Boilerplate and Economic Power in Auto Manufacturing Contracts

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BOILERPLATE AND ECONOMIC POWER
IN AUTO MANUFACTURING CONTRACTS

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Abstract

This article studies the standard form contracts used by automobile manufacturers to purchase auto parts. It explores how the contracts reflect divisions of bargaining power, asymmetric information, problems of hold-up and renegotiation, and market competition. Based on interviews with representatives of buyers and suppliers, the article also describes the process of drafting the forms, the negotiation over price and other terms in the shadow of these forms, and the opportunities for non-drafters to extract improved terms. Some of the main lessons are: (i) The terms of the contracts and the bidding process prevent ex-post hold-up by suppliers (in contrast to the claims made by Benjamin Klein and others based on the GM/Fisher Body contract); (ii) There is surprisingly little ad-hoc tailoring of terms, even when such tailoring can increase the surplus from the deal; (iii) Internal organization structures are harnessed effectively to secure favorable bargaining outcomes; (iv) There is a significant variation between the standard forms utilized by the big automakers, in some of the most important aspects of the deals. This variation suggests that some of the terms are inefficient.

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Introduction

Manufacturing contracts in the automotive industry have served a canonical role in the economic theory of contract and bargaining. The famous story of General Motors’ relationship with its supplier Fisher Body in the 1920s is a landmark illustration of the problem of contractual hold-up, underlying a prominent theory of vertical integration and the nature of the firm.¹ The theoretical fascination with automotive procurement contracts is well deserved. There may be no other merchant-to-merchant contractual template that governs such fantastic economic stakes—hundreds of billions of dollars per year—and implemented through a process that involves almost no negotiation of the legal terms. Boilerplate rules these transactions.

There is a long line of law-and-economics scholarship studying the attributes of standard form terms in contracts between sophisticated parties in high-stakes transactions. One of the benchmark predictions in this literature is that contractual terms have to be efficient if they are to be consistently used by the parties.² Any rent-seeking power that a party has should be translated into a price advantage; it should not be used to dictate selfish but inefficient performance terms. Further, since legal terms such as warranties and remedies affect the costs borne by the parties, we expect that sophisticated parties will be “pricing” the terms and will be ready to redraft terms that cost more than they save. A study of automobile contracts provides an opportunity to test


these predictions. These are transactions where economic power is unevenly distributed; much
dicking takes place over prices and product design; but everything else is packed into
boilerplate. Every party reads the boilerplate and understands its legal effect and its economic
consequences. Do strong parties dictate efficient boilerplate and extract rents through prices and
other purely distributive clauses? Do they tailor their terms to maximize their net gains from the
transactions?

Moreover, automotive supply contracts are the paradigmatic long-term relationships that
require a great deal of relationship-specific investments in the form of machinery, location of
plants and precontractual technology research. As the economic literature predicts, the
dependence of suppliers (who must invest in specializing for their buyers’ needs) and buyers
(who need specialized parts from their suppliers) gives opportunities for hold-up.3 These dangers
make the contracts the primary tool to deter hold-up and to encourage investments. What are the
contractual techniques used to address the risk of hold-up?

In answering these questions, we have taken a simple, almost naïve approach. We read
and compared the boilerplate contracts in the industry, and talked to lawyers who drafted these
forms and to some non-lawyer participants in the industry. We provide a case study, but it yields
some general insights. For example, the boilerplate contract terms between the Original
Equipment Manufacturers (OEMs) and the tier-1 suppliers show how economic power is
translated into transactional advantage. From the contract terms we can identify ways the OEMs
extract value from their suppliers. Contrary to the fabled GM/Fisher Body story, we find no real
problem of “hold-up” by suppliers. The claim that suppliers with a long-term contract can hold
up the OEMs is based on a misunderstanding of the terms of the deal, the rules of contract law,

3. Oliver Hart, Firms, Contracts, and Financial Structure 7 (1995); Oliver Williamson, The
and the structure of the market. Moreover, comparing the terms that appear in the purchase orders of the various OEMs reveals ways in which they differ and, surprisingly, it suggests that some of these terms may foster inefficiency. Finally, studying the way the form contracts are drafted gives a detailed understanding of how and when “tailoring” of terms takes place and how internal organizational features are harnessed to affect the outcome of negotiations over contract terms.

The study of contracting in the automotive industry also provides an opportunity to investigate the design of contracts in an industry that deals with fascinating economic changes. One major change has to do with the organization of production. By 1960 Ford was making almost everything from floor mats to steel within the company, and the other OEMs had a nearly equal degree of vertical integration. But since the early 1980s, the trend towards vertical integration has reversed. The biggest American OEM, General Motors, which used to produce up to seventy percent of its parts internally, is now only thirty percent integrated. OEMs have shed whole divisions, most notably Delphi and Visteon, and have started to buy large sub-assemblies such as consoles, brake assemblies, and even frames from outside suppliers. With the business changing so vastly, have contracts changed as well?

Another major change in the automotive industry is its profitability. American OEMs lose money; this is no secret. Ford and General Motors, two bastions of American industrial power,

5. See id. at 220.
issue debt that is graded as junk. Since the OEMs are limited in their ability to renegotiate with their most burdensome creditors—their current and retired employees—they have turned to their suppliers. The drive to save money by paying suppliers less that began in the mid-1980s has accelerated, and, as these suppliers are pressed, the pressure cascades down the supply chain. This study traces the cascade of the contract terms that suppliers are required to accept.

The automotive supply industry is sometimes described as a pyramid, built in “tiers.” At the top are the OEMs. The paper focuses mostly on the “Big Three” OEMs—General Motors, Ford, and DaimlerChrysler—but it looks also at six foreign OEMs who assemble cars in the U.S. and who are a growing force in the American manufacturing market. Directly below the OEMs are the “tier-1” suppliers—anyone who sells directly to an OEM. These companies usually sell sophisticated assemblies or parts, and most of them specialize in designing and manufacturing automotive-specific products. They purchase their supplies from “tier-2” suppliers, who in turn purchase from “tier-3” suppliers, and so on. Since there are only a few OEMs at the top, but there are roughly 600 to 800 tier-1 suppliers, a pyramid is an inaccurate metaphor. The metaphor is important, as we will explain below. The main issues that need to be governed by the contracts between OEMs and tier-1 suppliers are different than in lower tiers. Some of that difference will be attributed to the fact that there is a much smaller set of potential buyers above tier-1 sellers than there is above sellers in the lower tiers.

This paper is structured as follows. Part I compares the terms and conditions in the purchase orders of the OEMs and highlights important differences in the substance of these

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boilerplate provisions. It argues that these differences cannot be easily reconciled with the prediction that sophisticated parties draft the most efficient boilerplate terms. Part II examines how these forms are drafted, how their terms are negotiated, and how the OEMs guard their terms from erosion. It provides some insight on how “tailoring” occurs and how the internal organization of a party to a deal affects the terms that this party can secure. Part III focuses on the role of economic power. There, we examine how power is harnessed to administer and modify contracts. This analysis revisits the claims made on the basis of the GM/Fisher Body deal, and argues that some of these claims are not valid. We demonstrate the subtle ways in which hold-up and renegotiation are curtailed. Finally, Part IV examines ways in which a less powerful party can nevertheless get favorable contract terms.

I. The Contracts

Supply contracts in the automotive industry are made through competitive bidding. An OEM issues requests for quotations (RFQs) for a particular part or assembly. The supplier whose bid is picked would ordinarily make a significant capital investment in R&D and production assets, and supply this part for the duration of the car model in which the part is assembled, a period which normally lasts four to eight years. The winning bidder, however, does not always get the security of a long-term, fixed-price contract. While some OEMs accord the supplier a long-term sourcing commitment, the actual purchase orders are issued on a short-term basis.\(^{11}\) Shorter contracts give the parties opportunities to renegotiate aspects of the deal like price and quantity estimates; OEMs commonly demand (and receive) price reductions every year.\(^{12}\)


Technically, most of these adjustments are not modifications of the contract, but rather renewals of short-term purchase orders (POs), all entered into under a master long-term agreement.

The contracts we looked at are the boilerplate purchase orders governing the actual supply agreements. While there is some interest in the long-term master agreements, their language is usually brief and subordinates them to the terms of the shorter-duration POs. These forms are drafted by and issue from the OEMs through a process which will be described in Section II. Each OEM has a single form, titled either “Global Terms” or “General Terms,” which is used for procuring all of the manufacturing parts, almost without exception. General Motors, for example, enters into roughly one million procurement contracts every year, at a total amount in excess of $80 billion—all governed by a single contract form containing thirty-one paragraphs, translated into six languages. In terms of economic stakes, this form may be the single most important commercial contractual document ever drafted. In the remainder of this section, we compare the standard forms of the North American OEMs.

Before we started this study, our conjecture was that we would find similar boilerplate language throughout this industry. Influenced by the economic theory of standard form contracts, we expected these contracts between ultra-sophisticated parties to include efficient arrangements. Surely the OEMs have significant bargaining power vis-à-vis their suppliers; but economic theory teaches us that it would be wise to use this power in extracting more favorable bottom line prices, not by extracting inefficient, one-sided legal terms. Moreover, our expectation that the forms would be uniform throughout the industry was influenced by the fact that they are all


issued in a highly repetitive fashion to the same group of tier-1 suppliers—those very large manufacturing companies that supply the main parts and assemblies to the OEMs. These are sophisticated counterparties who read the contracts and assess the costs of the terms. OEMs cannot “sneak in” inefficient terms that would go unnoticed. Further, a uniform format, we expected, would minimize drafting costs: Why draft a new form if your competitor already produced one? More importantly, it would also be consistent with learning externalities: Why start with a fresh form when there is already much experience in interpreting and relying on familiar language in existing forms? Finally, uniform templates would generate network externalities, by making it easier to predict costs (e.g., of warranty terms) in order to compare bids across companies and to price individual terms.15 In sum, based on observations about other industries,16 we expected little variation in the OEMs’ forms.

What we found was a different reality. There is significant variance across the OEM contracts. We examined the boilerplates of nine North American OEMs,17 and recorded the many ways in which they differ. These differences were also confirmed in discussions with representatives of tier-1 suppliers and of the suppliers’ trade association, who emphasized that the differences in the legal terms represent in some cases significant variations in the economic consequences of the deals. This variance, which we describe below, casts doubts on the robustness of a fundamental prediction of the economic theory of contracts, that standard form

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17. The nine OEMs who assemble cars in North America are: General Motors, Ford, DaimlerChrysler, Honda, Toyota, Nissan, Hyundai, VW, and BMW.
contracts in sophisticated transactions are efficient. These contracts, recall, are between companies that have large in-house attorney staffs, who read the forms in their entirety, who have lifetime experience in the auto business, and who look to manage huge stakes with these contracts. If these forms vary in important ways, some of them must include terms that are less efficient—that is, terms that cost the weaker party more than they enrich the strong party.

According to all of our interviewees, the most important issues in the OEM boilerplate contracts are the following: termination rights, warranties and remedies, tooling (the ownership of the production assets), intellectual property rights in technological innovations, and service parts. Consider each of these issues.

**Termination.** In all purchase contracts, OEMs secure the right unilaterally to terminate the agreement.\(^\text{18}\) This right to terminate, which is not available to suppliers, is almost unrestricted. Either for no cause at all, or for reasons stated ambiguously as “competitiveness” of price and quality, the OEMs can, with short notice, terminate the contract. In fact, the cancellation rights are so one-sided that they might render the contracts unenforceable on the ground that they lack consideration or fail to state a quantity term under the statute of frauds.\(^\text{19}\) There is variation

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\(^{18}\) See, e.g., General Motors General Terms and Conditions § 13 (Sept. 2004) (on file with authors); Ford Motor Company Production Purchasing Global Terms and Conditions § 27 (Jan. 2004) (on file with authors); DaimlerChrysler Production Purchasing General Terms and Conditions § 20 (May 2003) (on file with authors).

\(^{19}\) Ford’s contract says: “27.01 Termination. The Buyer may terminate the Purchase Order, in whole or in part, at any time and for any or no reason, upon Written Notice to the Supplier. The Supplier may not terminate at its option.” This term replaced an earlier termination clause that required a thirty-day notice. Similarly, General Motors’ contract gives it the right to cancel the transaction within thirty days if the supplier cannot match the rivals’ lower cost or competitive technology, design, or quality. These provisions come close to rendering the contracts illusory. Still, the requirement of a written notice in Ford’s contract, and of a thirty-day notice in GM’s contract, may constitute the necessary restriction to render these contracts enforceable. See, e.g., *Williston, Law of Contracts*
among OEMs’ forms regarding the payments to which suppliers are entitled upon termination. While all OEMs provide some recovery to suppliers for their squandered investments, some are stingy—they pay only for finished parts, work in progress, and raw materials. Others are more generous: they will pay for a combination of other termination costs, such as suppliers’ obligations to their own subcontractors and investments in capital. None of the OEMs cover suppliers’ unamortized investment in R&D and engineering—a great source of agony for suppliers who expect to cover their fixed costs only after several years of supply. Indeed, as we note below, OEMs recognize the potential unfairness of a sudden termination and are willing to grant ad hoc accommodations that go beyond their legal responsibility.

§ 105, at 418–19 (3d ed. 1957). The termination term may also create a problem under the statute of frauds. Courts that have adjudicated similar provisions in lower tier cases, and one recent OEM/tier-1 case, have held the contracts to be unenforceable. See, e.g., Dedoes Indus., v. Target Steel, No. 254413, 2005 WL 1224700 (Mich. Ct. App. May 24, 2005) (holding that a price quote in which seller promises to supply buyer’s steel requirements for the next three years does not satisfy the quantity provision of the statute of frauds); Gen. Motors Corp. v. Steel Dynamics, No. CR-04-056983-CK (Cir. Ct. Oakland County, Mich. Aug. 4, 2004) (holding that GM’s award letter confirming the purchase of approximately 70,000 metric tons of steel did not satisfy statute of frauds because it contained only an approximate quantity, not a guaranteed purchase).

20. See, e.g., Daimler Chrysler Production Purchasing General Terms and Conditions § 20 (May 2003) (on file with authors); General Motors General Terms and Conditions § 13 (Sept. 2004) (on file with authors).


22. The willingness of parties to go beyond the boilerplate and to grant concessions that are tailored ad hoc to the needs of their counterparts is discussed in Jason S. Johnston, The Return of Bargain: An Economic Theory of Standard Form Contracts and the Negotiation of Business Relationships, 104 Mich. L. Rev. ___ (2006) and in Lucian Bebchuk and Richard A. Posner, One-Sided Contracts in Competitive Consumer Market, 104 Mich. L. Rev. ___ (2006); see also Benjamin Klein, Transaction Cost Determinants of “Unfair” Contractual Arrangements,
It is difficult to identify the exact inefficiency that broad termination rights create, particularly since it is not clear how often these rights are exercised. Still, contracts containing harsh termination terms represent a de-facto transformation of the long-term commitment into a series of short term agreements. In this reality, suppliers anticipate pressures from OEMs to reduce prices even after they have been awarded a contract. This creates a risk of hold-up by OEMs—“reduce your price or be terminated”—that makes relationship-specific investments less valuable.

Warranties and Remedies. Warranty provisions are important legal terms for they determine suppliers’ liability for design defects, intellectual property infringements, and the cost of precautionary recalls. OEMs specify what fraction of the total liability bill would be borne by suppliers, and grant themselves rights to setoff warranty charges against payments owed to suppliers.23 When an OEM finds itself liable for a design problem, there may be a genuine dispute as to whether the problem originates from a defective part for which the supplier is liable, or from faulty integration of the part by the OEM. Anticipating such future disputes, OEMs include standard clauses that grant them self-help power to recover from the supplier. GM’s right to recover 100% of the liability when it unilaterally decides that the parts failed to conform to the warranty, and to setoff the entire charge against the supplier’s account, are among


23. See, e.g., Ford Motor Company Production Purchasing Global Terms and Conditions §§ 11.01, 23.06 (Jan. 2004) (on file with authors) (“Buyer may set off and recoup against the Buyer’s accounts payable to the Supplier any amounts for which the Buyer determines in good faith the Supplier is liable to it. [. . .] the Buyer may do so without notice to the Supplier.” And “at its option, the Buyer may debit the Supplier for up to 50% of the actual recall costs . . . if the Buyer has made a good faith determination that the Supplier is likely to be liable for some portion of the total costs . . . ”).
the toughest. Ford stipulates that the supplier’s share of liability will be negotiated ex post, but allows itself a unilateral setoff, to be charged before such negotiation concludes, of up to 50% of the cost. This setoff is against the amount owed by the supplier or by any of its more liquid affiliates and subsidiaries. Some companies’ terms entitle them to make the liability apportionment without the supplier being heard. Others provide that the parties will negotiate the allocation of liability costs to reflect actual responsibility.24

In practice, these variations in sharing-of-liability clauses reflect true differences in the cost allocations, and, importantly, they enable different systems for monitoring of defects. It appears that OEMs with the most self-serving warranty allocation terms are also ones that take longest to detect and resolve a defect. That is, they are the ones where the total costs of defects are, on average, greater. One of our interviewees quoted the warranty cost per vehicle to be roughly $1000 for an American OEM which uses the harshest warranty allocation terms,25 but only about $250 for a Japanese OEM that applies a more balanced approach.26 Further, he

24. Some of the lower tier contracts we examined include an equally harsh warranty burden on the supplier. For example, some large tier-1 manufacturers put in their own contracts with tier-2s: a warranty burden of 100% on the supplier. See, e.g., Delphi Corp. General Terms and Conditions § 7.3 (Mar. 2004) (on file with authors) (“If any goods are reasonably determined to fail to conform to the warranties set forth in this contract, Seller shall reimburse Buyer for all reasonable losses, costs and damages caused by such nonconforming goods.”) (emphasis added). There is an important difference, however, between the OEMs’ terms and the identical tier-1 terms. OEMs have the power to actually impose almost any share of the liability on their suppliers; tier-1s, in contrast, are more constrained, as they expect their suppliers to fight back.


26. Craig Fitzgerald, Getting Serious About Quality, Auto. Indus., July 2004, at 45. A different source suggests that American OEMs spend on warranty claims between $537 to $628 per vehicle, whereas Japanese
pointed out, the American OEM takes, on average, 180 days from the time of the first indications of a parts defect till it is resolved; the Japanese OEM takes only 40 days.\textsuperscript{27} Of course, Japanese cars may simply be better built than American cars. But other figures suggest that if there is quality gap, it is not as significant as represented in the warranty costs. One way to measure intrinsic quality is the average number of problems per 100 vehicles. Toyota and Honda, for example, reported in 2003 101 problems per 100 vehicles; GM, Chrysler, and Ford reported between 120 to 127 problems per 100 vehicles.\textsuperscript{28} This small quality gap is much smaller than the warranty cost gap, where an American OEM suffers a cost roughly four times as high as that of the Japanese OEM.

These figures are consistent with the prediction that parties who believe that they can shift the cost of liability onto others would do less to reduce this cost. Put differently, in situations in which joint precautions by both supplier and buyer are necessary to prevent liability from mounting, or where suppliers can efficiently cure a defect, it is not surprising that the allocation of greater liability to the supplier reduces the OEM’s need for a quick solution to any quality issue.\textsuperscript{29} What is surprising is that not all contracts are designed to induce more participation of the suppliers in the warranty process, and thus fail to achieve efficiency.\textsuperscript{30}


\textsuperscript{27} Interview with Matthew Paroly, Delphi World Headquarters, Troy, MI (July 28, 2005).

\textsuperscript{28} Fitzgerald, supra note 26.

\textsuperscript{29} It is interesting to compare the OEM’s warranty terms with those appearing in the boilerplate purchase contract in Germany (“VDA”), which applies to all procurement contracts in all tiers. The VDA’s warranty and remedies provisions give the supplier a greater role in assessing any damage claim, participating in repairs and replacements, and being consulted before any action is taken by the buyer. The VDA’s terms also limit the duration of warranties, reduce their scope when the supplier is not negligent, and allow a host of opportunities to cure. See
Service Parts. The arrangements governing service parts can be a source of important profit for suppliers, as well as a significant burden. Service parts are sold in the retail market at a large premium. If the OEM alone may sell these parts, the supplier is deprived of a share of potential profits. Moreover, if the supplier is obligated to supply the OEM’s requirements for these parts for years after the model production ends (when it is expected that volume efficiency, materials, and skilled personnel will no longer be available), the burden on the supplier can be large.

Almost all OEMs require the supplier to agree to supply service parts for a period of ten to fifteen years after current-model production ends. Some OEMs, however, share the surplus that this production will yield. Honda and Toyota, for example, stipulate that the service part prices will be negotiated by the parties when the time comes; that translates to a profit-sharing deal. Others (e.g., GM) require prices to remain at their low, production-phase price for an initial period, say three years, after which a higher negotiated price would be agreed upon. Most


30. Similarly, OEMs draft broad indemnity terms, entitling them to reimbursements of legal defense expenses of claims (such as products liability) for which the supplier will ultimately be responsible. Suppliers are nervous about their inability to control or influence the litigation of such claims, and at the same time their responsibility for the outcome of the litigation and its cost.

31. See, e.g., Toyota Motors Manufacturing North America, Inc. Terms and Conditions § 4.2(d) (Oct. 1998) (on file with authors) (“[Toyota] will establish, after good faith negotiation with Supplier, a price for Service Parts.”).

32. General Motors General Terms and Conditions § 20 (Sept. 2004) (on file with authors) (“During the 15 year period after Buyer completes current model purchases, Seller will sell goods to Buyer to fulfill Buyer’s past model service and replacement parts requirements . . . . The prices during the first 3 years of this period shall be those in effect at the conclusion of current model purchases.”).
harsh are terms that require suppliers to commit to fifteen years of post-production supply and to refrain from raising prices above the production-phase prices. These provisions were described by a tier-1 supplier as “cyanide pills”—leaving the supplier with the high cost of maintaining a production line but without the ability to recoup this expense through high volume of sales.

The service parts provisions are not only a matter of division of surplus; they also have efficiency implications. When a car model is discontinued by an OEM, the production volume of parts obviously decline substantially. Maintaining the production line and the skilled labor to produce the parts will be expensive. Pricing the parts based on a cost structure prevailing on much larger volume is a poor way to reflect the true wholesale economic price and it may lead to sub-optimal purchase decisions. For example, supplier representatives complained about the OEMs’ reluctance to hold minor inventories of parts and their tendency to make frequent small-volume purchases; that requires the suppliers to “turn on the machines” repeatedly to produce small, highly inefficient, quantities of parts. Schemes that accord the suppliers a greater share of the surplus might create incentives to reduce these inefficiencies.

**Intellectual Property.** The production of assembly parts often requires the development and application of new technologies that have high value as intellectual property beyond that particular application. Much of this technology passes over to the OEMs in the course of designing the parts and assembling them into the vehicles. The contracts grant the OEMs legal rights in these valuable information assets, not only to use them in production, but also to control other uses. Suppliers—particularly those for whom the technology is the main asset—care greatly about this type of appropriation. Here, too, there is surprising variation in the scope of rights secured by different OEMs. The most extreme position accords the OEMs unlimited rights to all intellectual property of the supplier that is disclosed in the course of trade, except for

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patents registered prior to the supply. Suppliers also waive their trade secret protection, and assign to the OEMs all copyrightable works created under the contract without any royalty rights. These rights are often for unlimited duration, extending beyond the termination of the contract. The more restrained position of other OEMs limits the OEM’s right to sublicense intellectual property and guarantees that the confidential information of the supplier will not be disclosed.

As will be noted below, some suppliers refuse to grant such rights in their intellectual property. Companies whose main business is information technology (IT), such as the makers of software, are stubborn about this, and OEMs have learned to expect that they will not be able to dictate their terms to such suppliers. Indeed, some OEMs have specially drafted IT contracts that accommodate the expectations of their IT suppliers for more balanced terms. Still, most production parts are supplied by manufacturing companies whose main business is not IT, and these suppliers were not able to protect their investment in innovative technology as well as the IT suppliers do.

Since OEMs do not tailor their intellectual property terms specifically for each supplier, the boilerplate can be a significant source of inefficiency. Suppliers that have the ability to develop new technologies, but who cannot enjoy the full value of the technology they develop once appropriated by the OEM, will have a weaker incentive to make investments. We can only speculate that OEMs that insist on harsh IP terms end up with cars that incorporate fewer technological advances. Some of the suppliers’ representatives suggested that this is the case.

34. See, e.g., Ford Motor Co. Production Purchasing Global Terms and Conditions §§ 16, 20.01 (Jan. 2004) (on file with authors); Hyundai Motor Manufacturing General Terms and Conditions § 19 (on file with authors).

Tooling. The machinery and production assets used in manufacturing requires costly investments. When an OEM pays for these investments, the contract establishes that the OEM owns the tooling and permits the supplier to use the tooling to serve this OEM. The OEM contracts forbid commingling—the use of the tools for assembly of parts directed to other OEMs. Thus, on termination, OEMs can haul away the tooling, and even charge the supplier with some of the costs of shipping.

Representatives of tier-1 suppliers voiced many complaints against the tooling provisions. A repeated complaint was that OEMs refused to allow the use of production assets to serve multiple clients. The strict ownership terms and the restriction against commingling and co-serving can lead to wasteful duplicity of investments, and, of course, to inefficiency. Moreover, this strict control of the machines makes the OEMs’ potential threat to terminate a contract (and haul away the production line) more credible. The fear that relationship-specific investments by the suppliers would be squandered increases.

What can we learn from these examples of fundamental variations in the contract terms? We present this variation in the contracts as a puzzle; it casts some doubt over the efficient-terms hypothesis. While each OEM has its own boilerplate, there is surprisingly little borrowing from each other. Each OEM knows its competitors’ forms well, but rarely copies any provision from them. In this sense, boilerplate in this industry has not risen to the level of “quasi-statute” that it achieved in other industries.\textsuperscript{36} And while factors relating to corporate “culture” can explain the persistence of this variation and the lack of convergence, it is hard to find an efficiency explanation.

Of course, contract terms do not always reflect actual practices. The actual behavior under the contract may not vary as much as the variation in contract language. There is some indication that OEMs may not enforce inefficient one-sided terms. For example, in a section titled “Supplier Frequently Asked Questions” appended to its Global Terms and Conditions, Ford explains that one of the most troubling new provisions in this form, the setoff term, was never used literally and only infrequently used at all. So it is possible that the inefficiency of some terms is only on paper and that in practice the OEMs apply systematic “tailored forgiveness” of some of the harsher provisions. Still, it is hard to reconcile this understanding with the angry opposition that suppliers displayed towards Ford’s recent redraft and the collective effort that suppliers invested through their association to change some of the terms.

We believe that the variations in the boilerplate terms do, in some cases, reflect inefficiency. True, efficiency does not always require homogeneity. In fact, oligopolistic competition may often generate product differentiation. But OEMs’ contracts are not “products” that suppliers pick along a spatial dimension. The variation in terms does not provide any advantage of improved “matching” or increased markets. Nor does the “menu” of contracts available in the industry force suppliers to “self-select” (as in the case were only high-quality suppliers can afford to accept a harsh warranty term). The story of the boilerplate is by-and-large an account of economic power, perhaps gone astray.

We do not claim that the boilerplate terms are the cause of the inefficiency. It is more plausible that many of these provisions, as we will argue below, are tailored to leverage the OEMs’ economic and bargaining power in the negotiation stage into advantages at the

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38. See Johnston, supra note 22.
performance stage, in which the parties are locked in a classic bilateral monopoly. The legal terms in the forms are the tail that is wagged by the business dog, not vice versa. It is clear that the American OEMs’ record-breaking losses have driven them to capture any opportunity to shift cost to suppliers. But if indeed they do so in a way that reduces the overall surplus of the contracts, what we are witnessing is a classic agency problem: agents find ways to save costs in the domain that they control, but often neglect to consider the effect of these cost-saving measures on activities that they do not control. If the pressure on suppliers is strong enough, they will accept harsh terms and low prices. And if there are inefficient consequences, they may eventually be counted on the scorecard of a different internal division. The lawyers and purchasing officials who write and negotiate the supply contracts invest much effort in tightening up the legal terms and in leveraging the OEMs’ bargaining power in securing adherence to these terms. It is possible that this exercise of their power will degrade suppliers’ cooperation and performance in ways that become clear only later.

II. Drafting of Boilerplate

One of the striking features of automotive supply contracts between OEMs and their tier-1 suppliers is their simplicity. Each OEM has a single form, used for procuring all of the manufacturing parts. General Motors, we mentioned, enters into roughly one million procurement contracts every year with suppliers all over the world. With very little exception, these deals are governed by GM’s “Global Terms”—terms that are never challenged, neither at the negotiation stage (e.g., by battle of the forms) nor in litigation.39

39. Only three litigated cases between OEMs and their suppliers were found. In the most recent, GM was granted summary judgment. Nartron Corp. v. Gen. Motors Corp., No. 232085, 2003 WL 1985261, at *9 (Mich. Ct. App. April 29, 2003). Another arose because of a fight over an indemnification provision: A third party was hurt while installing a piece of equipment at GM’s plant and the equipment manufacturer tried (successfully) to get out of...
Another notable feature of these boilerplate forms is their durability. DaimlerChrysler, for example, is still using the form that was drafted in 1985; GM’s form goes back to 1986. Ford’s old form had been in place since the 1950s, until it was recently revised in quite a dramatic fashion in 2004. While minor revisions are patched onto these forms occasionally, addressing “new” problems, the main terms and conditions remain unchanged over a long period of time. This rigidity of the forms is not so much a feature of interpretive or learning externality (that is, the adherence to something familiar with a predictable meaning), but rather a reflection of an OEM’s belief that the terms in its form work well and serve its profit goals.

These boilerplate contracts are simple. The terms are written in plain English. Although most of the tier-1 suppliers are large corporations with sophisticated legal counsel who read every word of the OEM contracts, and although each provision in these contracts can have significant effects on the division of the surplus, the clauses are drafted in a much simpler and shorter form than ordinary consumer contracts. For example, GM’s warranty provision is three sentences long. The main part says that “Seller warrants/guarantees that the goods covered by this contract will conform to the specification, drawing, samples, or description furnished to or by Buyer, and will be merchantable, of good material and workmanship and free of defect.” The warranty paragraph adds that the goods “will be fit and sufficient for the particular purposes

40. An example for the type of revisions we observed is GM’s employment conditions clause, requiring the supplier to refrain from engaging in “corrupt business practices” such as utilizing child and prisoner labor. See General Motors General Terms and Conditions, Revised Draft § 25 (Sept. 2004) (on file with authors).

intended by the Buyer” and that the duration of the warranty will match the warranty provided by
the Buyer to its customers.42 This paragraph is strikingly different than warranty terms in, say,
consumer contracts, which are usually lengthy, cumbersome, and legalistic. Perhaps this
difference owes to the greater government regulation of consumer warranties; perhaps it has to
do with the identity of the drafter—a buyer or seller. A seller-drafter needs to avoid the sweeping
warranties of the UCC, whereas buyers like the OEMs need only to strengthen the pro-buyer
UCC warranties. Note, also, that the difference between warranty terms in the auto production
context and other, consumer-related, contracts cannot be explained by factors like trade usages
and course of dealings. The supplier’s warranty to the OEM is governed solely by the express
warranty term.

Since boilerplate terms have to deal with many different types of situations and address
many possible contingencies, drafting the standard form from scratch would seem a daunting
task. It is often perceived, therefore, that the drafting of boilerplate language in mass contracts
involves not much more than a cut-and-paste task, whereby the “drafter” identifies similar forms
used by other organizations that do similar business and—on the premise that “if they work for
others they’ll also work for me”—borrows their language.43 Interestingly, however, the
American OEM supply contracts were not drafted in this fashion. Each OEM contract was

42. Id. Ford’s Purchase Order form is an exception, in that it is a long contract stretching over thirty-
one pages. This form, which was launched in 2004 following a significant overhaul, also contains simple language,
but it covers many more contingencies than other OEM contracts. Still, Ford’s warranty term is almost identical to
GM’s, and equally short.

43. There are many theoretical accounts of this “stickiness” of boilerplate. See, e.g., Kahan &
Klausner, supra note 15, at 761–64; Robert B. Ahdieh, Between Mandate and Market: Contract Transition in the
Shadow of the International Order, 53 Emory L.J. 691, 713-21 (2004); Choi & Gulati, supra note 36, at 61; Omri
drafted by in-house attorneys in a concentrated effort over a short period of time, with very little revision since.44 These attorneys are familiar with the forms utilized by their competitors, but seldom copy or borrow language from these sources. Unlike the drafting work done by outside law firms, the in-house drafting attorneys have a task that is ongoing. While revisions in the forms are rare, the drafting attorneys remain with the organization for a long period of time, carrying with them the “institutional memory” concerning the drafter’s intent and the rationales for the chosen language. Memory, of course, is a necessary trait for parties who enter long-term relationships or into portfolios of deals, where violations are addressed (and deterred) by informal sanctions within the relationship or by refusals to deal.

Given the simplicity of the forms and the ambitious goal to apply them to each and every manufacturing parts contract, how do OEMs overcome the different needs and objections of their tier-1 suppliers? Part of the answer, of course, concerns the performance and enforcement strategies, which we will discuss later. There, we will show, some patterns of flexibility have emerged. In the contract formation stage, however, we observe very little flexibility. Either take our contract as it is, or leave. This rigidity is maintained in several ways, as explained below.

**No Battles of Forms.** Battles of forms, where the seller responds to the OEM’s purchase order with a confirmation that contains different boilerplate terms, have the standard result that conflicting terms on both sides drop out. The battle of the forms might, of course, enable a supplier to substitute their own terms for some of the OEM’s more onerous terms. One might predict that the battle of the forms would be common in automotive contracting.

As far as we were able to determine, there is no battle-of-the-forms maneuvering against OEMs. We could not find reference to a single legal dispute on battle of the forms with an OEM, and none of the OEM or tier-1 representatives were able to quote an example. Battles-of-the-forms disputes are avoided, not by forcing the supplier to acquiesce ex post to the OEM’s terms. Rather, they are prevented ex ante by the OEMs insisting at the time that bids are invited that, as a condition for bidding, the supplier must agree to be bound by the boilerplate terms of the OEM’s form. Since the bidding occurs before the contract has been “issued” and at the time when the supplier’s position is the weakest—at the time when its refusal to commit to the OEM’s boilerplate could cost it the opportunity to bid—it is not surprising that most tier-1 suppliers agree not to engage in the battle of the forms and instead sign or otherwise agree to a form that binds them to the OEM terms.

Suppliers who do attempt to sneak in their boilerplate terms—either on the invoices or acknowledgments, or through what they sometimes call “letters of interpretation” or side-memos—are generally doomed to fail. OEM attorneys instruct their purchasing managers to abort any incipient attempt to engage in the battle of the forms by affirmatively rejecting any of the sellers’ forms or by getting the seller’s signature on the buyer’s form. The same is true for

45. We suspect, but we could not confirm, that the battle of the forms may occur as one goes deeper into the supply chain down to tier-3 and tier-4 suppliers.

46. But see supra note 32.

47. For example, suppliers who objected to Ford’s new Global Terms and Conditions “were threatened with new business hold and award of pending business to competitors.” See Urgent Ford Global Terms and Conditions: Status Report Web Conference, OESA (Apr. 2, 2004). That survey shows that thirty-one out of forty-six Ford suppliers were warned that they would experience business reduction if they refused to accept Ford’s terms.
other sophisticated, high-tier buyers when dealing with the forms of their own downstream suppliers.48

**No Authority to Dicker.** Another way in which OEMs prevent deviations from their own terms is by restricting the authority of agents within the organization to approve different or additional terms. Suppliers in the chain periodically try to negotiate or change the terms of the boilerplate imposed by the OEMs or other buyers. Both OEM and supplier representatives agree that changes in the boilerplate resulting from negotiations with an individual seller are as rare as hens’ teeth. Ford, for example, has erected a clever and conscious barrier to such negotiation. At that company, only the global vice president for purchasing has the authority to change the terms on the form contract. Similarly, in another OEM we observed a procedure in which only a senior purchasing committee of executives can approve a variation from the standard terms. By taking the authority away from the lower level purchasing agents and their executives, and granting it only to a person who presumably does not answer every phone call, these companies have raised a significant barrier to negotiation. Thus, no revision of a term can occur unless the person proposing it can talk to someone in authority or can persuade a lower level person to do so. And what first level purchasing manager wishes to besmirch his in-firm reputation as a tough negotiator and impair his chances for advancement by proposing to the big boss that the

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48. The finding that battles of the forms almost never occur is based on many conversations with attorneys in the industry. It may well be, though, that the picture portrayed by attorneys is not precise. Purchasing agents and engineering officers may have a particular interest in the deal—say because of the attractive price or the unique technology offered by the supplier—which would lead them to care little whether some “legal” terms are contested in a boilerplate letter sent by the supplier. The attorneys’ score card, on the other hand, depends on their success in blocking ex post disputes and securing the most favorable boilerplate terms. It is perhaps this desire to boast and to display a successful legal record that distorts the picture we report.
company make concessions to a tier-1 supplier? In fact, this barrier is recognized by suppliers as credible and intimidating, discouraging them from demanding that some terms be negotiated.

Furthermore, any variation in the legal terms would need to be drafted by a staff attorney. The legal offices of the OEMs simply do not have the resources to oversee frequent changes in the thousands of contracts entered into daily. This lack of legal capacity is another internal organizational hurdle, known to suppliers and deemed credible by them, that blocks any process of dickering over the legal terms.

Equality of Treatment. Another factor that limits the incidence of variation from the boilerplate terms is the strong formal commitment of OEMs to treat all their suppliers equally. Of course, transactions with suppliers vary significantly with respect to the goods purchased, prices, volume, and the like. But all suppliers—from the mega corporations who produce car frames to the sellers of nuts and bolts—must take the same legal terms: payment provisions, termination rights, warranties and remedies, and the like. OEMs believe that the fact that these terms are presented as non-negotiable and that variations are not approved provides their suppliers with assurance that there is horizontal equity, that everyone is treated the same. In fact, this equity factor is a reason why one of the OEMs recently revised its entire set of boilerplate provisions. It clarified to its suppliers that any concession negotiated by them in previous contracts would, of course, be honored for the duration of that contract (usually one year), but thereafter all terms would revert to the new set of “Global Terms and Conditions,” and the old concessions would expire unless affirmatively approved by the vice president.49 OEMs believe that suppliers recognize that more is at stake for the OEM than the individual concession. Their implicit position—“if we give one of you an accommodation, we’ll have to give it to others”—works

strategically to block any accommodations, in the same way that most-favored-nation clauses bolster the commitment to avoid price discounts.50

**Open-Ended Provisions.** The automotive industry is the typical example for a market in which contractual arrangements are long-term. This is particularly true of OEM/tier-1 relationships, where there are specific agreements to procure parts as long as the car model is produced, normally four to eight years. But relationships also extend beyond a single model, to encompass many such car-model contracts, and to cover the many years of supply of service parts. Given the difficulty of anticipating many factors that may become relevant in the course of performing the agreements, it is commonly noted that contracts signed up front must exhibit flexibility and must leave room for governance by ad hoc adjustments, agreements to agree, and informal norms. Indeed, the OEM boilerplate forms, although “tight” in many respects, contain many open-ended provisions that allow the parties to determine, in due time and if the contingency arises, matters of significant value. These open-ended clauses include price adjustments for changes in design; allocation of liability regarding the cost of recalls and other failures of components; indemnification of litigation costs in defending against injury claims by car owners and infringement of intellectual property claims; and more. These clauses leave it to the parties to “attempt in good faith to reach agreement” or to “negotiate diligently” the precise ex post term. In this way, up front dickering is avoided, and suppliers are willing to accept the contract although none of their needs are directly addressed.

Interestingly, OEMs use such open-ended provisions to address some of the issues that would otherwise be most troubling for suppliers. When Ford recently redrafted its entire form, suppliers were invited to voice their concerns and reactions to the proposed draft. While these meetings were not an open invitation to negotiate the new terms, they did represent the closest

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thing to negotiations over boilerplate, whereby uniform objections by suppliers did lead to some—albeit minor—changes in the draft. Specifically, suppliers were disgruntled over terms that allowed OEMs to impose costly changes in design, terms that permit OEMs to setoff any cost incurred in servicing a recall or a warranty against the account of the supplier of the allegedly defective part, and terms that allocate a fixed share of the liability to the suppliers. Not surprisingly, it is with respect to these issues that the OEM elected to implement open-ended terms, postponing the dickering of the actual resolution of individual cases, if the issues arise, to the post-performance stage.

The Dissemination of Boilerplate Terms Across Tiers. OEM contracts with their tier-1 suppliers affect the contracts entered into in lower tiers. Tier-1 suppliers, being strapped to the onerous OEM terms, turn around and offer the same terms to their own tier-2 suppliers. Of course, they may have less bargaining power to mandate their own terms, but at least the very large tier-1 companies—the twenty-five or so mega-corporations like Delphi and Visteon that supply a large portfolio of parts—ordinarily have enough leverage to require suppliers to use their terms. Representatives of tier-1 suppliers admitted to us that they would have much preferred to use a more balanced contract both upstream and downstream (which again suggests that the OEMs terms are inefficient—the tier-1 companies are shielded from the terms’ distributive effect, and can be averse to them only because of the waste that they create). But given the OEM terms that are imposed on them in their capacity as sellers, they cannot afford to use other terms in their capacity as buyers. A striking metaphor that a tier-1 representative used is “contractual DNA.” Looking at contracts down the supply chain, one can identify the OEM for which a given supply is eventually intended by the terms of the lower tier contracts. With each tier buyer copying some of the terms it had to accept as a supplier, the OEM’s terms are “genetically” replicated down the chain.
The special position of tier-1 suppliers explains their ambivalence towards the otherwise concerted effort of suppliers in the automotive industry to advocate for “fairer” contracts. Some of this effort is coordinated by the suppliers’ association, OESA. One of the projects of this association was the drafting of the Model General Terms and Conditions, which is a self-proclaimed “more balanced approach to buyer-seller relations” with the goal of “increas[ing] cooperation, communication, and trust between buyers and sellers.”

Tier-1 representatives have generally been less than enthusiastic, however, in supporting this initiative. Their concern is that if such an initiative would succeed and the use of the model terms would become a standard request of suppliers, it would harm their position vis-à-vis their lower tier suppliers, without helping them much vis-à-vis the OEMs. If a tier-1 supplier has to sign a fixed-price contract with an OEM for five years, he needs a contract with a tier-2 supplier that extends for the same period of time to enable him to maintain the fixed price.

III. Economic Power

Although courts and lawyers sometimes talk about form contracts as non-negotiable and subject to no limits, we know that is not true. Some drafters pull back from the limit of their economic power, some decline to exercise the rights that their contract gives, some contracts are


52. In Germany an organization called the Verband der Automobilindustrie (VDA) negotiates with the OEMs on behalf of the suppliers. The OEM forms used in Germany are the product of this collective bargaining. If initiatives in the United States like OESA's are to succeed the way they succeed in Germany, they have to start with the OEMs; the terms will then trickle down the supply tiers. Because the OEMs do not appear willing to enter into such a bargain and because the tier-1 suppliers cannot afford to enter into a bargain with the OEMs entering into one first, we do not foresee a collective agreement in the United States among the suppliers and the OEMs of the kind that apparently exists in Germany.
invalidated by courts, and others are constrained by legislation, regulation, or by threat of litigation or legislation. In this part we examine how market power shapes the deals and the contracts, with an eye to the specific provisions in the OEMs’ purchase orders that are aimed at securing their economic power.

At the outset of this study, we hypothesized that OEMs’ bargaining power would be strongest at the bidding and contract formation stage and weakest once relationship-specific investments were made and performance began. We imagined that once the OEMs became dependent on a supplier, they would face instances of hold-up, where the supplier demanded better price and other terms. The standard hold-up account seems to fit this situation perfectly— in fact, the hold-up theory was developed in the context of the GM/Fisher Body saga, which was an OEM/tier-1 relation. This hypothesis turned out to be surprisingly misguided, as we will explain below. We also hypothesized that economic power would echo down the supply tiers, with tier-1 suppliers being dominated by OEMs but exercising their own dominance over tier-2 suppliers. This too turned out to be only partially true. Some powerful companies, such as Exxon and General Electric, are in the tier-2 levels and are able to wield power because of their size and product mix. Other tier-2 suppliers have power because of their wide base of clients, extending beyond the automotive industry, and can afford to pass on automotive contracts. Yet other low tier suppliers have power that is supported by the uniqueness of their technology. Finally, the financial integrity of a firm turned out to affect its economic power in ways that are more subtle than we expected.

As we mentioned above, the OEM representatives freely admitted that their forms included most terms that the drafters thought necessary or helpful to protect their clients’ interests, and that they did not feel obliged to add similar terms that their sellers might have liked. For example all of the OEM contracts (and presumably most between suppliers) give the
buyer the right to terminate the contract without cause in certain circumstances and to cancel it for cause in other cases. The sellers get no corresponding rights of termination or cancellation. This power, along with the absence of a quantity commitment on the part of the OEM, makes the contract so one-sided that it runs the risk of being unenforceable. European suppliers have complained that such one-sided terms would be unenforceable under various European doctrines of contractual fairness, competition law (e.g., the term prohibiting suppliers from selling parts in the aftermarket), and corporate governance (the supplier’s corporate executive may not have the internal authority to sign such a poor contract without shareholder authorization).

How far can OEMs go in drafting one-sided terms? Surely, if suppliers have choices, they can bargain away these clauses. But for automotive suppliers who sell a large chunk of their output to OEMs, in a market in which suppliers suffer severe over-capacity, there does not appear to be much choice. A CEO of one of Ford’s suppliers was quoted in the Automotive News to say that Ford’s terms are effective in “closing every possible loophole. We’re responsible for acts of God now.” At the same time, the collective disgruntlement that echoed in the suppliers’ corps did not change any of the terms. Another supplier admitted that “[i]f you don’t have a point of leverage, you don’t have much ability to fight back.” Other attempts by suppliers to collectively draft a more favorable form to the seller, which were made under the umbrellas of

53. We are aware of only one case in which a supplier rejected the contract and argued lack of mutuality. Gen. Motors Corp. v. Steel Dynamics, No. CR-04-056983-CK (Cir. Ct. Oakland County, Mich. 2004).
56. Id. (quoting a supplier executive).
their trade association (OESA),\textsuperscript{57} have not, as far as we can tell, influenced even a single term of the OEMs’ contract forms.

\textit{A. Lower Tier Contracts}

When we move down from OEM contracts to lower tiers in the supply chain, bargaining power is no longer one-sided. Tier-1 suppliers cannot exert the same influence on tier-2s as OEMs exerted against them. For one, tier-1 suppliers do not offer the same magnitude and rarity of deals as OEMs do. If an OEM turns down a bid by a manufacturer of passenger seats, a big chunk of the business cannot be salvaged. On the other hand, if the same manufacturer of seats breaks the negotiations with the supplier of leather, that supplier would have many other business opportunities. Moreover, under contracts with OEMs, tier-1 suppliers occasionally are bound to use specific tier-2 suppliers. Similarly, once awarded a big contract by the OEMs, tier-1s have less flexibility to turn down suppliers. Time is of the essence and the tier-1 supplier must secure its own sources of supply, exposing it to potential hold-up by a tier-2 supplier who is particularly well-positioned to supply the goods in time.

Still, we find that tier-1 suppliers have some success overcoming these weaknesses and imposing their own terms on their suppliers. Some tier-1 self-drafted contracts include terms that their own attorneys admit are more onerous than the OEM terms. For example, the tier-1 contract we saw provided that the tier-2 supplier must indemnify the buyer for 100\% of the liability that the buyer bears vis-à-vis the OEM. That is, while OEM contracts either leave the issue of the division of liability for costly recalls and other defects open or impose a 50\%-unless-otherwise-agreed-upon split, the tier-1 contract imposed a 100\% liability on the supplier.\textsuperscript{58} The reason, it was explained to us, is that OEMs have the ex post power, once a recall occurs, to dictate the

\textsuperscript{57.} OESA, \textit{supra} note 11.

\textsuperscript{58.} See Delphi Corp. General Terms and Conditions, \textit{supra} note 24.
supplier’s share, and there is not much a disgruntled supplier can do other than plead for a fair allocation. On the other hand, tier-2 suppliers can fight back and in some events litigate or seek arbitration to settle these issues. Thus, to counter the greater ex post power of tier-2s, that contract was written with a more onerous term.

Moreover, when terms are disputed by their suppliers at the negotiation stage, tier-1 companies resort to what can be labeled a “golden rule.” Since pro-buyer boilerplate terms were imposed on the tier-1 by the OEMs when the tier-1s played the role of a seller, it is only fair that the tier-1 company would use symmetric terms in their roles as buyers. The argument made by tier-1s, that they cannot afford to give their sellers better terms because they cannot turn around and negotiate similar concessions as sellers to the OEMs, is often successful. It is this mechanism that causes the OEM terms to be replicated downstream.

B. Sellers’ Power Due to Switching Costs

An important factor that appeared to influence the contracts among the OEMs and suppliers was the OEMs’ significant switching costs. All of the OEM representatives, while recognizing that they have much of the bargaining power at the bidding stage, acknowledged that the pendulum shifts and suppliers may have some power in the course of carrying out a long-term contract. Many current contracts are for intricate sub-assemblies that will be installed wholesale into a finished automobile. For example an OEM might buy the entire heating and cooling system from a supplier, and the supplier might be the principal designer of the system. Since any such system must integrate with the car’s electrical and other systems and must conform to the physical location that is set aside for it in the completed automobile, the “part” may be unique. It is this uniqueness that accords the supplier the power.

Put differently, there are high switching costs in auto manufacturing. Switching costs are high because of the significant technological investments that other suppliers would have to
expend to be able to fill the required order. For example, a tier-1 supplier may make all of the frames of a high-volume vehicle. That supplier built an assembly line to manufacture the frames and had considerable difficulty meeting the OEM’s technological requirements. These same complexities of building and operating an entire assembly line would confront any new supplier if the OEM fired its current supplier. Such difficulties cannot be overcome in a short period of time.  

Switching costs are also high because of safety problems. If the supplier’s work relates to the brakes, engine operation, passenger restraints or the car’s suspension, defects may pose safety risks and may be an integral part of the OEM’s satisfaction of governmental safety regulations. If the replacement of one supplier’s part with another’s would require additional safety tests to comply with governmental regulations, one can be sure that any change of suppliers would be costly and time consuming. Moreover, even without having to comply with safety regulations, switching costs may be high because of the need to integrate the component with other parts and to test its performance before assembling it into the vehicle. It is for these reasons that an OEM usually relies upon the “sole-source” supply method, under which it purchases its requirements of parts or raw materials from one supplier. Using more than one supplier—either by switching over time, or contemporaneously—would significantly increase the testing and tooling costs, lead to inconsistent quality, and undermine economies of scale.

If an OEM who abandons a supplier would suffer prohibitive costs in finding and qualifying a replacement, it may be conjectured that the original supplier has some economic

power over the OEM for the contracted goods or services for some period—perhaps even to the end of the model run of the vehicle in which the part or assembly is installed. This power, we should expect, would be at its height shortly after production commences when the supplier looks forward to five years of work, and when the competing bidders have turned to other things. In fact, this conjecture—that a tier-1 supplier can exert hold-up power against an OEM after production begins—is widely recognized as the benchmark example in economic theory for the general problem of contractual hold-up. The standard account of the hold-up problem was developed and generically illustrated in the context of the very same OEM/tier-1 contracts that we explored. It suggests that in the 1920s Fisher Body (a tier-1 supplier of automotive bodies) had a ten-year requirements contract with General Motors. When GM’s requirements increased due to the greater demand for closed-body cars, Fisher Body enjoyed an “intolerable” position to hold up General Motors and to refuse to make adjustments that were overall efficient, and was therefore acquired and vertically integrated into GM.60 It is not clear how much evidence substantiates the GM/Fisher Body hold-up story,61 and yet it seems plausible that in light of the

60. See Klein et al., supra note 1; Benjamin Klein, Vertical Integration as Organizational Ownership: The Fisher Body – General Motors Relationship Revisited, 4 J.L. Econ. & Org. 199 (1988). The Klein account of the Fisher Body—GM merger and its illustrative role for the theory of the firm has been widely embraced. See, e.g., Dennis W. Carlton and Jeffrey M. Perloff, Modern Industrial Organization 13 (2d ed. 1994).

high switching costs, OEMs would indeed be vulnerable to rent-extraction. As one leading economist explains:

Why did GM and Fisher Body not simply write a better contract? Arguably, GM recognized that, however good a contract it wrote with Fisher Body, [...] contingencies might occur that no contract could allow for. GM wanted to be sure that next time around it would be in a stronger bargaining position; in particular, it would be able to insist on extra supplies, without having to pay a great deal for them.  

Our own findings suggest that, at least in the automotive business, this bargaining position/hold-up account is misguided. For one, the contracts are pretty good at dealing with this problem, as we will show below. But even without looking into the contractual language, this account ignores the fact that each individual transaction is only part of a larger portfolio of business, both concurrently and into the future. Even for unique goods, the power of the supplier to hold its buyer up is effectively limited. If the seller uses its power to engage in explicit hold-up (e.g. “Give me an increase in price or I won’t ship”) he knows he will lose in the long run. One OEM representative emphasized that the buyers “have long memories” and assured us that a successful threat by a seller would surely count against it in the award of new contracts. Even more threatening, the representative told us, is that a major disruption at one OEM is likely to become known to the others and to be considered by other OEMs when bids are being evaluated. Representatives of suppliers concurred with this skeptical view. If a supplier puts a gun to the

head of the OEM, it would be “suicide,” they claim; the short-term benefit from extracting some concession will be more than offset by the long-term reputation sanction.

The myth that suppliers can engage in hold-up overlooks a very basic fact. Suppliers trying to hold up OEMs must threaten to halt production of a part that is necessary to keep the assembly line working. Such a threat, if carried out, would lead to enormous losses, constituting an entire melt down in the industry. The tier-1 supplier who commits such a hold-up would therefore be subjected to potentially bankrupting damages, some of which can be setoff by the OEM against the supplier’s account as a matter of self-help. Moreover, the OEM would likely be able to get injunctive relief, thus barring such a threat from being carried out in the first place. In other words, the hold-up account assumes lethargic contractual obligation and legal enforcement, which is probably far from reality.

Moreover, in his rebuttal of the Fisher Body myth, Ronald Coase speculated that problems of supplier hold-up can be addressed by OEMs contractually. We have seen some evidence for such contractual arrangements. First, OEMs have almost unconstrained authority to terminate contracts. That is, if anyone has the contractual power to threaten to walk away, it is the OEM, not the supplier. True, they may not want to terminate a contract for supply of unique parts, but they can threaten to terminate other contracts with this same supplier, to “phase out” its business. Second, OEMs maintain significant property rights in “tooling,” namely in the machines and production assets at the suppliers’ plants, and they can haul these assets away once

64. See Coase supra note 61.
the contract is terminated, often with only stingy compensation for suppliers’ sunk investment.\textsuperscript{65} Thus, a supplier is in effect posting a bond against hold-up; their investment will be amortized in the course of production, but only if they stick around for the long haul.\textsuperscript{66} Third, OEMs reserve for themselves, in other boilerplate terms, the right to control the very profitable market for service parts for years, sometimes decades, into the future, and to potentially share this profit with suppliers. Suppliers that hold up the OEM in the short run will lose in a big way in the division of the aftermarket surplus. Finally, buyers in this industry do enjoy some success in securing court injunctions against breach,\textsuperscript{67} and can thus fend off suppliers who are holding up in order to renegotiate existing terms.

In his rebuttal of the GM-Fisher Body myth, Coase then is correct in asserting that contractual provisions can protect OEMs from hold-up.\textsuperscript{68} But a more important aspect, we believe, and one that is also recognized by Coase, is that the “concern for their reputation would

\begin{itemize}
  \item \textsuperscript{65} See also Miwa and Ramseyer, supra note 59, at 2642; Baird, supra note 61, at 26 (noting that the GM/Fisher hold-up account is not plausible because GM could have retained ownership of dies, which it would be able to retrieve in case Fisher engaged in hold-up).
  \item \textsuperscript{66} This ownership-of-tooling mechanism may appear to conform in part to the Klein-Crawford-Alchian hypothesis, that the problem of hold-up is addressed through vertical integration. See supra note 1. What we found in the contracts is indeed an ownership solution, but not one that rises to complete integration. Instead, OEMs have devised a subtle scheme in which they maintain partial ownership rights in the supplier’s tooling, rights that gradually diminish over the life of the contract, as the hold-up scare diminishes. The rights do not give them actual control of the organization of production, but may allow them to exclude commingling and other uses, thereby reducing the alternative value of the assets to the supplier.
  \item \textsuperscript{68} Coase, supra note 61, at 30.
\end{itemize}
also have deterred the Fisher brothers from engaging in [hold-up].”69 The explanations we heard from all the participants confirmed that it is indeed the OEMs’ long memories and the sanctions they can levy upon bad suppliers in future deals—that is, reputation sanctions—that render hold-up a bad strategy for tier-1 suppliers. Any short-term gain to be had by this offensive bargaining tactic will be greatly offset by long-term losses in future deals. The “hold-up myth” fails because it is based on a false empirical assumption that suppliers specialize in a single part or assembly. In reality, many of the suppliers—and the large ones in particular—supply hundreds of parts and assemblies to the OEMs. Their business is not to supply a part, but a portfolio of parts. Even if they have some power with respect to one part, it does not change the fact that as suppliers of portfolios whose only clients are the few OEMs, they are captives, rather than hijackers. That is, the business plan of these supply firms—large diversified companies that specialize in automotive parts—is to build a symbiotic relationship with their clients, a fabric of reliability that will be completely undermined by hold-up.

Thus, if long-term contracts confer power on the weaker seller, but if the seller cannot engage in hold-up, how is that power used? First the power ameliorates the standard contract termination or cancellation terms. If the buyer cannot find a replacement, it cannot exercise its legal right to cancel. Second, particularly with a weak supplier, the contract may mitigate an OEM’s setoff or hold-back of funds earned where the OEM claims that the supplier broke the contract. If the supplier is in a weak financial state, the OEM risks losing the supplier’s production if it reduces the supplier’s cash flow by setoff. We suspect that the seller’s power is also expressed in more subtle effects on the buyer’s use of its boilerplate. For example we can imagine buyers hesitating to be as aggressive as they might be in using the boilerplate indemnity provision against an important seller. As we suggest above, a seller needs to be felicitous in its

69. Id.
use of this power (e.g. “Can you give me some help with my increased material costs?”) to escape identification as a chiseler who should be avoided when new contracts are awarded. Further, since many tier-1 suppliers produce a portfolio of parts, they can leverage the power they have in the supply of one crucial component to secure additional deals for other parts.

C. Bankruptcy

The picture of a weak tier-1 supplier, squeezed by powerful OEMs that demand ever growing discounts, can change dramatically when the supplier experiences insolvency. When this happens, suppliers’ threats to stop performing critical contracts become credible. They are credible because they come not from a company that is concerned with long-term business, but from stern bankruptcy workout specialists who have no attachment to next year’s business or even to next month’s if current crises can be surmounted. In the automotive industry of today, where suppliers’ bankruptcy has become a real danger, and their threat to file in Chapter 11 more credible, many suppliers who are known to be suffering losses have a more powerful negotiation position vis-à-vis their buyers.


71. During the time we conducted this study, five major automobile suppliers filed in Chapter 11: Delphi (the world’s largest tier-1 supplier), Tower Automotive (a builder of frames for the Ford Explorer), Intermet (a steel supplier), Meridian (a steering parts producer) and Collins and Aikman (a maker of plastic trim, interior fabric and plastic parts such as dash board consoles and headliners). See Robert Sherefkin, Suppliers’ Woes Put Bond Ratings on the Junk Heap, Auto. News, Aug. 8, 2005, at 1.

72. For example, prior to filing for bankruptcy, tier-1 supplier Delphi issued a threat to General Motors and to the UAW, demanding renegotiation of many prior agreements. See Brett Clanton, Delphi’s Troubles May Cost GM, Detroit News, Aug. 31, 2005, at 1.
Ironically, at times when the supplier’s costs increase unexpectedly it is that very weakness of the supplier’s economic power and its inability to secure modifications to the contracts with the OEMs that can send it to bankruptcy, and eventually bolster the credibility of its threat. Threats from the weak and desperate are more powerful than threats from the strong and rational. Indeed, the increasing hardship of the American automotive industry provides ample examples of this unfortunate dynamic.73 They confirm that tier-1 suppliers have no power to hold up the OEMs when the OEMs know that their suppliers regard the costs of long-term retribution as greater than the near term gains from improved terms. But when retribution loses its effect, hold-up can be significant. Still, suppliers generally believe that even if it is bankruptcy that drives the price renegotiation the victorious supplier will suffer significant detriments in future dealings.

73. One prominent example is Collins and Aikman (C&A), a tier-1 supplier who entered bankruptcy in May 2005. This company, which makes parts used in 90% of American cars, many of which are irreplaceable complex assemblies manufactured in factories that are symbiotically attached to OEMs’ plants, was unable to leverage the uniqueness of its products into profitable contracts. The more it grew, the more dependent it became on future contracts from the OEMs and the weaker was its economic power in the bargaining game. When C&A filed for bankruptcy under Chapter 11, it threatened to stop performance unless its contracts were renegotiated and the prices increased—that is, it engaged in classic hold-up. Given its well-known cash shortage and the demands of unsecured creditors to stop performance of losing contracts, C&A had a credible threat. The payoff from the use of this power was quick: the three OEMs agreed to give C&A $82.5 million by raising the prices on their existing supply contracts with C&A by 15%, to purchase $140 million of tooling, and to make a loan of $82.5 million. See McCracken, supra note 70.
IV. The Exceptions: Deviations from the Boilerplate

A. Information Technology Transactions.

In this sea of refusal to budge, which we describe above, we did find one area where the OEMs often negotiate boilerplate terms and agree to deviate from the global terms. All of the OEMs reported that their relationship with respect to information technology (IT) providers was different from their relationship with respect to conventional suppliers. IT suppliers sometimes successfully force the OEMs to sign on to their own forms; other times they successfully negotiate revisions of the standard global terms in areas of great importance. In fact, some OEMs have drafted different forms for IT suppliers. Ordinarily, IT suppliers insist on terms that grant them greater ownership in the intellectual property. They also successfully limit their liability and cap it at a level far below the liability that conventional suppliers may face, usually not to exceed the price paid for the component. Finally, they are reluctant to provide the same types of extensive warranties that OEMs usually demand.

Why do IT suppliers succeed in extracting more favorable boilerplate? We heard explanations focusing on the concentration and leverage of the IT suppliers, led by Microsoft and other superpowers. This is probably true in the automotive context, where the IT firms are more diverse suppliers, less dependent on their OEM buyers. But this explanation does not account for the fact that even less powerful IT suppliers enjoy the more favorable terms. Another conjecture is that for IT companies, the intellectual property clauses in the contracts are critical, as this is their only asset. Standing to lose more from the OEMs’ IP provisions, their resistance to these expropriatory clauses is therefore more credible.

And yet IT firms succeed not only in securing better intellectual property terms, but also far more lenient warranty and remedies provisions. We found this feature to be the most puzzling. Could it be explained by the fact that, unlike the ordinary tier-1 “assemblers,” IT firms
do not buy “parts” and therefore do not have many tier-2s to which they can turn around and
dump similar anti-seller terms?

The prevalence of warranty and remedy limitations in the IT area can perhaps be
explained by the nature of information products. It is often difficult to determine whether a
defect in the operation of the integrated component is a result of bugs in the software or
inadequate specification requested by the client. When a machine shuts down due to software
problems, the consequential harm may be huge, and yet the fix may be simple and cheap.
Moreover, IT firms provide their services to a variety of industries and products. Similar
technologies and information can be adapted to heterogeneous products and applications. Thus, it
is beyond the expertise of the IT supplier to foresee the types and magnitude of the consequential
harm that a defect might cause, and it is therefore hard to insure. Self-insurance by the more
specialized buyer makes economic sense. As a result, suppliers of IT are unwilling to provide
warranties beyond repair and replacement.

Japanese Manufacturers. Outside the area of IT contracts, we discovered that at least
some of the Asian OEM’s will modify some parts of their boilerplate terms. One tier-1 supplier
reported that a Japanese OEM would listen to focused and well reasoned objection to particular
provisions of its form contract. The tier-1 supplier emphasized that even the Japanese OEM
would not agree to wholesale changes to its form, but he made clear that the Japanese attitude
toward negotiation was markedly different from that of American OEMs. Another source
confirmed that while Toyota and Honda have contracts with strict terms, they view their
relationship with suppliers as long-term and place more value on suppliers’ satisfaction.
So why are the Japanese OEMs more generous than the American OEMs to their suppliers? Doubtless part of the reason is cultural, having to do with norms of negotiations and the like. Also, it is sometimes speculated that Japanese manufacturers may be sensitive to the hostile publicity that they might earn if they contribute to the demise of a large American manufacturer of supply parts. But we believe that an important reason is the economic distress of the American OEMs. Several representatives traced the current state of “war” between OEMs and suppliers to a managerial change that occurred in General Motors in the 1980s. Earlier, American OEMs in general, and GM in particular, were more generous with suppliers in all phases of their relations. But the mounting losses of the auto manufacturers could find an outlet in only a few places. Even though improvident contracts for pay, pensions, and health benefits with the UAW may be the principal cause of the current economic distress, no OEM has the power to open a labor contract and get large concessions from the union. That meant OEMs turned to easier prey: their suppliers.


75. The following anecdote illustrates the type of behavior that we denote “cultural.” One of our respondents in an American tier-2 company explained how a tier-1 Japanese supplier agreed to give a price increase. The American supplier had agreed to make and sell a part to the tier-1 supplier for approximately $3.00. When the first parts were delivered they were missing one weld. The weld had been identified on the drawings in Japanese and the seller had failed to translate that part of the instructions. When the parties discovered this, the Japanese buyer agreed to add 7¢ to the price to cover the cost of the additional weld—with the admonition that the seller had better get it right the next time. The seller's representative assured us that any American OEM would have "pointed to the contract" and forced the seller to eat the cost.

Most of the Japanese manufacturers (Nissan and Mitsubishi may be exceptions) have not suffered the same distress. Both Toyota and Honda have been consistently profitable\textsuperscript{77} for many reasons, e.g. good management, the absence of union contracts with their American workers, the comparative youth of their American workers, and the Japanese state’s assumption of some of the liabilities in Japan that private companies must bear in the United States. Both the earlier American experience and reason suggest that insistence on one’s own tough terms with no exceptions is the kind of thing that no business person does without a strong economic incentive, like business distress.

\textbf{“Backdoor” Negotiations.} Staff attorneys within the OEMs are of course the organ that keeps the tightest control on the boilerplate terms and guards against deviations. Other organs—specifically, engineers and purchasing agents—may have slightly divergent goals and motivations. The purchasing representatives are interested in the cost of the item and their performance is measured by their success in getting the lowest price. Engineers are interested in quality and uniqueness of features, and operation and are less interested in cost. The engineering success is measured by how well the car works, the extent of warranty obligation it causes and, of course, how well it sells. A time honored but relatively crude way for a supplier to get better legal terms is to convince the OEM engineers that the supplier’s part is the only acceptable part and to get the engineer to write the specifications to exclude others. Or one might get the engineers to agree to “engineering change orders” that modify the specification of the part, enable the supplier to quote a new price (without going through a competitive bidding process),

Yuval Rosenberg et al., \textit{The Top Picks from 50 Great Investors}, \textit{Fortune}, Dec. 29, 2003, at 70.
and increase the profit on the sale of the part. These ploys that result in higher prices offset some of cost of unfavorable boilerplate.

More subtle indirect changes in the contract may also come in through the engineers or by the addition of a term that the purchasing manager does not regard as part of his “cost.” For example a supplier may negotiate for a side agreement that permits the supplier to use the OEM’s tooling to make aftermarket parts, a right that the boilerplate would deny. Since the supplier’s profit on the aftermarket parts may be substantial, yet the purchasing manager might not regard that as part of his “price,” the seller gets something of considerable value. One tier-1 representative spoke of the pricing for service parts and change in the terms of the warranty process as examples of terms in the boilerplate that the OEM’s might alter by a side agreement, if a successful pitch has been made to an organ within the OEM who cares more about other factors. In these cases too, the base price stated in the contract would not change but the change would have measurable and predictable value for the supplier.

Conclusion

So there you have it—sophisticated companies use the rigid boilerplate forms to govern tens of billions of dollars of sales every year. The drafters of these forms are not the least embarrassed in admitting that they draft every term in a one-sided, self-serving manner. It turns out that such unrestrained economic power in contracting is exercised not merely against the weak and ill advised, but also against sophisticated partners to relational contracts. And yet, in numerous discussions with suppliers and their representatives, we have not heard the word “unconscionability” even once. Obviously, there is no element of duress or unfair surprise in the formation of these contracts. It is the understanding of all who are involved in this market that bargaining power is the name of the game, and that the only way to reform the contracts is to alter some fundamental features of this market, to affect the division of economic power.
Our study has obvious limitations. Since our primary interest was the boilerplate contracts, the evidence we collected came from “legal” sources—the contracts, the lawyers who draft them, the lawyers representing the parties to the purchase agreements, and the very small body of case law. In the shadow of this legal cloud there may be a different business reality in which transactions occur in a more balanced way, where OEMs exercise their power and their contractual entitlements in a selective and less selfish manner. While we cannot rule out such a possibility, it does not seem plausible. Representatives of suppliers with whom we spoke exhibited too much frustration with the OEMs’ legal terms; they appear to believe that the reality of the business is consistent with the picture portrayed by the boilerplate.

What are the lessons that can be drawn from this study? Unlike some prior studies of automotive contracts, we do not claim any general conclusions about contractual behavior, nor do we aim any critique at the law or advocate any legal reform. The automotive production business is sufficiently idiosyncratic that much of what we have learned may be applicable only to this industry. For one, it is clear that much of the bargaining power account stems from the specific structure of the industry, in which specialized tier-1 companies are “captives”—they have immense investments in production capacity and can sell only to a handful of clients. But this study does show patterns that may have broader application. It identifies the important role that internal organization structures play in the formation of form contracts. A story we all heard many times is that organizational concerns can explain the necessity of standard forms. That is, forms are a way for principals to exert control over terms offered by their agents. But what we found here was the flip side of this account. The internal hierarchy is not the reason for the forms, but rather an instrument in implementing the forms as-is, without allowing any erosion of the terms. Constantly under pressure by counterparties to vary some terms, buyers have erected artificial internal structures to prevent purchasing agents from yielding to such pressures. This
internal rigidity also explains the absence of “menus”—the refusal of the drafting party to set prices under which its counterparties can “buy” better terms.

While some of our findings can be explained with clear economic logic, for others we did not find a compelling explanation. We do not offer a satisfactory explanation for the variance of terms across the different OEM contracts, or for the conjecture that some terms are inefficient. If we are right in suggesting that there is inefficiency in the legal provisions, it is possible—given the enormous stakes in this industry—that a lot of money is left on the table. Clearly, the OEMs are using any means to reduce costs and are pressuring their suppliers to the maximum extent. But by using such harsh terms, the OEMs may be creating (or at least, not eliminating) the deadweight loss. Another finding that left us puzzled is the IT forms; these are a remarkable exception to the otherwise one-sided boilerplate in the industry. We can offer only guesses as to why IT firms succeed in securing better terms. We leave this question for future inquiry.

Finally, this study reinforces some doubts about theories of asymmetric information in contracting. We mentioned that a prominent line of thought in economic theory identifies contractual “failures” as the reason for why firms organize the way they do, and why some activities are outsourced and others are done in-house. Since auto production contracts have served an important role in demonstrating these insights (the GM/Fisher Body story), we took a closer look at the actual contracts. We discovered a reality in which more things are “contractible” than previously suggested; where asymmetric information and imperfect verification are rarely obstacles for contracting; and where reputation sanctions quickly fill any void that the contracts may have left. And yet, the familiar economic story of vertical integration is not necessarily undermined. While it is not manifested through outright takeover of supplier firms, we discovered that integration in production occurs in more subtle ways, such as contingent control over production assets and technological innovations.
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