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EFFICIENT PLUNDER

By Peter T. Leeson and Alex Nowrasteh

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Efficient Plunder^{*}

Peter T. Leeson[†]

Alex Nowrasteh[‡]

Abstract

When contracts between enemies are enforceable and transaction costs are low, plunderers and their victims benefit from trade that facilitates the former's ability to plunder the latter. Coasean "plunder contracts" transform plunder's social costs into private benefits for plunderers and their victims. A significant portion of the wealth that plunder would otherwise destroy is preserved instead. We call this result "efficient plunder." To investigate our hypothesis we consider maritime marauding in the 18th and 19th centuries. Privateers developed a system of ransom and parole founded on Coasean plunder contracts with victim merchantmen.

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[†] Email: Peter.Leeson@ChicagoBooth.edu. Address: University of Chicago, Becker Center, Booth School of Business, 5807 S. Woodlawn Ave., Chicago, IL 60637.

[‡] Email: Anowrasteh@scu.edu. Address: Santa Clara Law, Santa Clara University, 500 El Camino Real, Santa Clara, CA 95053.

1 Introduction

Every law and economics scholar knows theft is socially inefficient. From society's perspective, resources thieves use to transfer others' property to themselves are wasted. The social costs of violent theft—of plunder—are larger still. Plunder not only produces deadweight losses in the form of resources plunderers use to steal. It quite literally destroys resources that are obliterated in violent contests between plunderers and their victims.¹

However, no one has pointed out that the parties to plunder have strong incentives to engage in activities that minimize plunder's social losses—to make plunder efficient. This paper shows that plunder's social costs are also private costs borne by plunderers and their victims. Thus plunderers and their victims have a mutual interest in reducing violent theft's social losses, improving plunder's social efficiency.

We argue that while self-interest seeking leads plunderers to embark on violent theft in the first place, it also leads them to do so in ways that minimize their private cost. This, in turn, minimizes plunder's social cost. When contracts between enemies are enforceable and transaction costs are low, plunderers and their victims benefit from trade that facilitates the former's ability to plunder the latter. Coasean "plunder contracts" transform plunder's social costs—resources invested in violent appropriation and resources lost in violent conflict over ownership—into private benefits for plunderers and their victims. A significant portion of the wealth that plunder would otherwise destroy is preserved instead. We call this result "efficient plunder."

To investigate our hypothesis we consider maritime marauding in the 18th and 19th centuries. During war, privately owned and operated vessels from enemy nations called privateers plundered one another's merchant shipping. Traditional plunder, whereby a privateer battled a merchantman and then hauled its prize back to port for condemnation in a "prize court," was costly to the privateer, the merchantman, and society. To reduce their costs of plunder, privateers developed a system of ransom and parole founded on Coasean plunder contracts between themselves and victim merchantmen. Under these contracts, privateers agreed to give merchantmen, their cargoes, and their crews their freedom for a price. The Coasean bargains that underlaid the ransom and parole system not only preserved merchant vessels, their cargoes, and

¹ For the classic discussion of the welfare costs of theft, and their similarity to the welfare costs of monopolies and rent-seeking, see Tullock (1967).

merchant sailors' lives and freedom. They preserved privateering vessels, privateersmen's lives, and improved privateers' profit while minimizing the social cost of maritime marauding. Not all privateers could capitalize on this system. But those that did facilitated efficient plunder.

Our analysis highlights the Coase theorem's relevance and operation where it's expected least—between powerful plunderers and weak victims. Traditionally, the Coase theorem's operability is confined to situations in which property rights are well defined and interactions are voluntary. Our analysis suggests that Coase's (1960) insight may also apply to situations in which property rights are poorly defined and interactions are coercive.

Second, our findings suggest that even if the Hobbesian prediction of purely uncooperative relations in the absence of a formal overarching authority is correct, the conventional welfare implications of this predication may not be: a Hobbesian world of might makes right needn't lead to a nasty, brutish, and short existence. Compared to a world in which cooperation is the norm, one of predominantly uncooperative interaction fares worse. But plunderers' and victims' incentive to engage in activities that reduce plunder's social cost places an upper bound on how destructive even a world populated by individuals bent on violent theft can become.

A sizeable and growing literature demonstrates that the Hobbesian predication is overly pessimistic (see, for instance, Anderson and Hill 1975, 2004; Benson 1989, 1990; Dixit 2004; Ellickson 1991; Friedman 1979; Landa 1981, 1994; Leeson 2007a, 2008; Leeson and Boettke 2009; Powell and Stringham 2009; Powell and Wilson 2008; Stringham 2003, 2007). Without government, individuals can and do secure a surprising degree of cooperation. However, in this paper we assume the "worst case" and consider the possibility of limiting social losses when agents are dedicated to plundering one another instead of engaging in socially productive behavior—i.e., when they are locked into a state of war with one another.

This paper is most closely connected to Becker's (1983, 1985) work on efficient rent-seeking. Becker demonstrates that while special interest group manipulation of policy may produce socially inefficient outcomes, the inefficiencies of such manipulation have been overstated because of a failure to recognize that special interest groups have incentives to seek rents in ways that reduce the deadweight costs of their activities. Our paper can be seen as an extension of this important insight to plunder, and the ransom and parole system we describe as the institutional mechanism that achieves this.

Our analysis is also closely connected to Bruno Frey and Heinz Buhofer's (1988) important analysis of prisoner treatment and property rights. Their work highlights how when aggressors have property rights in their victims, they have strong incentives to treat their victims well. Our paper contributes to an understanding of why and how this outcome emerges in the context of the privateering ransom and parole institution.

Additionally, our argument is related to Peter Leeson's (2009) analysis of the endogenously emergent "laws of lawlessness" that governed hostile relations between English and Scottish border reivers in the 16th century. His work shows how borderers developed laws that governed cross-border raiding to reduce the devastation wrought by their penchant for plunder. These laws limited the destructive consequences of interactions between warring hostiles. Our paper considers the ransom and parole system that emerged to govern maritime plunder between the citizens of warring European powers. It examines how this system was built on Coasean bargains between enemies, making it more efficient.²

2 A Theory of Efficient Plunder

Plunder's social cost has two sources: resources invested to steal others' property and the deadweight loss of destruction.³ The former are socially costly because resources invested to transfer property aren't used to produce wealth. The latter is costly because resources are literally and irrevocably destroyed. The pie of existing wealth shrinks.

Perfectly efficient plunder avoids both these costs completely. It constitutes a costless transfer. If no resources were required to violently steal from others and violent theft destroyed nothing, its social cost would be zero. Plunder would be an efficient reassignment of property from one holder to another.⁴ Since, at a minimum, plunder requires time, it always involves a positive cost and perfectly efficient plunder is impossible. However, more efficient plunder is

² Our analysis is also connected to Leeson's (2007b) investigation of "trading with bandits," which explains how weak, would-be victims can and have used credit agreements to convert the incentive of stronger, would-be bandits from plunder to trade. Our paper examines how weaker agents who cannot avoid being victimized by stronger ones create contracts that facilitate their victimization but in doing so reduce plunder's social cost, making it more efficient. For an excellent discussion of the decision to "raid or trade" in the context of Indian-white relations see, Anderson and McChesney (1994).

³ In some cases a third social cost of plunder may be added: resources invested to defend against plunder.

⁴ For one influential model of the social cost of plunder, see Buchanan (1975). For another, see Hirshleifer (18995, 2001). For related discussions on the endogenous emergence of property rights and cooperation and conflict under anarchy more generally, see for instance, Anderson et al. (2006), Bush and Mayer (1974), Haddock (2002), Libecap (2002), Skaperdas (1992, 2003), and Umbeck (1981).

possible and can, under circumstances, approach the perfectly efficient ideal. More efficient plunder, which we will simply call “efficient plunder,” satisfies two conditions: 1. it economizes on resources plunderers use to steal from victims; and 2. it economizes on resources destroyed in violent struggles between plunderers and their victims.

2.1 A Simple Model

Consider an island of complete and perfect information with two inhabitants, p and v . Both inhabitants are equally productive: each is capable of producing up to 20 fish per day. But p is much stronger than v . When p and v fight, p wins the violent contest whether aggressing or defending with a 0.9 probability. v only succeeds (whether aggressing or defending) with a 0.1 probability. Further, no matter who wins, two fish are destroyed in the contest.

When he’s the plunderer (i.e. aggressing), the winner of a fight may take as many of the loser’s fish produced that day that remain undestroyed as he’d like. This is a maximum of $(20 - 2 =) 18$. When he’s the victim (i.e., defending), the winner of a fight preserves all the fish he produced that day that remain undestroyed, again, 18. If either party doesn’t fight back when attacked, he loses all the fish he’s produced that day to his attacker.

Both inhabitants find it costly to produce plunder. To plunder his enemy, p or v must cross the island to where the other inhabitant lives. Further, for simplicity, assume fighting back is costless: both inhabitants always fight back when attacked.

Although p is stronger than v , he’s also slower. In the time it takes him to cross the island to find v , he could have produced five fish. In contrast, v can cross the island in the time it takes to produce only two fish. There’s no formal overarching authority on this island to prevent either inhabitant from plundering the other if he chooses.

In the traditional rendition of this problem, p plunders v even though v defends because his expected payoff of doing so, $0.9(20 - 2 - 5) + 0.1(-5) = 11.7 - 0.5 = 11.2$ fish, is positive. v never plunders p because his expected payoff from doing so given that p always defends, $0.9(-2) + 0.1(20 - 2 - 2) = -1.8 + 1.6 = -0.2$ fish, is negative. However, like p , v always fights back when assaulted. This helps reduce his expected losses since ten percent of the time he’s able to defend himself successfully. Specifically, by fighting back v limits his losses to $0.9(-20) + 0.1(-2) = -18 - 0.2 = -18.2$ fish. If he didn’t fight back, his losses would be $1.0(-20) = -20$ fish.

p is therefore a plunderer and v is his victim, a situation that arises “naturally” in the state of nature given p ’s considerably superior strength. The two fish destroyed in the inhabitants’ contest plus the five fish the plunderer foregoes by violently stealing from the victim are plunder’s social cost. The plunder gains 11.2 fish. The victim loses 18.2 fish. Society is poorer by 7.

This conventional prediction is a rather unusual one, however. In this story the plunderer and his victim have chosen to leave 7 fish on the table. If the plunderer offered to leave the victim, say, 6 fish if the victim would agree to come to his side of the island and surrender his fish peacefully, the plunderer would net $(14 - 2 =)$ 12 additional fish instead of 11.2. If the victim agreed to this, he would net 6 fish as opposed to 1.8. If they could engage in such a trade, both the plunderer and his victim would be better off.

Since this island has only two people, both of whom benefit by the proposed exchange, plunder’s social cost must fall under this arrangement too. Whereas before plunder cost society seven fish, under the terms of the trade described above plunder only costs society two fish, the “savings” accruing to both the plunderer and his victim. The deadweight loss due to the destruction of 2 fish in the violent tussle is converted fully into the victim’s gain. The plunderer’s cost of carrying out the plunder is reduced by 3 fish, 0.8 of these going to the plunderer and 2.2 of them going to the victim. Plunder has been made more efficient through trade.

Plunder still socially costly. But p ’s and v ’s self-interested activities have reduced plunder’s social cost more than 70 percent. Even given the assumptions of this model, which guarantee plunder rather than cooperation between the island’s residents, there’s an upper bound to plunder’s social cost that’s considerably less than its maximum.⁵

Though rudimentary and only suggestive, this model exposes several important features of efficient plunder. First, it highlights that at the core of efficient plunder is a Coasean bargain, or “plunder contract,” between enemies—even as this bargain facilitates one party’s ability to plunder the other. Because plunder’s social costs are also private costs for the plunderer and his victim, the very costliness of plunder creates the space for mutually beneficial exchange. By

⁵ Further, recall that “defense” is costless in our example. However, when defense is costly, the reduction in social losses resulting from a plunder-victim agreement, such as the one described above, is larger yet. This agreement converts resources the victim would otherwise invest to defend against attack, which contribute to the social cost of plunder when plunder is inefficient, into private gains for the plunderer and his victim when plunder is efficient.

forging a plunder contract that reduces this cost, the plunderer, his victim, and society are made better off.

Second, and closely related, our model illustrates that, *ceteris paribus*, the larger inefficient plunder's social cost is—i.e., plunder that doesn't economize on the resources used in plunderous production and destroyed in the violent conflict plunder precipitates—the more likely plunder will be conducted efficiently. Because inefficient plunder's social costs are also private costs for plunderers and victims, the prospective gains from Coasean plunder bargains increase as plunder's costliness increases in the absence of such bargains. This makes it more likely that plunderers and victims will resort to them. Because plunder is always costly, in principle there's room for a Coasean agreement between all plunderers and victims that makes plunder efficient. However, as we discuss below, in practice, transaction costs or other confounding features of reality may thwart Coasean plunder agreements, preventing efficient plunder.

Because more specific means of plunderous production make inefficient plunder more costly, it follows from our model's second implication that efficient plunder becomes more likely as the means of plunderous production become less specific. Less specific means of plunderous production have a higher opportunity cost than more specific ones. This raises the cost of inefficient plunder. Following the logic above, this increases the plunderer's benefit of achieving a Coasean agreement with his victim, making it more likely he will do so.

For example, if, as in our model, the only means of plunderous production is time, which is totally non-specific, inefficient plunder is very costly. Because hours p doesn't devote to traveling to v 's side of the island to plunder v after he's made an arrangement with v whereby v comes to him are costlessly convertible into additional hours spent fishing, p reaps significant gains from making such an arrangement and loses significantly if he fails to do so. In contrast, if p required some highly-specific capital good to plunder v —one that he could only convert to fishing at great expense—his gains from negotiating a Coasean plunder contract with v would be accordingly smaller and the losses he incurred for failing to do so would be smaller as well. Thus the more cheaply the plunderer can convert the means of plunderous production into wealth-creating production, the larger are his gains from negotiating efficient plunder via the kind of Coasean bargain between p and v described above. Our theory therefore predicts that the less specific the means of plunderous production are, the more likely a Coasean exchange permitting efficient plunder is to emerge and vice versa.

2.2 Conditions for Coasean Plunder Contracts and Efficient Plunder

Our model exposes several conditions that must be satisfied for plunderer-victim Coasean bargains to take place and thus for efficient plunder to be possible. First, transaction costs must be sufficiently low to make exchange between plunderer and victim worthwhile. For example, if the plunderer speaks English but the victim only speaks Swahili, striking such a bargain may be prohibitively costly.

Similarly, transaction costs may also be prohibitively high if the bargaining process is protracted because the parties have difficulty reaching a mutually agreeable price because each is negotiating strategically to increase his share of the gains from trade. Since our model is focused on highlighting the potential gains from Coasean plunder contracts, it treats such transaction costs as zero. However, real-world plunderer-victim negotiations have positive transaction costs. Efficient plunder therefore depends on plunderers' and victims' ability to find ways of preventing such transaction costs from overwhelming plunder agreements' potential gains.

Second, for plunderers and victims to secure Coasean plunder contracts, information about the plunderer's and victim's strength must be symmetric. The plunderer and victim must agree the plunderer is stronger. If the victim is delusional about his relative strength, he may believe he can obtain better terms than what the plunderer offers through exchange by battling the plunderer. This prevents the parties from negotiating the Coasean bargain required for efficient plunder. Our model assumes perfect information. In practice, knowledge of strength may not be symmetric, leading to resource-destroying conflict rather than resource-conserving Coasean contracts.

Finally, for plunderer-victim agreements to create efficient plunder they must be enforceable. If either party to the contract expects that the other will renege, exchange is impossible. In our model, if p and v are allowed to exchange hostages, their Coasean bargain is self-enforcing. Having concluded their agreement, if the victim walks across the island to meet the plunderer with 12 fish per their arrangement, and upon meeting him the plunderer decides he'd like the victim's other six fish too, he can plunder this remainder, but he loses by doing so. The plunderer's expected payoff of plundering the victim's remaining six fish, $0.9(6 - 2 - 5) +$

$0.1(-5) = -0.9 - 0.5 = -1.4$, is negative. Thus the plunderer finds it in his interest to fulfill his end of the contract with his victim even without a hostage exchange.

Things are slightly different from the standpoint of the victim's incentive to keep his end of the bargain. Without a hostage exchange, the victim has an incentive to break the terms of his agreement with the plunderer. The plunderer can't credibly commit to fight the victim, travel to his side of the island, and appropriate his fish unless the victim leaves at least $(0.9(x - 2 - 5) + 0.1(-5) = 0 \rightarrow x \approx) 7.6$ fish home. However, if the victim keeps slightly less than this number of fish back but more than the 6 fish he and the plunderer agreed he would have per their contract, say, 7.5 fish, he can re-appropriate $(7.5 - 6 =) 1.5$ additional fish for himself by bringing only $(18 - 7.5 =) 10.5$ fish to the plunderer instead of the 12 he agreed to. Since this is fewer fish than the plunderer could gain by plundering the victim and not bothering to contract with him in the first place (11.2 fish), this prospect threatens to undermine the plunderer's and his victim's ability to strike the Coasean bargain required for efficient plunder.

However, if the plunderer requires a hostage from his victim worth at least 1.5 fish to the victim but which has no value to him as a condition of the agreement, the victim's incentive becomes to enter into and uphold his end of the bargain. To ensure the plunderer doesn't use the victim's hostage to renegotiate the terms of their initial contract, the victim requires a hostage worth to the plunderer the same as the hostage he's given to the plunderer but worth nothing to him. As long as both parties make this hostage swap a condition of their Coasean agreement, this agreement is self-enforcing.

We invoke a kind of Williamsonian (1983) hostage exchange above simply to illustrate how the Coasean plunder contract may be enforced. There are of course other mechanisms available for this purpose, the suitability of which depends on the particular circumstances influencing plunderer-victim agreements. These include reputation in cases where repeated play is an important part of plunderer-victim interactions or where there are more than two parties, and even third-party enforcement, again where there are more than the two parties, among others. Whatever its source, plunderer-victim agreements must be enforceable. Thus our theory predicts the emergence of such agreements, and consequently efficient plunder, only when this is so.

3 Privateering and Maritime Plunder

Privateering in the 18th and 19th centuries provides an instructive case for exploring our theory of efficient plunder. Privateering began in 12th century as a form of self-help against maritime muggers. Several centuries later, privateering's self-help role had given way to one as the means for cash-strapped nations to prosecute war against enemies at sea. Even into the 18th century, by which time European governments had grown their public navies considerably, their navies remained too small and weak to effectively conduct warfare on the water alone.⁶

Privateering remedied this situation by calling private initiative to the war effort. Although, as we discuss below, privateers were commissioned by and operated within the constraints of rules created by their governments, interactions between privateers of one nation and the vessels of another were formally ungoverned and thus "anarchic." There wasn't in the 18th and 19th centuries, as there isn't today, a formal supranational agency with the authority to oversee and control interactions between foreign countries, let alone belligerents. Foreign sovereigns and their citizens dealt with one another in an anarchic international arena.

Privateering was a form of maritime plunder. The way it worked is straightforward.⁷ We focus on British and North American privateering. But the system worked similarly elsewhere. A group of investors sought a "letter of marque" from their government. This licensed them to send a private warship to sea over a stipulated time to plunder the merchant ships of an enemy nation (see, for instance, Admiralty Court Prize Papers 39, 1691; Admiralty Court Prize Papers 90, 1693; Admiralty Court Miscellanea 862, 1694; Admiralty Court Prize Papers 118, 1742; Admiralty Court Prize Papers 115, 1746; Admiralty Court Letter of Marque Declarations 12, f. 1, 1760). Investors earned a pre-negotiated share of any "prizes" their crew captured. Until the first decade of the 18th century, in return for commissioning the privateer, the British government entitled itself to a share of prizes as well. To encourage privateering, it generously left off this practice in 1708.

There were two sorts of privateers: "letters of marquee" and "private men-of-war." The former was a merchant ship engaged in trade but also licensed "to annoy the enemy and take their ships, as occasion shall offer" (P.C. Register 76, f. 142, 1695). Letters of marquee were

⁶ On the history and development of privateering, see Starkey (1990).

⁷ For excellent descriptions of the privateering system in the economics literature, see Anderson and Gifford (1991), Sechrest (2004), and Tabarrok (2007). For descriptions of the privateering system in the historical literature see, for instance, Crowhurst (1989), Garitee (1977), Petrie (1999), and Swanson (1991).

primarily traders. Their crewmen earned fixed wages like typical merchant sailors. But they also earned shares of any prizes their vessels might plunder while engaged in commercial activity. Private men-of-war were a private warships fitted specifically for the purpose of plundering enemy merchant shipping.⁸ Private men-of-war didn't engage in commercial activity. Their crewmen were paid exclusively in shares and only if they plundered successfully. Whereas letters of marque were no more than ordinary merchantmen with licenses to plunder, since private men-of-war engaged only in plunder, they were typically smaller and without the large cargo-carrying capacity of merchant ships. This made them faster and more agile than merchantmen though carried more crewmembers and guns per ship tonnage.

Upon application to the Admiralty for a privateering commission, a privateer's owners signed a performance bond to secure its good conduct, the value of which depended on the proposed vessel or crew's size (see, for instance, Admiralty Secretary In Letters 3878, April 12, 1744; Admiralty Secretary In Letters 3878, June 30, 1744; Admiralty Court Letter of Marque Declarations 12, f. 1, 1760).⁹ As the instructions for a privateer that James II commissioned after his abdication read, "Before the ship put to sea, security is to be given to our . . . agent or his deputy for the due performance of the above articles" (Hist. MSS Commission, Stuart Papers, i, 92, 1694). If it went about seizing neutral vessels, for instance, or other ships not permitted under the terms of its commission, or operated outside the area or timeframe specified in this commission, the privateer could forfeit its bond.

A privateer also forfeited its bond if it was later discovered that its crew had misused enemy prisoners, whose treatment the "law of nations" protected—the international law of war that European and North American governments respected and enforced on their citizens.¹⁰ As American privateer owner George Stiles' bond read for the *Nonsuch*, a ship he fitted out during the War of 1812, the bond was to ensure that the "said armed vessel shall observe the treaties and laws of the United States, and the instructions which shall be given to them according to law for the regulation of their conduct."

The instructions referred to here, issued to every privateer when it received its commission, instructed the privateer "to pay the strictest regard to the rights of neutral powers,

⁸ A bit confusingly, these vessels were also commissioned via a document called a letter of marque.

⁹ Sureties were also required for the performance bond.

¹⁰ This paper considers the international law of war only in so far as it influenced the constraints privateers confronted in plundering merchantmen. For a discussion of this law, its emergence, and enforcement see, Anderson and Gifford (1995).

and the usages of civilized nations Towards enemy vessels and their crews, you are to proceed, in exercising the rights of war with all the justice and humanity which characterizes the nation of which you are members” (quoted in Garitee 1977: 94, 97-98). As the instructions George II issued to British privateers in 1739 read, “no Person or Persons, taken or Surprized in any Ship or Vessell as aforesaid, tho’ known to be of the Enemy’s Party, shall be in Cold Blood killed, maimed, or by Torture and Cruelty Inhumanely Treated, contrary to the Common Usage and just Permission of War,” under the threat of severe punishment for violation of these instructions (quoted in Jameson 1923: 349).

When a privateer successfully assaulted an enemy merchant ship it was entitled to take its prize back to port in the commission-issuing country or, in some cases, a port in a friendly foreign nation (see, for instance, Admiralty Court Libels 117, No. 82, 1676; Letter of Marque Declarations I, f. 23, 1689; Hist. MSS. Commission, Stuart Papers, i, 92, 1694; Admiralty Court Prize Papers 118, 1742). In these ports were “prize courts” that determined the seized merchant vessel’s status. If the court adjudged the prize legitimate—i.e., an enemy owned vessel—the ship and its cargo were condemned, auctioned, and the proceeds divided according to the terms established in the privateer’s contract between its owners and crew. The prize court received an administrative fee. The government received its share (if any). And, most significantly, import duties on the receipts of the vessel’s and cargo’s sale were appropriated by the commissioning government, the privateer “duely and truly pay[ing] or caus[ing] to be paid . . . the usual customes due His Majestie for all ships and goods so as aforesaid taken and adjudged for prize” (Admiralty Court Prize Papers 63, 1719).¹¹

The most common reason a prize court adjudged a prize illegitimate was that the prize wasn’t in fact an enemy owned merchantman. Rather, it was owned by citizens of a neutral power whose ire the commissioning government was eager not to raise, “it being our royal intention,” a letter to the Lords of the Admiralty explained, “that . . . all engagements which subsist between us and our said good friends and allies should be most carefully and religiously observed” (S.P. Dom. Naval 60, April 30, 1744; see also, S.P. Foreign, Foreign Ministers, &c,

¹¹ Such duties could be extremely high, in some cases consuming 30-40 percent of a prize’s value (see, for instance, Garitee 1977: 183; see also Lydon 1970: 91). Though, to further encourage privateering, at various times some colonial governments exempted privateer-obtained booty from onerous customs (Swanson 1991: 15).

22, April 7, 1705; S.P. Dom. Naval 34, f. 265, 1744).¹² Like privateers, commercial vessels in the Age of Sail carried a variety of false flags and papers to prevent enemy privateers or navy warships from seizing them. Thus it wasn't always easy for privateers to discern whether a prospective prize was legitimate or not. If a mistake arising from such difficulty appeared honest to the adjudicating prize court, the vessel and its crew were released and the privateer received nothing. If the mistake was the result of negligence, the privateer's owners could be ordered to pay damages to the offended neutral vessel's owners. In cases of willful illegitimate seizure, or if mistakes became common, the offending privateer could forfeit its bond and lose its commission.

In addition to prohibiting privateers from mistreating merchant sailors they overwhelmed or killing them in cold blood, the law of nations imposed some positive obligations on them. Privateers couldn't seize a merchant ship and dump its crewmembers in the water to fend for themselves. Prize courts required testimony from two or three merchant sailors from the vessels a privateer seized—typically the captain and a few officers—to condemn the captured vessel. Privateers had two choices for other members of a quarry's crew: they could release the sailors if a vessel was available to send them home in, or they could take the sailors with them, requiring the privateers to provide for the sailors until they could be sent home via a prisoner cartel arranged in port or at sea. Under the rights afforded prisoners by the law of nations, privateers were “bound for fair and safe custody [of captives], and . . . liable for any loss occasioned by their neglect or want of proper care In cases of gross misconduct on the part of private captors, the [captors' government's] court will decree a revocation of their commission” (Upton 1863: 393).

Prisoner cartels were belligerent nations' means of exchanging prisoners in wartime. To ease the burden of providing for captured enemies, and to get one's own prisoners back, warring nations traded prisoners—man-for-man of equal rank—throughout (and sometimes following) conflict. Thus, if Britain sent 15 French merchant sailors who British privateers had recently captured and returned to port with for adjudication to France, France would send 15 British

¹² This wasn't the only reason a prize may be adjudged “bad,” but it was the main one. The British government also prohibited its privateers from “breaking bulk,” i.e., disposing of plundered cargo before a prize court had adjudged it legitimate (though exceptions for unusual circumstances were permitted), which was another grounds on which a prize may be adjudged illegitimate. According to a letter of marque issued to an East Indiaman in 1694 for plundering French merchant shipping, for example, “you are to keep in safety all such ships, vessels, and goods, which shall be taken in your voyages outward or homeward, and not break bulk, sell, wast, spoil, or diminish the same before judgment be first given in our Admiralty court in England or the East Indies respectively” (Admiralty Court Miscellanea 862, 1694; see also, Admiralty Court Prize Sentences 21, No. 140, 1697).

merchant sailors of the same status to England.¹³ The law of nations, which governed such arrangements, amounted to promises between sovereigns about prisoner treatment and similar matters. But European governments enforced this law on their own citizens. So it was generally upheld. A privateer that misused prisoners taken into custody by starving them, or dispatching them outside one of the accepted methods described above, jeopardized its prize, which the prize courts might release, as well as its bond, which the courts might seize.¹⁴

Indeed, prize courts sometimes ruled against privateers in the case at hand based on their past mistreatment of prisoners when this was discovered. The British privateer *Minerva* captured the *Anna* at the mouth of the Mississippi River in 1805. The justice presiding in this prize case, Sir W. Scott, discovered that before capturing the *Anna* the *Minerva* captured a Spanish vessel named the *Bilbao*. The privateersmen of *Minerva* set the *Bilbao*'s prisoners ashore on an uninhabited island near the mouth of the Mississippi. Justice Scott considered this "an act highly unjustifiable in its own nature" and because of the *Minerva*'s history of prisoner mistreatment refused to condemn the *Anna* (quoted in Roscoe 1905: 399).

4 Ransom and Parole: Privateer-Merchantman Coasean Bargaining

The potential social losses of privateer-committed maritime plunder are familiar: resources privateers devoted to transferring foreign merchant ship owners' wealth to themselves and resources destroyed in violent conflict with merchantmen in privateers' efforts to appropriate their vessels and cargo. However, provided their interactions satisfied the conditions discussed in Section 2, our theory predicts that privateers and merchantmen would enter Coasean contracts, facilitating efficient plunder.

¹³ Alternatively, a privateer could place its prisoners on a ship and send them home after having them sign a declaration certifying their capture and release, which the privateer's government could then present to its enemy along with a request for the release of an equivalent number of its citizens held prisoner. For an example of this, see Fanning (1912: 187). For an example of an impromptu arrangement for prisoner exchange between a French privateer and its British prize see, Admiralty Secretary in Letters (3382, April 12, 1747).

¹⁴ Besides the fact that governments punished their citizens who violated rules about prisoner treatment, privateers were also encouraged to comply with these rules through the use of bounties in certain cases. Governments sometimes offered "head money" for each sailor on an enemy merchant ship (or navy vessel) that a privateer overwhelmed. Returning home with prisoners was the most convincing (though not the only) way to evidence what head money was due and thus to collect bounties owed. In addition to this, prize courts, recall, relied on the two or three merchant sailors taken captive by a privateer to testify at its prize hearing. If privateers hoped for favorable testimony, it behooved them not to mistreat these prisoners.

As our theory highlights, central to this possibility was the costliness of producing plunder for privateers. Privateers' cost of producing plunder had several sources. The first was violent conflict with a merchantman. If a merchantman resisted a privateer's advances, running, or engaging its attacker, a bloody melee was likely to ensue. Although privateers were typically much stronger than the merchant vessels they attacked, even a significantly weaker merchantman was capable of putting up a fight that. A merchantman could not only damage the privateering vessel. It could injure or kill its crewmembers. Captain Harriot's St. Kitts-based privateer discovered this when it engaged a French merchantman near the Calicos Islands in 1744. The merchantman fought back, killing 18 of Harriot's privateer crew and injuring many more (Swanson 1991: 198). Even if a merchantman wasn't strong enough to significantly damage its attacker, if the two came to blows, damage to the merchantman and its cargo hindered the privateer's ability to bring its prize safely to port and reduced what the prize could fetch at auction. In extreme cases, the entire prize might be lost, leaving the privateer with nothing to show for its efforts.

Privateers confronted two other notable costs of producing plunder: the cost of bringing the victim to a prize court to adjudge its legitimacy and the cost of carrying and providing for captured merchant sailors. Privateers could and did seize prizes considerable distances from the nearest prize court. Even when they didn't, the nearest prize court located at the port in which their plundered goods had the greatest market could be far. A privateer that had to return to shore after taking each prize lost considerable time in transit that could be spent plundering instead. More important, traveling any distance back to port was a risky endeavor. At some point, every privateer needed to return home. But the more trips a privateer made between port and its cruising ground, the greater were the risks it would never make it back. Thus economizing on the number of back and forth trips a privateer made was critically important to its success.

The high risk of additional back-and-forth trips had several sources. One was the unavoidable chance of sea-borne travel, such as the prospect of shipwreck or a related nature-driven tragedy. But the most significant risk of such trips was manmade: the possibility of destruction or capture by the enemy. This danger was especially strong when to return with a merchantman to the nearest prize court a privateer had to break through an enemy blockade (see, for instance, Crowhurst 1989: 36). If it negotiated the blockade unsuccessfully, the privateer not only stood to lose its prize, but its freedom to the enemy as well.

If a privateer had enough crewmembers, it could place some of its men on the prize to create a “prize crew” to return to port for consideration by a prize court, allowing the privateer to remain at sea. However, some privateers were too small to do this. “Many of the [French] corsairs . . . in the eastern half of the English Channel” in the late 18th and early 19th centuries, for example, “carried a handful of men which was barely adequate to sail the ship and provide prize crews” (Crowhurst 1989: 53). Even for larger privateers that had enough men to form prize crews, delivering victims to prize courts remained costly. Putting enough men on a captured quarry to create a prize crew significantly weakened the privateer, reducing its ability to take future prizes and defend itself against attack. The British privateer *Sheerness* had to let five potential French prizes escape because its crew remained too small for the task, most of its members having departed previously on prize crews (Swanson 1991: 63). Further, prize crews, as much as the privateers that created them, faced the threat of capture en route to port. In the War of 1812 less than one third of American prize crews ever made it to port (Garitee 1977: 170). Many of these lost their freedom to British privateers and navy ships on their way to prize courts.

The third important cost of producing plunder for privateers was carrying and providing for the merchant crews they overtook. As noted above, the law of nations required privateers to care for their captives until they were brought to port or could be exchanged via a prisoner cartel. Provisions used to support prisoners reduced those available to privateer crewmembers, shortening the duration of plundering cruises since re-provisioning became necessary more often. Taking on prisoners posed another problem: the prisoners might revolt. This prospect was most significant on a prize crew. During the American Revolutionary War, the American privateer, *Yankee*, captured two British merchantmen and put prize crews aboard both. The *Yankee*'s crew must have been severely disappointed when British prisoners overwhelmed both prize crews and managed to seize control of the *Yankee*, making the American privateersmen the captives (Coggins 2002: 68).

To avoid these costs of plunder, which not only constituted social costs, but private costs for privateers as well, many privateers resorted to plunder contracts with merchantmen they overwhelmed similar to the one analyzed in Section 2. These contracts formed the basis for the system of “ransom and parole.”

After overwhelming a merchantman, such a privateer offered its victims the following bargain: for a price it would allow the merchant vessel, its cargo, and its crewmembers their freedom. If the price was right, this arrangement was mutually beneficial. Provided the price agreed on in the plunder contract was higher than what the privateer expected to earn if it plundered its victim traditionally, and thus had to incur the costs discussed above, it was happy to enter such a contract. Consider the reasoning of French privateer captain Nathaniel Fanning whose crew aboard the *Comte de Guichen* “ransomed . . . two [British merchant] ships . . . for three thousand two hundred guineas; and the brig and cargo for five hundred.” Although “these two sums were not more than half the value of these vessels,” Fanning noted, “we thought it more prudent to ransom them for this sum than to run the risque of sending them to France” (Fanning 1912: 139). Similarly, consider the reasoning of privateer captain William Ashion who sought to avoid the cost of creating a prize crew when he entered a plunder contract with the *Wife of Sable d’Ollone*: “the Master thereof proposing to Ransom . . . considering the number of men they had on board, and that he could not send her for this Island, without coming along with her, which should have been a great hindrance to him,” Ashion was pleased to negotiate a plunder agreement with his victim instead (quoted in Bromley 1987: 344).

Provided the price agreed on in the plunder contract was lower than what the merchantman expected to lose if the privateer plundered it traditionally—lower than the value of the ship, its cargo, and the value the merchantman’s crewmembers attached to their freedom—it was also happy to enter such a contract. As Fanning describes in his case, the merchantmen got an excellent deal, paying only half the value they would have lost without the plunder agreement. Such an arrangement benefited both parties by preventing the destruction of valuable vessels, cargo, and men. The possibility of such an offer lowered merchantmen’s cost of being plundered, encouraging them to submit to stronger privateer attackers. This permitted the plunder process to proceed peaceably rather than through violence, preventing the deadweight losses of violent conflict.

If a mutually agreeable ransom price could be arrived at, the merchantman and privateer drew up a written contract in duplicate called a “ransom bill” stating the agreement’s terms. Under these terms, the merchant ship captain obligated his ship’s owner, and failing that, himself, to pay the privateer upon presentation of the bill. In return, the agreement entitled the merchantman to safe passageway, or “parole,” without plunder by other privateers from the

ransoming privateer's nation or allies, to a specified port within a proscribed period of time and in some cases via a proscribed route. If the merchantman were approached by another privateer from that nation or one of its allies en route, it only needed to produce the ransom bill and the privateer would customarily allow the ship to continue on its way.

Consider the ransom bill contracted between a British privateer, the *Ambuscade*, and its French merchant ship victim, *Le Saint Nicolas*, circa 1711 (Admiralty Court Prize Papers, 91, 1711¹⁵):

Whereas on the seventh day of October, old style, 1711, the ship called St Nichola of Sable d'Olone, near Rochelle, whereof Jacque Ayreau is commander, together with her cargo as follows, viz. nine thousand Bank fish, and forty hogsheads of salt, and four hogsheads of oyl, or thereabouts, was taken prize by the *Ambuscade* of Bristol, a private man of war, Robert Summers commander, by virtue of a commission bearing date in London the twenty ninth day of March 1711. And whereas the said Robert Summers is willing, at the instance and request of the said Jacque Ayreau, together with the said ship and cargo, to proceed on his intended voyage to Nants, or any first port in France, upon condition that the aforesaid Jacque Ayreau shall pay of cause to be paid unto the said Robert Summers, or his executors, administrators, or assigns, the full sum of eleven thousand five hundred livres tournis, French money, which makes nine hundred and fifty sterling money of England, at twelve livres the pound, to be paid in London for the Ransom of the above ship and cargo And I Jacques Ayreau to hereby bind myself, my heirs, executors, and assigns, for the true payment of the said sum as above . . . as before agreed on, unto the said Robert Summers, his heirs, executors, or assigns. In Witness whereof we have set our hands and seals this seventh day of October 1711, old stile.

[signed] Joachim Bruneteau.

[signed] Andre Caillaud.

Signed, sealed, and delivered in the presence of us, Testes, Richard Pym, Fran. Gandouet.

¹⁵ Unless otherwise noted, all 17th- and 18th-century documents cited in this paper are reprinted Marsden (1915-1916 [1999] II).

Memorandum. I, Jaque Ayreau, do acknowledge and confess that no Barbarous or Uncivil Treatment has been used to me of any of my Men, nor no Imbezlement nor Pilferage have been actually done to my ship or cargo by the said Robert Summers, his officers or Company, since the aforesaid Agreement; And that it is agreed between me and the said Robert Summers that I shall be allowed seventy Days to accomplish my Voyage afterward, and no more; And that I do well and truly understand the Bargain and Agreement as aforesaid.

Je recognois avoir ranomme ledit navire Le Saint Nicolas pour la somme de vinze mil cinq livres tournois argent et monnois de France.

[signed] Jacques Ayreau.

As Section 2 discussed, this kind of Coasean plunder contract is most likely when the means of plunderous production are relatively non-specific and thus the gains of negotiating such an agreement are largest. Privateering was close to the ideal in this respect because privateers' plunderous capital was highly non-specific. Most privateers were simply modified merchant vessels. As Rajan and Zingales (1998) point out, asset owners have incentives to develop their assets in ways that retain their value in alternative uses—i.e., to avoid making specific investments. This is as true for plunderers, such as privateer owners, as it is for anyone else. Privateer owners benefited by investing in vessels that were useful in non-plunder related production, such as commercial voyages, in addition to being useful for producing plunder. Privateer owners accomplished this by modifying existing merchantmen to build their ships or, when seeking purpose-constructed private men-of-war, by building privateers generically enough to be useable in merchant shipping when not plundering.

Recall the two types of privateers: merchantmen with a commission to plunder (“letters of marque”), which differed from ordinary merchantmen only by virtue of their raiding license and the fact that they might carry a few extra guns, and private men-of-war, which were often smaller and had less cargo-carrying capacity than typical merchantmen. Nearly all other basic elements of private men-of-war were the same as typical merchantmen. Thus they could be easily converted to regular merchantmen when not employed for plunderous purposes. Indeed, “the majority” of private men-of-war were merely “merchantmen converted for the task” (Starkey 2001: 72; see also, Swanson 1991: 57, 120). Converting private men-of-war back to

merchantmen when war ended was equally straightforward. More than 90 percent of the privateers that went to sea from America's chief privateering port in Baltimore in the War of 1812 were schooners—vessels identical to the brigs preferred in merchant shipping save their rigging.¹⁶ Similarly, 50 percent of Massachusetts' early 19th-century privateering fleet consisted of schooners. 66 percent of New York's privateering fleet did as well (Garitee 1977: 166, 114). If they weren't already fit for a particular merchant shipping need, by simply modifying their sail setups, many "sharp-built" schooners could easily be made so. And, when war ended, this is precisely what many privateer owners, or individuals who purchased ex-privateers, did (Garitee 1977: 220).¹⁷

The switch was still cheaper for privateers that were letters of marque. These could be "converted" to regular merchantmen simply by taking one or two guns off them.¹⁸ Indeed, even this "conversion" wasn't required: letters of marque *were* merchant ships. For them, costs saved through plunder contracts over producing plunder traditionally, such as the travel time involved in going back and forth to prize courts with prizes, were directly translated into socially productive activity—more time spent commercial shipping—even before war ended.

Letters of marque were numerous—more numerous in many cases than private men-of-war. 7,100 of the 9,151 British vessels that sought privateer commissions between 1739 and 1815, for instance, or nearly 78 percent, were letters of marque (Starkey 1997: 130). Similarly, in the War of 1812, 114 of Baltimore's 175 privateers, or over 65 percent, were letters of marque (Garitee 1977: 166). These vessels' capital was equally well suited for productive (commerce) and non-productive (plundering) purposes, permitting them to quickly and inexpensively "transform" their capital's application to commerce and plunder as they found convenient.¹⁹

¹⁶ While schooners were fore-and-aft rigged, brigs were square rigged.

¹⁷ Anderson and Gifford (1991: 114) note that following war's end, smaller privateers were often sold as merchantmen, similarly suggesting privateers' low-cost convertibility.

¹⁸ Besides adding a few guns, the only other notable way in which a merchantman was modified to make her fit for a letter of marque was perhaps some reinforcement of the bulwarks and additional siding to make her sturdier.

¹⁹ Contrast this situation with the situation that navy warships confronted. Although these vessels were primarily concerned with handling enemy navy warships rather than enemy commercial vessels, they, too, could and occasionally did assault merchant shipping as well. However, unlike privateers, which were often no more than slightly modified merchant ships, the plunderous capital embodied in navy ships was highly specific. These ships were designed exclusively for warfare and had no commercial use. They were massive, built to engage in and withstand heavy fire, and carried an extraordinary number of guns. Naval vessels' gains from entering Coasean exchanges with their victims were therefore smaller than that of privateers, leading them to enter them less often and engage in inefficient plunder more often instead.

4.1 Conditions for Privateer-Merchantman Plunder Contracts and their Breakdown

Section 2 identified several conditions that must be satisfied to make Coasean plunder contracts possible. Transaction costs must be sufficiently low, information about the plunderer's and victim's strength must be symmetric, and plunderer-victim bargains must be enforceable. Many, but, as we discuss below, not all, privateer-merchantman relations satisfied these conditions, permitting them to forge Coasean agreements like the one recounted above, facilitating efficient plunder.

Two types of potential transaction costs threatened to render privateer-merchantman contracts unprofitable by overshadowing the gains of such agreements. Both had their source in potential bargaining difficulties. The first was the simple fact that since privateers and their victims were necessarily from different countries, they spoke different languages. This meant they didn't always know the language of the other, or not well enough to negotiate contracts. If privateers and merchantmen couldn't communicate because of language barriers, they couldn't forge Coasean plunder contracts.

Privateers developed a simple solution to this problem: they created template plunder contracts in multiple languages. During the War of the Spanish Succession (1701-1714), when France was at war with Britain, Portugal, the Holland, and several other countries, French privateers carried multiple, generic plunder agreements—one in French, and the others, translations of the French template into the their enemies' languages so their foreign victims could read them (Senior 1918: 52).

The second type of transaction cost that threatened to overwhelm the prospective gains from privateer-merchantman plunder agreements was the time required to negotiate such agreements. A privateer and its victim merchantman confronted a classic bilateral monopoly problem in which, because of the unusual monopolistic and monopsonistic nature of the market, the process of converging on a mutually agreeable price can be long and tedious. Fortunately, although the "plunder market" that a privateer and its victim merchantman operated in consisted of only a one seller and one buyer, the vessel and cargo the merchantman had that the privateer sought were bought and sold in competitive markets with many sellers and many buyers.

Since the privateer and merchantman both had an idea about the prevailing market prices for these goods, the maximum price the privateer could reasonably expect the merchantman to pay in lieu of these goods and the minimum price the merchantman could reasonably expect the privateer to accept in lieu of these goods were brought close together. Remaining haggling to influence the distribution of the surplus created by the agreement was thus delimited and reflected unknowns, such as the value the different parties attached to the merchant crewmen's freedom, the odds the privateer or its prize crew would be seized en route back to the nearest prize court, and so on. Thus privateers' and merchantmen's bargaining ranges were narrowed significantly, lowering the transaction cost of negotiating Coasean plunder agreements.

The second condition privateers and merchantmen had to satisfy to enable Coasean agreements between them was symmetric information about their strengths. As noted above, the most important difference between merchantmen and privateers was the larger number of crewmembers and guns (per ton) the latter carried. Between 1739 and 1748 the average privateer that plied the sea was 166 tons, carried 35 guns, and had 100 crewmembers. The average privateer victim in this same period was 45 percent bigger (241 tons), but carried seven fewer 7 guns and had only 11 more crewmembers (Swanson 1991: 61, 71). Thus a privateer that attacked a merchantman of equivalent size boasted significantly greater firepower and manpower. This gave privateers the upper hand in both ship-to-ship and hand-to-hand combat.

Besides knowing that the average privateer of equal size was stronger, merchantmen also knew that privateers aimed to attack significantly weaker ships since doing so made their job easier. Knowing this, conditional on being assaulted by a privateer, a merchantman also knew it was the weaker party and likely to lose a fight if it resisted. As privateer historian Jerome Garitee (1977: 148) put it, "The captain of a [privateer-attacked] merchant vessel [typically] knew he was confronting a heavily manned, better-armed, and swifter opponent." Thus many merchantmen found it in their interest to peacefully submit to their plunderers, particularly when they expected Coasean bargaining opportunities that could improve their post-plunder positions. Since "Most merchant ships were outsailed, outmanned and outgunned by almost any privateer . . . the crew meekly surrendered when escape was impossible" (Crowhurst 1977: 36; see also, Crowhurst 1997: 156-157). Consequently, "The great majority of captures were made without resistance" (Bromley 1987: 356).

Finally, recall that for Coasean plunder contracts to be possible both privateers and merchantmen required reason to believe the other party would fulfill their end of the agreement. Privateers and merchantmen achieved this through several means. From merchantmen's perspective, the central problem was ensuring that other privateers from their captor's nation wouldn't plunder them a second time while en route to their specified destination as the terms of their contract promised to protect them from. Reciprocity between privateers from the same or allied nations was one means of ensuring this.

Equally important was privateers' governments' unwillingness to adjudge a "doubly seized" merchantman a good prize. For much of the 18th century, European governments recognized privateer-merchantman plunder contracts as legally binding on the privateer that issued them and protected the privateer's right as first captor to sell parole prohibiting subsequent captors from his nation or his nation's allies from seizing the merchantman again. The American government continued to recognize such contracts' legitimacy into the 19th century. Governments' refusal to award doubly seized merchantmen as prizes to their captors dramatically reduced privateers' incentive to violate the terms of plunder contracts their compatriots negotiated with enemy merchantmen that they subsequently caught up with. Because of this, merchantmen were confident the terms of their Coasean bargains with privateers would be respected.

The more significant potential enforcement difficulty was from privateers' perspective. After granting a merchantman its freedom, how could a privateer ensure it would be paid? Three mechanisms were critical to ensuring contractual compliance. First, privateers often required a hostage from their victim—typically the captain of the ship or one of his officers—who they would take with them and release only after being paid. Privateers and merchantmen negotiated the terms of such hostages, and even how they would be cared for, in their plunder contracts. Consider the hostage terms of the ransom bill entered into between the French merchantman and British privateer recounted above (Admiralty Court Prize Papers, 91, 1711; see also, Fanning 1912: 126,139):

And it is agreed by and between the said Roberts Summers and the said Jacque Ayreau that he the said Jacque Ayreau shall leave some Hostages or Ransomers in the possession of the said Robert Summers . . . for and till the true payment of the abovesaid sum so

agreed upon for the Ransom of the said ship and cargo, and shall also bind himself, his heirs, executors, administrators, and assigns, for the true payment thereof, and the Redemption of the Hostages, with the allowance of three shillings and four pence per day for the victualling of the said Hostages from the date hereof until the time of their arrival in England and being released &c, to be likewise well and truly paid . . . with all other charges that may occur until the time of the Hostages being released. Now these Presents witness that we Jonachim Bruneteau and Andre Caillaud, at the instance and request of the said Jacque Ayreau are willing and voluntarily oblige ourselves to become Hostages and Ransomers for the said ship and cargo, and to remain so until the abovesaid sum . . . agreed upon, with the allowance aforesaid, by fully paid and satisfyd.

The second means privateers used to enforce the terms of their plunder contracts with victim merchantmen was state courts. As noted above, for much of the 18th and 19th centuries, governments recognized plunder contracts as legally binding. Britain forbade alien enemies, such as foreign privateer owners, from directly initiating legal action against their citizens in their courts. A privateer owner couldn't sue a British merchantman that violated its plunder contract with the aid of Britain's courts.²⁰ However, British law recognized a merchant captain's right to enter a plunder contract that obligated his ship's owners to a privateer: "He is the agent of these owners, lawfully authorized to enter into such contracts . . . His signature therefore binds them as debtors of the ransom" (Wheaton 1815: 236). When a merchant ship captain signed a ransom bill he also obligated himself to pay his captor the agreed upon sum if his ship's owners failed to. Crucially, the law granted him a right of action *in rem* against the ship owners' vessel in this case to recover the ransom sum he paid the privateer to gain his freedom in lieu of the owners or, more likely, since most hostages didn't have the funds required to pay this sum, to recover his freedom by compelling the owners to pay the privateer. Because of this, privateers were able to indirectly initiate action against non-paying merchantmen through their hostages whose incentive was aligned with privateers'.

For example, in 1696 British merchant ship captain John Munden of the *Reyner* entered a plunder contract with French privateer captain Louis Daincon of the *Phillipicene*. According to their contract Munden promised to "pay, or cause to be paid, to Daincon the sum of £170

²⁰ Though, for discussion of an exception see, Senior (1918: 54).

sterling, and give himself up as a prisoner for the payment of that sum.” However, the *Reyner*’s owners “never paid the bill.” Munden sued the *Reyner* from his St. Malo prison, as the law entitled him to, and succeeded. The *Reyner*’s owners were compelled to uphold their end of the plunder contract, the *Phillipicene* received the payment it was due, and Munden recovered his freedom (Admiralty Court Libels 126, No. 107, 1698; see also, Admiralty Court Libels 130, No. 237, 1713).²¹ In this way, a privateer could rely on its hostage’s incentive to use the law to compel non-paying merchant ship owners to comply with the terms of their plunder contracts, ensuring contractual enforcement.

The third method privateers used to enforce plunder contracts with victim merchantmen was repossession. Privateers chiefly resorted to repossession after Britain and France banned their citizens from partaking in plunder contracts, which we discuss below. The way repossession worked was simple. If a known, non-paying merchantman was spotted in a foreign port, its privateering creditors, or someone on their behalf, would seize it (Petrie 1999: 23). Although after 1782 Britain and France no longer viewed plunder contracts entered into by their merchantmen as legally binding, the rest of Europe’s governments and those of North America did and permitted this method of enforcement in their ports. As an early 19th-century legal digest describing the law of maritime capture and prizes stated, although “no [plunder] contract can be enforced against a British subject in the courts of his own country[,] There is no such prohibition by the municipal laws of other states, and the contract may therefore be enforced in them” (Wheaton 1815: 232). Repossession was the chief means of doing so.

Many privateer-merchantman interactions satisfied the conditions required for Coasean plunder agreements and thus efficient plunder. According to historian of privateering Carl Swanson (1991: 204), while “It is difficult to determine how often prizes were ransomed,” before Britain and France outlawed plunder contracts they were common. Indeed, this is why the British and French governments had to resort to legislation to curb the practice in the first place. Eager to realize the benefits of entering plunder contracts, some merchant ship owners encouraged their captains to seek ransom if privateers seized them. Before merchantman owner John Reynell sent

²¹ If the hostage was not the ship captain, the captain might be tempted to fraudulently ransom the ship to secure its release—i.e., enter a plunder contract for a price that exceeded the ship’s and its cargo’s value without intending to honor the agreement. However, this was prevented by two factors. First, as we discuss below, privateers had an idea of the market value of ships and their cargoes, limiting merchant captains’ ability to get away with such fraud. Second, the hostage had a right of action against his captain for fraud if his captain did this (see, for instance, Marsden 1915-1916 [1999] II: 398).

his ship the *Bolton* to Antigua he instructed its captain that “In case of being taken,” the captain should “Endeavour to ransom if thou cans’t for Twelve Hundred Pounds Sterling (if Sugar Loaden, may’st advance as much more as thou thinks Reasonable) and draw for the same on Birkett and Booth of Antigua, on Elias Bland of London, or on us here and the Bills shall be honourably paid and the Hostage fully Satisfied for his time, Expences, etc.” Similarly, Gerard Beekman, owner of the *Dolphin*, advised his ship’s captain that “As you[r] Vessell is Loaded only with Lumber and is very old Can be of Lettle worth to an Enemy. in Case you Should be taken Which God forbid you may Give them fifty Pounds Sterling as a ransom for her again for She will not be worth that to them” (quoted in Swanson 1991: 204).

Although little systematic data exist to precisely measure the popularity of Coasean plunder contracts in 18th- and 19th-century privateering, what data are available suggest that while such contracts weren’t the rule, neither were they exceptional. Between 1776 and 1783, when the American Revolutionary War was waged, foreign privateers captured 3,386 British merchantmen. Of these, privateers ransomed 507, approximately 15 percent. In three of these years no ransoms were recorded. When these years are excluded the percentage of British merchantmen that entered plunder contracts with their captors rises to nearly 19 percent. To put this in perspective, the Royal Navy succeeded in retaking only 495 British merchantmen seized by privateers (Wright 1928: 156): plunder contracts “saved” more British merchantmen than the government’s official navy. Indeed, according to Senior (1918: 57), in the same war, French privateers ransomed more British merchantmen than they returned to prize courts with.

Other data on the frequency of plunder contracts suggests they were still more common. Between 1688 and 1607, during the War of the Grand Alliance, French privateers leaving from St. Malo, one of France’s major privateering ports, ransomed more than 30 percent of all merchantmen they captured. Between 1702 and 1712, during the War of the Spanish Succession, these privateers ransomed nearly 24 percent of all prizes they captured (Crowhurst 1977: 18-19). In these same years, Dunkirk and Calais privateers ransomed more British and Dutch merchantmen than they took to prize court, nearly 56 percent of those they seized. All told, during the War of the Spanish Succession, French privateers entered plunder contracts with 2,118 merchantmen, almost 30 percent of the total number they captured (Bromley 1987: 67, 223).

Although plunder contracts were a common feature of 18th- and 19th-century maritime marauding, they were less common than traditional plunder. Many privateers chose to plunder their victims traditionally instead of through Coasean bargains. These privateer-merchantman interactions failed to satisfy the conditions discussed above required for plunder contracts to be formed. Privateers and merchantmen misjudged each others' strength; plunder contracts proved unenforceable; the transaction costs of bargaining were prohibitively high; and privateers' cost of producing plunder traditionally was sometimes low, shrinking the benefit of plunder contracts. Coasean agreements weren't possible in these cases so privateers plundered merchantmen without them. Because of this, conflict between privateers and merchantmen that destroyed valuable resources occurred; privateers expended resources dragging every captured merchantman back to shore for prize court adjudication; and merchantmen lost their vessels, cargoes, and crewmembers' freedom. The social losses of plunder in such cases stood where conventional wisdom suggests they always are: at their maximum.

In some cases merchantmen fought their privateering aggressors because of a misjudgment of relative strength. Although in many cases a merchantman could conclude by virtue of coming under attack that it was weaker and likely to lose in a violent contest, privateers could miscalculate their own strength leading them to mistakenly assault stronger vessels. The average privateer was much stronger than the average merchantman. But that didn't preclude some privateers from being weaker than some merchantmen. If the former erred in which ship they attacked, a fight was likely the result. In February, 1815, Captain Boyle's American privateer the *Chasseur* spotted an innocent-looking schooner with only three gun ports and made for her. Imagine the *Chasseur's* surprise when, upon closing on her, the schooner revealed seven hidden gun ports. The formidable 10-gun quarry proved to be His Majesty's *St. Lawrence*. The *Chasseur* prevailed that day but was prizeless for her efforts. The *St. Lawrence* was "a perfect wreck in her hull and had scarcely a Sail or Rope Standing" (Garitee 1977: 161). The *Chasseur*, too, sustained damage to her rigging and sails from the battle, besides losing five men and having seven injured.

Merchantmen were capable of making their own mistakes, wrongly believing they were stronger than their assaulter, in which case they may hazard a conflict rather than negotiating a Coasean agreement, again preventing efficient plunder. In January, 1813, Captain Stafford's American privateer the *Dolphin* engaged two merchantmen off the coast of St. Vincent. The

merchantmen didn't yield to the *Dolphin*'s advances, believing their joint strength was enough to overwhelm the *Dolphin*. They were wrong. Although the merchantmen's joint forces were in fact superior to the privateer's, the *Dolphin* proved more effective with 10 guns and 60 men than the merchantmen did with more than twice as many guns and five more men (Coggeshall 1856: 128). Unfortunately the merchantmen didn't realize their mistaken judgment until after the bloody battle that led to their capture.

In other cases Coasean plunder agreements weren't created because they couldn't be enforced. In 1782 the British government legally barred its merchantmen from entering plunder contracts with privateers. In 1793 it prohibited British privateers from entering plunder contracts with their merchantman victims. Similarly, in 1756 France began restricting its citizens' use of plunder contracts. First, the government forbade French privateers from ransoming merchantmen until they had brought at least three prizes to port. In 1782 the French government prohibited its citizens from entering plunder contracts as plunderers or victims. After these years, neither the British nor French government could be relied on to enforce plunder contracts against their citizens.

Because they benefited from them, some British and French merchantmen continued to enter plunder contracts with privateers despite their governments' ban. British merchantmen continued to offer ransom bills to American privateers throughout the War of 1812, a full 30 years after parliament criminalized such contracts (see, for instance, Garitee 1977: 272-272; Petrie 1999: 22-23). And American privateers continued to accept them, relying on the threat of repossession for enforcement. Privateers remained "justified in their expectations of payment" from British and French victims, even after their governments criminalized plunder contracts, "because the vessels were merchant ships." As noted above, "A merchant ship owner who didn't pay his obligations simply couldn't trade in foreign ports in the future or his vessel would be seized there by his creditors" (Petrie 1999: 23). Because of this, Britain's and France's plunder contract prohibitions had a muted effect on foreign privateers' ability to enforce the terms of their bargains with British and French merchantmen. But they did have some effect—namely, in those cases in which repossession was insufficient to ensure contractual compliance. Some assaulted commercial vessels, such as Arctic whalers, had no occasion to ever dock at a foreign port where they could be seized on behalf of the privateer they were indebted to, rendering this enforcement mechanism useless (see, for instance, Petrie 1999: 23-24).

Although problems relating to asymmetric information and enforcement are responsible for why some Coasean plunder agreements were never negotiated, problems relating to the benefit of such agreements in certain cases and the transaction cost of creating them in others are likely the reason most privateer-merchantman plunder agreements failed to get off the ground. A privateer confronted a tradeoff when deciding how to proceed with a captured merchantman. As our model highlights, negotiating a plunder contract with a victim merchantman had value to the privateer because it could avoid certain costs of producing plunder by doing so. These costs resulted from the time and risk associated with going back and forth between sea and prize court, giving up men to form a prize crew, and carrying and providing for a captured merchantman's sailors.

However, several of these costs were minimized if the privateer was seizing its final prize for the expedition. Even a well-provisioned privateer couldn't plunder forever. Many privateers couldn't last longer than the time it took to seize a single prize, especially since many weren't full time plunderers but were employed in commerce instead. Since privateers had to return to port after seizing their final prize, the time and risk they hazarded in traveling home, and the men they sacrificed to form a prize crew, were costs they incurred whether they contracted with victim merchantmen or not. Only the cost of providing for the captured merchant crew's sailors could be avoided by negotiating such an agreement. In these cases, the gains from a plunderer-victim Coasean bargain were small.

In March, 1815, Captain Matthews' Baltimore privateer the *Ultor* was cruising when Matthews heard from a passing American ship that the war was over (Garitee 1977: 155). The *Ultor* could plunder vessels on its way back to Baltimore. But it couldn't resume plundering after that. Since the victims the *Ultor* encountered on its way home at war's end would be its last, the privateer couldn't save time that could be spent plundering, travel costs of going back to port, or avoid the dangers of venturing to a prize court with its prizes by entering plunder contracts with these victims. So, Matthews plundered the foreign merchantmen he encountered on his return home in the tradition fashion: without a Coasean contract.

In addition to the smallness of privateers' potential gains of using plunder contracts in some cases, the transaction costs of negotiating plunder agreements could be large. The market for vessels and cargoes that merchantmen carried helped narrow privateers' and merchantmen's bargaining range, reducing these costs. But in other cases the vessel and cargo were worth little.

In these situations the majority of the price a privateer could extract from its victim merchantman was based on the value the merchant crewmembers' attached to their freedom. And, here, there was no market to narrow the bargaining window. The transaction costs of negotiation in these cases threatened to be large—large enough to trump the potential gains from plunderer-victim exchange, in particular if such gains were small in the first place because the privateer was heading home anyway. Indeed, when a captured vessel and cargo were worth little, even traditional plunder could be more costly than it was worth, leading the captor to simply release its victim. When the *Yankee* overwhelmed the British schooner *Ceres* the privateersmen were disappointed to find she was carrying only produce. “As this vessel was of little value she was released after some articles of value to her captors had been taken out” (Maclay 1900: 271, see also, 272).

5 Concluding Remarks

Our analysis leads to three conclusions. First, Coase's (1960) seminal insight has even greater applicability than is usually thought. Even in situations in which property rights are poorly defined and interactions are coercive, the essence of the Coase theorem is at work. The plunderer's superior strength “naturally” endows him with property rights to his victim. However, this doesn't mean the plunderer necessarily comes to own everything in his victim's possession. When the victim's possessions are worth more to him than to his plunderer because they're costly for the plunderer to appropriate, room for mutually beneficial exchange emerges.

In 18th- and 19th-century maritime marauding, the costliness of plundering merchantmen traditionally for privateers created a divergence between victim merchantmen's valuations of their ships, cargoes, and crewmembers' freedom and privateer' valuations of these goods. To reduce these costs, privateers entered plunder contracts with their victims, benefiting them and merchantmen, which escaped having paid less for their release than they were worth to their owners and crews. Coasean bargaining in the context of coercion improved both parties' situation compared to if such bargains had been impossible.

Second, our analysis suggests that even if the Hobbesian view is correct in positing that in the absence of an overarching formal authority, agents will be locked into a state of war with another, the conventional welfare implications of this view are mistaken. It's impossible to reduce plunder's social cost to zero, making a world with plunder necessarily worse than one

without it. However, economists have overstated the social cost of plunder because they have overlooked the incentive of plunderers and their victims to engage in activities that minimize plunder's social cost. Plunder's social cost consists of costs borne privately by plunderers and their victims. Conditional on plunder's presence, plunderers and their victims therefore have a mutual interest in seeing that plunder transpires in the least-cost way.

By entering plunder contracts, plunderers and their victims can economize on resources used to produce plunder and avoid the deadweight loss of resource destruction. This benefits them and reduces plunder's social inefficiency. The incentive to create such agreements bounds how destructive even a world in which the strong are committed to plundering the weak can become. In the 18th and 19th centuries, plundering privateers and their victim merchantmen negotiated ransom bills that were to their mutual benefit and limited the social destructiveness of maritime marauding.

Finally, our paper highlights that although it may be difficult in many cases to satisfy the conditions required for Coasean plunder contracts and thus efficient plunder, satisfying these conditions is not impossible, even for parties at war with one another. Transaction costs, enforcement difficulties, and informational asymmetries threaten to frustrate such contracts. But for this very reason the parties to plunder have an incentive to seek ways of overcoming these obstacles to plunder agreements. They don't always succeed in doing so. But in other cases they do, sometimes where it's least expected. Privateers developed a system of hostage taking to promote contractual enforcement. They relied on market prices for vessels and cargo when negotiating ransom bills to reduce transaction costs. And they created plunder contract templates in foreign languages to overcome communication barriers that threatened to prevent them from forging mutually beneficial plunder agreements. These efforts promoted their private gain. They also promoted efficient plunder.

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