Yorkshire coal miners in order to maintain the cohesion of the community. The pressures on subsistence groups to eschew activity that might divide one section of the group against another are likely to be even stronger under the worst case than they are in contemporary England.

Hence, prestige activity is likely to be coordinated by enforcers or other leaders who are able to provide non-divisive incentives (a share in his prestige) for subsistence groups to cooperate in the provision of public goods. For example, Pospisil (1963) describes how only the prestigious big man could persuade his fellow Papuans to collaborate in the construction of a bridge, and how each villager retrieved his own logs from the structure when it fell into disrepair after the big man's influence had waned. The coordination of labor for large collective projects is likely to be a major obstacle to economic development from the worst case, especially where middle men are dependent upon enforcers for protection at the same time as their opportunities are limited by the prevalence of fixed allocations of goods.