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# 10 The holdup game\*

*Richard R. W. Brooks*

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## 1. INTRODUCTION

“Holdup” long ago entered common usage as a description of forcible robbery, typically of travelers on rail or coach, characterized, perhaps apocryphally, by hands held up at gunpoint or knifepoint. By the early twentieth century the term had expanded in the American vernacular to include a form of lawful extortion. John Commons (1924: 59) used “hold-up” to describe extreme cases of bargaining, bordering on immorality but not actually illegal. In 1934, William du Pont characterized a threat by the tight-knit Fisher brothers to leave General Motors *en masse* as “almost a hold up” (Freeland 2000: 58). Victor Goldberg (1976: 439) may be credited with reviving the term and ushering in its modern usage (expressing more formally the folk understanding known to Commons, Coase,<sup>1</sup> and their contemporaries):

Before locating its plants at a particular site, a firm will have a number of options [among suppliers], once the relationship has begun [however], the supplier will be isolated to some degree from competition and will be in a position to “hold up” the customer.

Among economists presently, however, the classic citation to “holdup” is Klein et al. (1978) and, in particular, their account of Fisher Body holding up General Motors, which is the focus of this chapter.

As a matter of theoretical description, the *holdup problem* is well defined. It generally means underinvestment in anticipation that one will not capture the full returns on investment (Schmitz 2001). In terms of empirical description and identification, however, *holdup behavior* remains elusive. Undoubtedly, the vivid account of Fisher Body’s tactics in its purported holdup of General Motors contributed to the widespread, almost canonical, citations to this case in economics. But, it was just one of a number of interesting examples offered by Klein et al. (1978) to illustrate holdups. What mechanism elevated this story to such prominence? Skepticism from the story’s greatest detractor, it seems, played the pivotal role.

“In the 10 years following the publication of the paper by Klein et al. (1978),” Coase (2006: 258) notes, “the example of Fisher Body and GM

excited little interest.” That all changed, he argued, following comments made by him at a 1987 conference held at Yale, celebrating the fiftieth anniversary of “The Nature of the Firm” (Coase 1937). In those comments, elaborated in Coase (1988), he said he had considered the threat of opportunism by Fisher Body as the reason for General Motors’ acquisition, but ultimately dismissed the salience of holdups as a basis for vertical integration after concluding that contractual devices were generally sufficient to overcome such threats. It was an exception, not the rule, Coase argued, if holdup motivated General Motors to acquire Fisher Body. Klein (1988: 200) countered that Coase’s view of the contracting process was “too simplified” and “too narrow”. What he lacked, Klein suggested, was “[a] more complete analysis of how vertical integration solved the opportunistic behavior problem in the Fisher Body-General Motors case.” In this short chapter, I will attempt to clarify this “more complete analysis” of the case presented by Klein, as it has evolved over a thirty-year period in his writings, from 1978 to 2008, and through the responses of others, including especially Coase.

## 2. AGREEMENTS AND DISAGREEMENTS OVER THE FISHER BODY HOLDUP STORIES

Space prohibits reiteration of the full history surrounding the Fisher Body acquisition. Detailed and thoughtful treatments, even if not all entirely consistent, may be found elsewhere.<sup>2</sup> A sketch of the largely agreed upon facts will have to suffice as a backdrop against which to assess the contested aspects of the original and revised Fisher Body holdup accounts. Readers who have become weary of factual assertions in the Fisher Body back-and-forth needn’t submit to my portrayal of actualities. The aim here is not to move all background assertions beyond debate, but rather to clear the ground a bit so that we can see where the real debate lies.

### 2.1 Largely Agreed Upon Facts and Background

Automobiles in the early 1900s were mostly open body vehicles. Consumers and producers wanting closed bodies turned to suppliers, like the Fisher Body Company, to manufacture tops for their vehicles. In 1910, Fisher Body delivered 150 closed bodies to Cadillac, a sizable delivery at the time. By 1917, it was delivering thousands of bodies to “manufacturers . . . such as Ford, Chalmers, Cadillac, Hudson, Buick, Maxwell, Studebaker and Chandler” (Schipper 1918a: 1190). Fisher Body became a major player, a serious contender in Detroit’s burgeoning automobile industry – a fact

that is often elided in the standard account. At the time Fisher Body was reported to be “the largest employer of labor in Detroit, coming next to the Ford Motor Co.” (ibid.). Moreover, in 1917, a disastrous year for General Motors, there was talk that Fisher Body might acquire the stumbling giant.<sup>3</sup> In the end, the DuPont Company stepped in, propping up General Motors with \$25 million, and securing a profitable long-term relationship between these two companies.<sup>4</sup> That same year, General Motors also entered a contract with Fisher Body to purchase “substantially all of their output at cost, plus 17.6 percent” (Chandler and Salsbury 1971: 465).<sup>5</sup> Fisher Body continued to supply other automakers, including “a large proportion of [Ford Motor Company’s] bodies” (Schipper 1918a: 1190).

Two years later, in the summer of 1919, Fisher Body received its largest order to date from Ford. General Motors’ senior management, unsurprisingly anxious, were increasingly eager to gain control of the body company and to hire the talents of the Fisher brothers.<sup>6</sup> The Fisher brothers, however, were not prepared to relinquish control of their family business or to be splintered within General Motors. After some back-and-forth, a compromise was reached in the fall of 1919. The agreement had several key components, including a Fisher Body stock authorization that permitted General Motors to acquire 60 percent of the company for a sizable cash contribution.<sup>7</sup> To allow the Fisher brothers to retain control, General Motors’ newly acquired shares would be placed, along with shares held by the Fisher brothers, in a five-year voting trust, which effectively limited General Motors’ power to unilaterally exercise its majority position in the Fisher Body Company. In addition to the voting trust, the Fisher brothers entered five-year employment contracts with the Fisher Body Company. Finally, Fisher Body and General Motors entered into a ten-year cost-plus supply contract, scheduled to expire in 1929.

Given its critical role in the holdup story, a few details about the supply contract may be useful.<sup>8</sup> Like the 1917 supply arrangement described by Chandler and Salsbury, the 1919 contract remunerated Fisher Body on a cost-plus 17.6 percent basis for “substantially all the automobile bodies, both open and closed, *required* by” General Motors (emphasis added). Fisher Body remained free to sell bodies to other automakers, which it continued to do. General Motors was restricted, but not wholly so, in its ability to call on other suppliers for bodies. Under the contract, General Motors *may* acquire the right to use other body suppliers or to make its own bodies if Fisher Body was “unable through *lack of facilities* or for other reasons to furnish the automobile bodies” to meet General Motors’ requirements, schedules and plant capacities (article III, emphasis added).<sup>9</sup> There were no express statements in the contract about the location of Fisher Body facilities or how new plants would be financed.

## 2.2 Initial and Pre-Millennial Holdup Stories

In motivating the Fisher Body-General Motors 1926 merger, Klein et al. (1978) began with the context surrounding the 1919 agreements. They note, first, that while “[t]he original production process for automobiles consisted of individually constructed open, largely wooden, bodies, [b]y 1919, the production process began to shift towards largely metal closed body construction for which specific stamping machines became important” (Klein et al. 1978: 308). A predictable consequence of investing in these specialized assets, they argued, is that the investor, Fisher Body, would face a substantial risk of being held up by General Motors. Hence, “[i]n order to encourage Fisher Body to make the required specific investment,” the parties signed a ten-year contract with “an exclusive dealing clause whereby General Motors agreed to buy substantially all its closed bodies from Fisher” (ibid.: 308–9). The exclusivity clause significantly reduced “the possibility of General Motors acting opportunistically by demanding a lower price for the bodies after Fisher made the specific investment in production capacity” (ibid.: 309). It did little, however, to prevent Fisher Body from acting opportunistically, by, for instance, raising the price it charged after General Motors was bound exclusively to Fisher Body. “Therefore, the contract attempted to fix the price which Fisher could charge” and introduced a number of other provisions to limit opportunism (ibid.).

“Unfortunately, however, these complex contractual pricing provisions did not work out in practice” (ibid.). When the demand for automobiles increased dramatically and “shift[ed] away from open bodies to the closed body styles supplied by Fisher[,] General Motors was very unhappy with the price it was being charged by its now very important supplier, Fisher” (ibid.). In later accounts, Klein (1984, 1988, 1996, 1998) would clarify that the basis of General Motors’ unhappiness with the prices charged by Fisher Body emanated from the latter’s use of inefficient labor-intensive technologies, every wasted dollar of which earned Fisher Body a 17.6 percent premium. “In addition, Fisher refused to locate their body plants adjacent to General Motors assembly plants, a move General Motors claimed was necessary for production efficiency,”<sup>10</sup> and so by 1924, Klein et al. (1978: 309–10) concluded, “General Motors had found the Fisher contractual relationship intolerable and began negotiations for purchase of the remaining stock in Fisher Body, culminating in a final merger agreement in 1926.”

### 2.3 Challenges to the Initial and Pre-Millennial Stories

Two essential claims informed the pre-millennial Fisher Body holdup stories. First is the claim that the cost-plus supply contract allowed Fisher Body to exploit inefficient, labor-intensive technologies. The contract itself called for “the most modern, efficient and economical methods,”<sup>11</sup> which, of course, would not necessarily prevent Fisher Body from shading or otherwise distorting its performance without technically breaching the contract; moreover, even if such shading and otherwise nonconforming performance was prohibited by the contract, Fisher Body could still breach over a non-trivial range without inviting legal intervention, given the costs and difficulty of court enforcement. However, there is simply no evidence of opportunistic inefficiencies of this sort, as described by Klein (1984, 1988, 1996, 1998). In fact, there is evidence that Fisher Body adopted the state of the art technologies and operated with noted efficiency.<sup>12</sup>

The second key claim in the pre-millennial holdup account, the so-called “mis-location” problem, asserts that Fisher Body refused to locate its body plants adjacent to General Motors’ assembly plants (or, more provocatively, that it intentionally located its plants “far away” from General Motors’ plants). This claim was easy enough to check. The result was an embarrassment. Apparently, in preparing and publishing a half dozen writings over a twenty-year period from 1978 to 1998, Klein never bothered to confirm this bald assertion by looking at the actual location of Fisher Body’s and General Motors’ plants. When one examines the plant locations of the two companies during the period of the alleged holdup, the “mis-location” argument is revealed to be clearly incorrect. Differences remain among researchers concerning the numbers and nature of the various Fisher Body facilities that were built in close proximity to General Motors’ plants, but we needn’t delay on these quibbles.<sup>13</sup> Everyone now agrees “that Fisher Body did not mis-locate any of its body plants at the time” (Klein 2007: 2–3).<sup>14</sup> Even the principal proponent of the pre-millennial holdup story would, it now seems, consign the non-occurrence of “the two holdup mechanisms” to the section of this chapter labeled, “Largely Agreed Upon Facts and Background”. That might have been the end of the Fisher Body holdup claims, but the overarching account has proven extremely resistant to factual correction.

### 2.4 The Millennial Accounts of Fisher Body Holdups

Coase called it “The Extraordinary Year 2000,” the year in which a half dozen articles and comments were published, all addressing and reassessing the claimed holdup of General Motors by Fisher Body (see, e.g.,

Brooks and Helper 2000; Casadesus-Masanell and Spulber 2000; Coase 2000; Freeland 2000; Helper et al. 2000; Klein 2000; Miwa and Ramseyer 2000).<sup>15</sup> Most of these contributions expressed skepticism, to say the least, about the premillennial accounts of holdup. Two of the contributors, however, provided new Fisher Body holdup stories. First, and most interestingly, Freeland (2000) argued that the Fisher brothers did not engage in holdup before the 1926 acquisition of their family namesake; however, they were later able to successfully hold up General Motors as employees. Freeland's well-documented argument, focusing more on human asset specificity – as opposed to prior accounts stressing physical-, locational- or dedicated-asset specificity – revealed the limits of vertical integration as a solution to holdup. Indeed, argued Freeland (2000: 33), integration may increase holdup threat.

Freeland was also the likely source for the facts behind the second holdup argument, although he himself did not interpret the facts as such. Rather, it was Klein (2000) who advanced the other new holdup account. Whereas the original, and now seemingly rejected, holdup story described a pattern of opportunistic behavior under the 1919 supply contract that, by 1924, became intolerable to General Motors (Klein et al. 1978, 309–10), Klein (2000) now argued that the contract worked well through 1924:

In analyzing the Fisher–GM body supply contract, it is crucial to distinguish between the early period of operation, from 1919 to 1924, when the contract functioned well, and the period 1925–26, when the contract was used by Fisher to hold up GM and was the primary motivation for GM's acquisition of the remaining 40 percent interest of Fisher Body. (Klein 2000: 110)

There was, no doubt, a disagreement between General Motors and Fisher Body concerning a major plant location in 1925. Several years later, while visiting the United States in 1931–32, Coase (2006: 267) recalled a General Motors executive telling him (probably in reference to this dispute) “that GM had merged with Fisher Body to make sure that the body plants were located near the GM assembly plants.” The question remains, was this dispute based on holdup?

Some context may be helpful to appreciate the circumstances giving rise to the 1925 plant location disagreement. Automobile production and sales were transformed in the mid-1920s. In 1922, Henry Ford's utilitarian low-priced Model T still accounted for more than half of the cars made in the US and because of the scale economies realized on Ford's assembly lines, there was no competing with him on price – the Model T price was low (around \$350 in 1923) and falling (around \$260 in 1925) during this period. Automakers turned to competing along other dimensions, such as color (e.g., while the Model T came only in black, General Motors offered

a range of colors using a shiny lacquer paint developed by DuPont called Duco), as well as style, appearance and other features, particularly closed bodies. In 1923, sales of closed-body vehicles exceeded their open-body counterparts for the first time. A 1924 recession caused General Motors' sales and profits to fall by a quarter, but Chrysler, Dodge and Hudson actually improved their sales by marketing new closed-body designs. "Moreover," as Freeland (2000: 49) observed, "both Hudson and Chrysler built their new models around closed bodies designed and manufactured by Fisher. Not only was GM losing market share to more innovative rivals, but Fisher was providing the crucial component in competitors' strategies!" General Motors had to respond, which it did by increasing its closed body production schedule for 1925 and some time thereafter introducing annual model updates to encourage sales of new cars. "The increase in closed-body design, output, and die manufacture thus made it apparent that Fisher had to expand its capacity" (ibid: 50).

But who should pay for this expansion? And who gets to decide when, where and how it occurs? Recall, the 1919 supply contract provided no expressed guidance for determining the location of Fisher Body facilities or how they were to be financed, especially if requested by General Motors. A conflict arose from this contractual gap. General Motors wanted Fisher Body to build a massive facility in Flint Michigan, next to its Buick plant. The Fisher brothers wanted to expand their existing Detroit facilities and ship bodies to Flint, as it had been doing. On the surface, the desires of each side do not appear unreasonable. General Motors sought closer coordination and increased efficiency (not to mention the added benefit of raising its rivals' costs) by having Fisher Body move its Detroit-centered production to Flint, which it accomplished immediately after the 1926 merger. For their part, the Fisher brothers were reluctant to abandon their largest plant and the goodwill of other key customers they supplied from Detroit. Moreover, Fisher Body was not bound to promote General Motors' interests. They were still two separate entities, operating under a contract set to expire in four years. Even if the controlling shareholders of the Fisher Body Company, i.e., General Motors and the Fisher brothers, were willing to compromise on Fisher Body's profits and its future negotiating position by moving to Flint, the Company's minority stockholders surely would resist this move as a self-dealing transaction, that is, unless they were adequately compensated.

Did all of this add up to holdup? Klein (2000) says yes: by resisting the move to Flint and pushing for General Motors to finance the new plant, Fisher Body appropriated quasi-rents by taking advantage of fixed contractual terms. Coase (2006: 271) asked and answered the question as follows: "Did Fisher Body hold up GM? My answer is that they did not.

The original claim in the paper by Klein et al. (1978) stands discredited. The 1925 dispute that Klein substitutes was, in my view, a normal business dispute." Critical readers will have to make up their own minds based on the reported facts and their plausible interpretation.

## 2.5 Post-Millennial Accounts of Fisher Body Holdups

In the latest salvo of this interminable sideshow, Klein (2007) introduces yet another rumor of Fisher Body holding up General Motors. The alleged holdup, this time, occurred in 1922 as Chevrolet sales were rising and General Motors made a demand on Fisher Body to locate new body plants adjacent to Chevrolet assembly plants. General Motors' demand for "co-located body plants," Klein (2007: 11) argued, "provided Fisher Body with an opportunity to negotiate a highly favourable contractual adjustment." Presumably, he means a contractual adjustment to the 1919-supply contract, which again was silent on the issue. Not merely silent, but according to Klein, the issue "was *unforeseen* at the time Fisher Body and General Motors entered into their contract" (*ibid.*, emphasis added). No one imagined "that General Motors would request Fisher Body to make the investments in body plants necessary to meet this increased demand for Chevrolet closed bodies with smaller plants located close to each Chevrolet assembly facility" (*ibid.*). General Motors' demand was also contrary to the course of performances established between the parties, as well as trade usages and the larger industry practices. "General Motors request for smaller, co-located body plants represented a significant change in the production process" (*ibid.*). So how does Fisher Body's resistance to this significant change come to represent a holdup?

No obvious answer presents itself. As Klein (2007: 12) observes, "Fisher Body's reluctance to make investments in body plants located in conjunction with G.M.'s new and expanding Chevrolet assembly plants may appear, at first glance, somewhat understandable." He points out that General Motors may have held up Fisher Body after it made these investments, but concludes by noting that "Fisher Body was largely protected against a General Motors holdup, at least for the next seven years, by the exclusive dealing contract" (*ibid.*). Barring any threat of holdup by General Motors, Klein sees no reason for Fisher Body's reluctance, none other than, it seems, extracting quasi-rents from General Motors. "If Fisher Body insisted on shipping Chevrolet bodies from its large, non-co-located plants in Detroit or Cleveland, General Motors would bear extra transportation and loading and unloading costs, and possibly lose other cost advantages it anticipated achieving from this new production process" (*ibid.*).



Surely, even without the threat of holdup, Fisher Body had cause to hesitate in acceding to General Motors' demands. Beyond holdup from General Motors, Fisher Body faced other risks by changing its own production structure from "large plants in Detroit or Cleveland" to smaller ones next to Chevrolet assembly plants. Recall, the 1919 contract gave Fisher Body the right to supply other automakers, a contractual entitlement it profitably exploited for many years. By shifting its operational focus to smaller more remote sites for the benefit of General Motors, Fisher Body would stand to lose its advantaged position with other automobile manufacturers. Even if General Motors did not hold it up after it made the sought after asset- and location-specific investments, at the end of the supply contract, assuming the merger with General Motors did not occur, Fisher Body would face a very different competitive environment in Detroit or Cleveland, having sacrificed its goodwill with other car companies and allowing other body manufacturers to get a foothold where it was once dominant. Given these expected costs, it seems quite reasonable that Fisher would demand some additional compensation. Moreover, it would have been wholly irresponsible for Fisher Body management not to factor in this risk in its 1922 negotiations with General Motors.

From the other side of the bargaining table, it is worth observing that General Motors' options were not as constrained by the supply contract as frequently suggested. Klein (2007) paints a context where General Motors was forced to acquiesce, one where its managers had no effective choice but to give in to the holdup threat by Fisher Body, in large part because of the exclusivity term in the 1919 contract. But the General Motors managers did have options. To satisfy the increased requirements of the Chevrolet business plan, Fisher Body facilities would need to expand. However, General Motors did not have to provide any support. There was no legal duty for General Motors to finance the expansion of Fisher Body facilities. General Motors was essentially required, under the 1919 supply contract, to submit schedules of its requirements to Fisher Body. If Fisher Body could not meet, or if it rejected, General Motors' requirements and schedules,<sup>16</sup> then General Motors had a right under the contract to use other suppliers or produce its own bodies by constructing new plants or acquiring existing ones.<sup>17</sup> Both sides had legitimate concerns, interests and options in entering the Chevrolet plant location negotiations.

Klein tells us that as a result of these negotiations six new body plants were built adjacent to Chevrolet plants between 1922 and 1924. "General Motors financed and then leased to Fisher Body three of the six [and] Fisher Body financed the remaining three co-located Chevrolet body plants . . . ." (Klein 2000: 12). It would seem the two firms chose to share the burden of financing the plant construction as required by General

Motors' new production strategy. Not an unreasonable outcome given the absence of a prior agreement on the matter. Klein, however, interprets Fisher Body's behavior as advantage-taking to appropriate quasi-rents. "Given that Fisher Body did not adjust the 1919 contract pricing formula, General Motors' decision to finance some of the new Fisher Body co-located Chevrolet plants was a contractual adjustment," he argues, "that resulted in a substantial per period transfer of profits from General Motors to Fisher Body" (ibid.).

"The original 1919 contract designed to protect General Motors from overpaying Fisher for bodies was now in its revised form permitting Fisher Body to earn an above-normal rate of return on its GM sales" (Klein 2008: 14). But, exactly which contractual term or terms were revised in 1922? It is not entirely clear what Klein has in mind here, but a hint of his thinking may be gleaned from the following:

We [. . .] know that Fisher Body was able to take advantage of the exclusive dealing contract and G.M.'s desire for co-located plants to reduce its capital costs relative to sales by *having General Motors make the capital investments Fisher Body was otherwise required to make under the existing contract.* (Klein 2007: 13, emphasis added)

But how can we know this, how can Klein know? The contract was silent about who was required to make the capital improvements that General Motors demanded. That General Motors might make such demands, Klein wrote, was unforeseen three years earlier when the parties entered the contract. How can it be that Fisher Body was now *required* to make capital investments of a sort not contemplated by the parties' agreement?

It is possible, of course, for obligations to arise from a course of dealing or performances between parties, or from industry usages and customs, or from other sources of default terms (such as through assignments of risk), as well as from clever interpretation of written terms. Inexplicably, Klein offers no basis for his assertion that Fisher Body was implicitly or otherwise "required to [finance co-located plants] under the existing contract." Certainly, if one begins with that premise, then Fisher Body financing only three out of six plants does not seem fair or reasonable at all. However, the premise is neither obviously correct nor supported by evidence. It would seem just the opposite. Another interpretation, which may reconcile Klein's view, is that Fisher Body was strictly entitled, under the contract, to a narrow stream of earnings or to earnings in some fixed or approximate proportion to its capital expenses. Yet, again, there is no clear basis for inferring this restricted entitlement from the contract itself or elsewhere in the record.

Speculation is plentiful, but useful facts are hard to find here. We do know some things about the resolution of the matter. In spring of 1922, Fred Fisher arranged a tour of the Fisher Body Cleveland plant by General Motors and DuPont officials, including Pierre du Pont, who wrote Fisher days later saying, "I was greatly pleased with the success of the Cleveland effort and begin [*sic*] to realize more fully the needs of your company. I hope that you will soon be able to present a financial program that will permit caring for your needs in due season."<sup>18</sup> A follow-up meeting was held in Detroit, on July 12, 1922, the minutes of which were titled, "Fisher Finances in Connection with the Chevrolet assembly Plant (Meeting with Messrs. C.S. Mott, C.F. Kettering, Fred Fisher and P.S. DuPont)."<sup>19</sup> The minutes begin with a discussion of proposed plants, where it is noted, "Fred Fisher suggested that these plants be built on Chevrolet property and leased to the Fisher Body Company . . ." (*ibid.*). The minutes conclude: "In talking over Fisher financing, it was agreed that it would be better for the Fisher Company not to issue further senior securities. *To that end it would be better for General Motors Corporation to own the assembly plants, leasing them to the Fisher Company*" (*ibid.*, emphasis added).

Meeting minutes tend toward flat language. Reading the text above may suggest that a conclusion was easily and amicably reached. That would be reading too much into the text. There was, to be sure, a genuine dispute between Fisher Body and General Motors in 1922 about locating Fisher Body plants adjacent to Chevrolet assembly plants. Coase first raised the possibility that the Chevrolet plant dispute might have involved holdup. He concluded with characteristic humility, "I cannot with certainty say that Fisher didn't hold-up Chevrolet, but it seems highly unlikely" (Coase and Brooks 2000).

### 3. IMPLICATIONS AND CONCLUSION

Where does all of this leave us? In an important sense, as it relates to the theory of the firm, this continuing debate is entirely pointless. No decisive answer to the Fisher Body inquiry could resolve the central contention about holdup and vertical integration, which was never one of existence or about the possibility that holdup may lead to vertical integration, but rather a question of salience.<sup>20</sup> If, on the one hand, the Fisher Body story is just a hypothetical account intended to illustrate holdup, then Klein does not have to defend his use of that story to advance theory. If, on the other hand, he is asserting Fisher Body holdup as an objective fact, given what we now know, his use of that story would seem indefensible. But in

neither case will resolving this inquiry about the motivation of motorcar men in the 1920s shed much light on the salience of holdup, then or now, in leading firms to vertically integrate.

What the Fisher Body story does reveal is something, possibly distinctive, about the development and reception of ideas in economics. Coase put it bluntly in questioning the broad disciplinary acceptance of the holdup account: what is it, he wrote, “about the conduct of economics that led so many able economists to choose error rather than truth” (Coase 2006: 255). His choice of words was uncharitable, but perhaps understandable as it reflected a long-held frustration, evident in his early critique of the lighthouse in economics (Coase 1974). Instead of characterizing the choice as one in favor of “error rather than truth”, he might have asked, what led so many to choose fiction over fact, which is not to disparage the role of fictions in economics. Whether the classical master metaphor of “the invisible hand” or, in the present case, “hands held up”, fictions have proven to be powerful tools in advancing economic theory. Maybe too powerful, in the way these evocative notions tend to constrain our interpretation and interrogation of economic facts.

Any set of facts, Vilfredo Pareto cautioned, “may be explained by an infinity of theories, equally true, because they all reproduce the facts to be explained.”<sup>21</sup> Hence, notwithstanding all the contrary evidence before him, Klein (2007: 3) can still make the ludicrous but not necessarily untrue assertion that “[t]he conclusion that Fisher Body held up General Motors not only stands, but is substantially strengthened by the analysis because Fisher’s conduct is shown to be consistent with what we would expect from economics” – that is, from economic theory.<sup>22</sup> One wonders if any fact could falsify the tightly held belief that holdup occurred. An absence of falsifiability is not, however, the principal challenge here. Rather, it is the willingness to treat as unambiguous fact, *interpretations* of observed outcomes that appear consistent with theory. A disposition of this sort tends to resist inquiry into observed phenomena once they pass through the filter of some favored theory, but, again, any given phenomenon will pass through innumerable such filters. “It is in this sense that Poincaré could say that from the very fact that a phenomenon allows one mechanical explanation, it allows an infinity of them” (Latsis 1976: 9 citing Pareto 1909: 31).

Likewise, if there is cause for caution because facts are so promiscuous with the theories they embrace, there ought to be equal concern about the converse. Theories, or rather theorists, are often too selective in the facts they seek out. Coase identified this as the central drawback in the theory-driven approach of contemporary economic analysis. “If it is believed that their theory tells us how people would behave in different circumstances,

it will appear unnecessary to many to make a detailed study of how they did in fact act" (Coase 2006: 275). He was not skeptical of theory *per se*, as some have suggested, but rather the "casual attitude toward checking the facts" (*ibid.*) among those strongly predisposed to be persuaded by theory alone.

A final example may clarify. Fisher Body was not the only infamous case of holdup described by Klein. Another "classic case of such a holdup," Klein (1985: 595) wrote, "involved the rental of space to view the coronation procession of King Edward." Facts of this case were reported in a well-known English opinion, *Krell v. Henry*,<sup>23</sup> involving a dispute arising from an agreement by Henry to rent Krell's apartment, overlooking the royal procession route, during the days surrounding the scheduled coronation of Edward VII. "When Edward was suddenly taken ill and the procession was cancelled," Klein argues that "the lessors [Krell] failed to modify the contract to change the rental day to the new scheduled date of the procession" (*ibid.*). He concludes that Krell held up Henry by "taking advantage of an unspecified element of the contractual understanding to violate the obvious intent of the agreement" (*ibid.*).

As with the Fisher Body case, it is unclear how Klein knows "the obvious intent of the agreement" or from where he identifies evidence of holdup (*ibid.*).<sup>24</sup> It is a notable irony that the court in *Krell v. Henry* came to the opposite conclusion – that there was no obvious agreement between the parties about what to do in these circumstances: "I think it cannot reasonably be supposed to have been in the contemplation of the contracting parties when the contract was made, that the coronation would not be held on the proclaimed days" wrote Vaughan Williams, L.J., "or along the proclaimed route."<sup>25</sup> Which is not to suggest that the court's interpretation of what the parties intended in the event of cancellation was correct. Goldberg (2011: 1140) rightly noted that the likelihood of cancellation was "not so far-fetched. After all, the unavailability of a heavy smoking, grossly overweight sixty-year-old who had been the target of at least one assassination attempt, was not a trivial possibility." In fact, in an article titled "The Coronation Gamble," published just days before the announcement, the New York Times reported on the large number of policies underwritten by Lloyds of London, insuring losses conditional on the cancellation of the coronation.<sup>26</sup> Neither Klein nor the Court in *Krell* looked to such potentially relevant contracting practices in reaching their conclusions. Why bother? Once the readily available facts appear consistent with their respective theories of the case (i.e., "holdup" for one, "frustration of purpose" for the other) what is to be gained from further confirmation of the (theoretically) obvious? It was in such regard that Coase (2006: 275) wrote "it is not surprising that economists misinterpret

the evidence and find what they expect to find.” Believing that what may have occurred must have surely or likely occurred when it is “what we would expect from economics” (Klein 2007: 3) is a form of faith-based reasoning antithetical to Coasean skepticism.

## NOTES

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- 1. For instance, Coase (2006: 259) recalls an excerpt from a March 24, 1932 letter to Ronald Fowler, wherein he wrote: “Suppose the production of a particular product requires a large capital equipment which is, however, specialized insofar that it can only be used for the particular product concerned or can only be readapted at great cost. Then the firm producing such a product for one customer finds itself faced with one great risk –that the customer may transfer his demand elsewhere or that he may exercise his monopoly power to force down the price . . .”. See also Coase (1988: 13 and 44–5).
- 2. See note 17 and accompanying text.
- 3. *United States v. Du Pont*, 126 F. Supp. 235 (1954) 1006–7.
- 4. The DuPont–General Motors relationship would, some thirty years later, become the subject of a federal anti-competitive lawsuit, *United States v. Du Pont*, 126 F. Supp. 235 (1954). Trial transcripts, depositions and exhibits from that lawsuit have provided a significant amount of what we know about the Fisher Body–General Motors relationship. Other valuable archives have been found in the Du Pont papers at the Hagley Museum in Delaware and the General Motors libraries in Michigan, among other primary and secondary sources, including Chandler and Salsbury (1971), Pound (1934), Seltzer (1928) and Sloan (1964).
- 5. The 1917 supply contract is referenced only in secondary sources (as far as I know, no current commentator has seen the actual contract) but little turns on this issue for present purposes.
- 6. There were six brothers associated with Fisher Body at that time, with Fred and Charles Fisher, the eldest brothers, leading the company. There was also a significant minority interest in the Fisher Body Company, held by Louis Mendelssohn and Aaron Mendelson. This minority interest implies duties on the managers and majority shareholders in the Fisher Body Company, a fact that may be usefully kept in mind when interpreting the alleged holdup behavior by the controlling Fisher brothers.
- 7. For a more detailed description of the various elements of the 1919 agreement, see Coase (2000: 22–3), Freeland (2000: 42–4), Casadesus-Masanell and Spulber (2000: 80–81) and Klein (2000: 108–10).
- 8. For a number of years the 1919 supply contract was not in the public domain. Klein et al. (1978: 308) wrote that the supply contract “between General Motors and Fisher Body can be found in the minutes of the Board of Directors of Fisher Body Corporation for November 7, 1919.” Significant portions of the contract have been published in Goldberg (2008: 1074–6) and Klein (2007: 36). I have not seen the original contract myself. Victor Goldberg graciously shared with me a retyped version, which was given to him by Benjamin Klein. I have found small transcription differences between the retyped version and sections of the contract reproduced in Klein (2008). I write on the assumption that the principal content of the retyped version of the contract is the same as the original.
- 9. In addition to providing basic warranties, Fisher Body agreed to “use its best efforts to make and deliver all the automobile bodies [ordered by G.M. and accepted by Fisher] and to that end will use the most modern, efficient and economical methods, machinery and devices consistent with good workmanship in the production of said automobile

bodies." Failure to meet these conditions could trigger General Motors' "right to place orders for such automobile bodies elsewhere" (Article III). See also Articles IV and V. The contract provided General Motors with a most-favored-nation clause with respect to the costs of delivered bodies (Article X). Additionally, if Fisher Body caused General Motors to pay a price "for automobile bodies manufactured by [Fisher Body that] substantially exceeds the general average market price of similar grade automobile bodies manufactured by other persons, firms or corporations, [General Motors] shall have the right to place its orders for automobile bodies elsewhere . . .". First, however, Fisher Body would have an opportunity to adjust its price or show the proffered market price wasn't available to General Motors (Article XI). Cost disputes under the contract were to be settled by binding arbitration (Article IX).

10. In later accounts, Fisher Body's obstinate refusal to locate their body plants adjacent to General Motors plants would become a more scheming endeavor "to locate its body producing-plants far away from the General Motors assembly plant" (Klein 1996: 446, emphasis added). See also Klein 1998.
11. See Article III of the 1919 cost-plus contract.
12. "From 1905 through the mid-1930s, most car bodies were framed in wood and covered with sheet metal skins" (Lamm and Holls 1996: 35, cited by Casadesus-Masanell and Spulber 2000: 84–5), a technological innovation said to be introduced by Fisher (Schipper 1918a: 1190). Additionally, the trade press reported that Fisher Body maintained "the most modern practices in woodworking," used "up-to-date manufacturing" and placed great emphasis on minimizing "wastage" (ibid.). See letters, Pierre du Pont to Fred Fisher, President of Fisher Body Corporation (May 8, 1922) and John J. Raskob to Fred Fisher, Esquire, Fisher Body Corporation (May 4, 1922).
13. Klein (2000) critiqued the specific analyses of Fisher Body–General Motors plant locations by Coase (2000) and myself, as well as Casadesus-Masanell and Spulber (2000). Casadesus-Masanell and Spulber (2000) in fact conducted a very careful analysis, going beyond a simple count of plants and their locations, but using square footage and supporting sources to determine the nature of the Fisher Body plants, which were not all body plants. For instance Fisher Body owned three glass plants in 1922. Coase and Brooks (2000) responded to questions of oversight raised by Klein.
14. "We also know that the Fisher Body–General Motors contract included a term designed to prevent Fisher Body from adopting an inefficient low-capital intensive production technology. These are the two holdup mechanisms I had previously identified as used by Fisher Body . . ." (Klein 2007: 3).
15. Among other cites, one might usefully add Marx and Peterson (1995), which was and remains an unpublished manuscript, but was very much in circulation in 2000.
16. Provision and acceptance of General Motors requirements and schedules were described in Articles II and III of the Contract: "GENERAL MOTORS will from time to time furnish to the FISHER COMPANY schedules showing the kind and quantity of the automobile bodies to be furnished by the FISHER COMPANY, which said schedules shall be accompanied by the specifications in accordance with which the said bodies are to be built. The schedules shall also specify the times and places at which, and the quantities in which, bodies are to be delivered by the FISHER COMPANY to GENERAL MOTORS, and shall be furnished reasonably in advance of requirement. (Article II) . . . The FISHER COMPANY will immediately upon the receipt of the schedule from time to time to be furnished by GENERAL MOTORS, notify said GENERAL MOTORS of its acceptance in whole or in part of the orders for automobile bodies contained in said schedules. . . (Article III)."

A brief exchange between Goldberg (2008) and Klein (2008) debates whether these provisions rendered the entire contract unenforceable for lack of mutuality of obligation.

17. These triggered rights for General Motors are described in Articles III and IV: "In the event that the FISHER COMPANY is unable through lack of facilities or for other reasons to furnish the automobile bodies in accordance with the schedules supplied . . .

- GENERAL MOTORS shall have the right to place orders for such automobile bodies elsewhere.* (Article III, emphasis added) . . . If the FISHER COMPANY by rejection of the schedules of orders furnished to it by GENERAL MOTORS, or by its failure to make deliveries as specified, should be unable to furnish automobile bodies to such extent as to interfere materially with the general program of automobile production mapped out by GENERAL MOTORS, then GENERAL MOTORS, in addition to the remedies provided above, may, at its option purchase, or cause to be constructed plant facilities for the production of automobile bodies, and thereafter be able to furnish the additional automobile bodies made by the plant or plants thus acquired. (Article IV, emphasis added).
18. Letters, Pierre du Pont to Fred Fisher, President of Fisher Body Corporation, May 8, 1922 (Longwood Manuscripts, Group 10, Series A, Papers of Pierre S. du Pont, Hagley Museum and Library, Greenville, Delaware).
  19. Document found in Longwood Manuscripts, Group 10, Series A, Papers of Pierre S. du Pont, Hagley Museum and Library, Greenville, Delaware.
  20. Coase always accepted the possibility that holdup may lead to vertical integration (a possibility he first saw in 1932), he simply felt it wasn't very likely to occur.
  21. The quotation is taken from Latsis (1976: 9), citing Pareto (1909: 31) who in turn was acknowledging Poincaré's 1902 *La Science et l'Hypothèse* of 1902.
  22. Klein (2007) offers two types of holdup behavior: (i) the type originally described by Klein et al. (1978), where a party engages in inefficient conduct to extract a counterparty's quasi-rents and (ii) where a party merely threatens inefficient conduct as a means of extracting a counterparty's quasi-rents through renegotiation (see earlier work by Ayres and Madison, 1999; Ben-Shahar and Bar-Gill 2003).
  23. 2 K.B. 740. Court of Appeal, 1903.
  24. Klein cites only the appeals court opinion, which focused on payments and refunds, not failed attempts to reschedule or modify the lease period. Specifically, the parties had agreed to a price of 75 pounds, of which Henry paid 25 pounds upfront. After the coronation was cancelled, Krell sued for the remaining 50 pounds and Henry countersued to recover his 25-pound advanced payment.
  25. *Krell v. Henry* [1903] 2 K.B. 740 at 740.
  26. *NY Times*, June 22, 1902, page 1 (described in Goldberg 2011).

## REFERENCES

- Ayres, Ian and Kristin Madison (1999), "Threatening Inefficient Performance of Injunctions and Contracts," *University of Pennsylvania Law Review*, **148**, 45–108.
- Ben-Shahar, Omri and Oren Bar-Gill (2003), "Threatening an Irrational Breach of Contract," *Supreme Court Economic Review*, **11**, 143–70.
- Brooks, Richard and Susan Helper (2000), "Correspondence: GM and Fisher Body," *Journal of Economic Perspectives*, **14**(2), 233–4.
- Casadesus-Masanell, Ramon and Spulber, Daniel F. (2000), "The Fable of Fisher Body," *Journal of Law and Economics*, **43**(1), 67–104.
- Chandler, Alfred D., Jr and Stephen Salisbury (1971), *Pierre S. Du Pont and the Making of the Modern Corporation*, New York, Harper & Row.
- Coase, R.H. (1937), "The Nature of the Firm," *Economica*, **4**(16), 386–405.
- Coase, R.H. (1974), "The Lighthouse in Economics," *Journal of Law and Economics*, **17**(2), 357–76.
- Coase, R.H. (1988), "The Nature of the Firm: Origin, Meaning, Influence," *Journal of Law, Economics, and Organization*, **4**(1), 3–47.
- Coase, R.H. (2000), "The acquisition of Fisher Body by General Motors," *Journal of Law and Economics*, **43**(1), 15–31.
- Coase, R.H. (2006), "The Conduct of Economics: the Example of Fisher Body and General Motors," *Journal of Economics and Management Strategy*, **15**(2), 255–78.



- Coase, R.H. and Richard Brooks (2000), "The Chevrolet 'Hold Up' Story," unpublished mimeo.
- Commons, J.R. (1924), *Legal Foundations of Capitalism*, New York: Macmillan Press.
- Freeland, Robert F. (2000), "Creating Holdup through Vertical Integration: Fisher Body Revisited," *Journal of Law and Economics*, **43**(1), 33–66.
- Goldberg, Victor P. (1976), "Regulation and Administered Contracts," *The Bell Journal of Economics*, **7**(2), 426–48.
- Goldberg, Victor P. (2008), "Lawyers Asleep at the Wheel? The GM–Fisher Body Contract," *Industrial and Corporate Change*, **17**(5), 1071–84.
- Goldberg, Victor P. (2011), "After Frustration: Three Cheers for *Chandler v. Webster*," *Washington & Lee Law Review*, **68**, 1133–69.
- Helper, Susan, J.P. MacDuffie and Charles Sabel (2000), "Pragmatic Collaborations: Advancing Knowledge While Controlling Opportunism," *Industrial and Corporate Change*, **9**, 443–88.
- Klein, Benjamin (1984), "Contract Costs and Administered Prices: An Economic Theory of Rigid Wages," *The American Economic Review*, **74**(2), 332–8.
- Klein, Benjamin (1985), "Self-Enforcing Contracts," *Journal of Institutional and Theoretical Economics*, **141**, 594–600.
- Klein, Benjamin (1988), "Vertical Integration as Organizational Ownership: The Fisher Body–General Motors Relationship Revisited," *Journal of Law, Economics, and Organization*, **4**, 199–213.
- Klein, Benjamin (1996), "Why Hold-Ups Occur: The Self-Enforcing Range of Contractual Relationships," *Economic Inquiry*, **34**, 444–63.
- Klein, Benjamin (1998), "Hold-Up Problem", in Peter K. Newman (ed.), *The New Palgrave Dictionary of Economics and the Law*, Vol. 2, New York, Stockton Press, pp. 241–4.
- Klein, Benjamin (2000), "Fisher–General Motors and the nature of the firm," *Journal of Law and Economics*, **43**(1), 105–41.
- Klein, Benjamin (2007), "The Economic Lessons of Fisher Body–General Motors," *International Journal of the Economics of Business*, **14**(1), 1–36.
- Klein, Benjamin (2008), "The Enforceability of the GM–Fisher Body Contract: Comment on Goldberg," *Industrial and Corporate Change*, **17**(5), 1085–96.
- Klein, Benjamin, Robert Crawford and Armen Alchian (1978), "Vertical Integration, Appropriable Rents, and the Competitive Contracting Process," *Journal of Law and Economics*, **21**(2), 297–326.
- Lamm, Michael and Dave Hollis (1996), *A Century of Automotive Style: 100 Years of American Car Design*, Stockton, CA, Lamm-Morada.
- Latsis, S.J. (1976), "A Research Programme in Economics," in S.J. Latsis (ed.), *Method and Appraisal in Economics*, Cambridge, Cambridge University Press, pp. 1–42.
- Marx, Thomas G., and Peterson, Laura Bennett (1995), "Theory versus Fact in the Choice of Organizational Form: A Study of Body and Frame Production in the Automobile Industry," unpublished manuscript.
- Miwa, Y. and Ramseyer, J. Mark (2000), "Rethinking Relationship-Specific Investments: Subcontracting in the Japanese Automobile Industry," *Michigan Law Review*, **98**(8), 2636–67.
- Pound, Arthur (1934), *The Turning Wheel: The Story of General Motors through 25 Years, 1908–1933*, New York, Doubleday.
- Schipper, J. Edward (1918a), "Quantity Production of Sheet Metal Bodies," *Automotive Industries*, June 20, 1188–93 and 1219.
- Schipper, J. Edward (1918b), "Quantity Production of Sheet Metal Bodies – II," *Automotive Industries*, June 27, 1262–6.
- Schmitz, Patrick W. (2001), "The Hold-Up Problem and Incomplete Contracts: A Survey of Recent Topics in Contract Theory," *Bulletin of Economic Research*, **53**(1), 1–17.
- Seltzer, Lawrence H. (1928), *Financial History of the American Automobile Industry*, Boston, MA and New York, Houghton Mifflin.
- Sloan, Alfred P. (1964), *My Years with General Motors*, New York, Doubleday.