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An empirical analysis of tying arrangements: Evidence from the litigated cases

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The Ohio State University, 1994
AN EMPIRICAL ANALYSIS OF TYING ARRANGEMENTS:
EVIDENCE FROM THE LITIGATED CASES

DISSERTATION

Presented in Partial Fulfillment of the Requirements for
the Degree of Doctor of Philosophy in the Graduate
School of The Ohio State University

By

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****

The Ohio State University

1994

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Advisor
Department of Economics
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Dedication

For my parents

and

Gillian
ACKNOWLEDGMENTS

I would like to express my sincere thanks to my committee members for all of their help in making this dissertation come together. In particular, I would like to thank Howard for improving my thinking with regard to not just to tying arrangements, but all types of antitrust issues. I also wish to thank all of my fellow graduate students for their support and encouragement during the years I have been at Ohio State.

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VITA

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CHAPTER I

INTRODUCTION

A tying arrangement occurs when the purchase of one good is conditioned on the purchase of another good. Historically, the courts have viewed tying arrangements as a method whereby one firm can "leverage" monopoly power in one market into another market, an analysis which stems from the dissent in the A.B. Dick case. This belief in leverage has translated itself into per se illegality for tying arrangements. Leverage arguments, however, have proven more plausible to judges than to economists, who have argued that without special conditions, the monopoly profits foregone in the tying good market will be at least as large as those acquired in the tied good market. Several

---

1 Examples of the courts' belief in the leverage theory may be found in Motion Pictures Patents Co. v. Universal Film Manufacturing Co., 243 US 502 (1917); United Shoe Machinery Corp. v. United States, 258 US 451 (1922); I.B.M.Corp. v. United States, 298 US 131 (1936); International Salt Co., Inc. v. United States, 332 US 392 (1947); and United States v. Loew's, Inc., et al., 371 US 38 (1962).


3 Tying arrangements are generally held to be per se illegal if certain conditions are met. See Digidyne Corp. v. Data General Corp., 734 F2d 1336, 1338 (1984). In addition, ABA Antitrust Section (1982) contains a through, albeit dated, treatment of court tying doctrine.
alternative theories for the use of tie-ins have been put forward. My focus is not to offer yet another theory of tying, but instead to investigate the litigated cases of tying in search of explanations as to why firms use tying arrangements.

The existence of the many alternative theories of tying suffers from a paucity of empirical studies to back them up. Unlike resale price maintenance which has several empirical studies, the most recent being Overstreet (1983) and Ippolito (1988), and exclusive dealing which has a study by Frasco (1991), tying arrangements have yet to be studied in a similar empirical manner. The alternative theories are often accompanied by a handful of case examples in order to illustrate a facet of the theory. But no theory actually offers any widespread empirical foundation on why it is better at explaining tying. In order to gain an understanding into the incidence and likely effects of tying, I have constructed a complete catalog of tying cases. This cataloging is in the spirit of Overstreet (1983), Ippolito (1988) and Frasco (1991). The catalog contains all litigated cases of tying, at the federal court level, from the 1917 case prohibiting tying (the *Motion Pictures Patents* case\(^4\)) to mid-year 1992.

This dissertation will analyze the population of litigated cases to gain an understanding of the kinds of tying that lead to litigation. Furthermore, we will study the competing theories of tying. The dissertation also examines the shifts in the pattern of tying over time. When studying litigated cases for this type of analysis the data must

\(^4\) *Supra* note 1.
deal carefully with any possible biases inherent in such a data set. If we wish to make inferences about the population of the practice in question and not just the sample of litigated cases, then we will need to account for any biases that may develop. Recent work in this area has lead to a "selection hypothesis" theory. Using the predictions of this theory, we can determine if the litigated cases can serve as a reasonable sample on which to make inferences about the population of the practice in question.

First, the competing theories of tying are examined to determined their ability to explain the litigated instances of tying. Given the information in the published case opinions, each case is catalogued based on which theory best explains the practice in question. The analysis shows that the court's faith in the leverage theory has been misplaced. The litigated tying instances are better explained by alternative, non-leverage, theories. As a policy question, this clearly brings into doubt the current treatment of tying as a per se violation of the antitrust laws. If the leverage theory is flawed, then a rule-of-reason analysis would be preferred.

Given the results of the selection hypothesis, we see that the current per se prohibition of tying is deterring too many non-leverage instances of tying. The selection hypothesis also tells us that

---

5 See infra note 105.

6 The rule-of-reason approach is currently used in two types of vertical restraints, namely exclusive dealing and territorial restrictions. However, resale price maintenance is per se illegal. Posner (1981) has argued for per se legality of vertical restrictions. Bays (1989) has argued explicitly for per se legality of tying arrangements.
liberalizing the standards (say towards a rule-of-reason standard) will help reduce this non-leverage deterrent effect.

Second, we explain why the nature of challenged tying arrangements and the plaintiffs involved are changing over time. This involves an analysis of the per se framework under which tying is adjudicated. Because the per se standard is invoked only if certain conditions are met, this has caused the standards which are applied to tying to vary over time. In order to study how these standards have changed over time, the cases are divided up into categories. The trends of tying case patterns over time are then analyzed. In addition, the causes that led to a changing pattern of plaintiffs involved in tying cases is examined. The conclusions are that the standards required to invoke the strict per se standard have been loosening over time and that the plaintiffs bringing tying arrangement cases are changing in response to this shift in the standards. However, recently there seems to be a trend back to the more stringent standards of the early 1970's. The most recent Supreme Court decision involving tying, the Kodak case, appears to send a signal that the standards used in tying are getting more stringent.

The dissertation is organized as follows. Chapter II contains a discussion of the leverage theory, as well as a discussion of the alternative theories of tying arrangements.

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7 See Digidyne Corp. v. Data General Corp., 734 F2d 1336, 1338 (1984), for a list of these conditions. See infra note 117.


9 Further support of this tightening standard can be seen in that the Supreme Court recently vacated the decision in Virtual Maintenance v. Prime Computer, 113 SCt 314 (1992).
In addition, a history of the judicial treatment of tying arrangements is provided. Chapter III discusses how the cases used in the study were found and catalogued. This chapter also discusses the implications of the selection hypothesis for a study of this magnitude. Chapter IV provides an investigation into the competing theories of tying. The study focuses on why the leverage theory is incapable of explaining most litigated instances of tying. Chapter V gives an analysis of the changing patterns and evolving standards of tying cases over time. The emphasis is on the causes that altered the manner in which the *per se* standard is applied to a particular tying arrangement case and the changing patterns of plaintiffs in tying cases. Chapter VI summarizes the main findings of the dissertation.
CHAPTER II

TYING: THEORIES, CASES, LIMITATIONS

II.1 Leverage

The leverage theory of tying views a tie-in as a method that allows a firm to gain a second monopoly from an initial position of only a single monopoly. As an example consider the IBM case. In that case, as a condition upon leasing IBM's computing machine, the lessee was required to purchase his requirement of cards needed to perform the tabulations from IBM. The tying arrangement allegedly allows IBM to illegally extend its machine monopoly into the card market and obtain a second monopoly. However, a firm can not get the monopoly rent more than once when it has only one monopoly with which do to so. The monopoly comes with a fixed amount of power. This can be illustrated as follows. A monopolist of some good X produces the

---


11 For an alternative view of the same case, see Posner (1976), p.173.
good at unit cost $c_X$. Consumers value the good at level $\alpha$. The consumers also desire some other competitively supplied good, $Y$, that consumers value at $\beta$ and which is produced at a unit cost of $c_Y$. If the monopolist adopted a tying contract between goods $X$ and $Y$, could the firm gain a second monopoly and its associated level of profits? Consumers will only purchase the bundle of goods $X$ & $Y$ if the price of the bundle is no larger than $\alpha + c_Y$. At this price, however, the profits of the monopolist would be $\left(\alpha - c_X\right)$, the same level of profits earned by the monopolist selling good $X$ alone. Thus, we see that the monopoly rents can only be extracted once. When that power is used to extract all possible rents available in that market, the power cannot then be transferred to another market in order to extract rents in that second market.

The monopolist may be able to use her power more efficiently extract all available rents. The monopolist may find herself in a position that makes her unable to extract all available rents in the monopolized market. In this situation, a tying arrangement can be used as a method of extracting the rents available to the monopolist, not through the monopolized market (the tying good market), but through a different market (the tied good market). The monopolist is not gaining a second monopoly via the tie-in, but instead is gaining better access to the available rents made possible through a lawful monopoly position. The monopolist is not able to gain more rents than are available due to the monopoly because this is not possible.
Butler, Lane, and Phillips (1984) show that approximate monopoly profits can be achieved by firms using a non-linear pricing strategy in lieu of tying. This non-linear pricing strategy would be perfectly legal. This shows that a firm need not, in fact, use tying in order to extract monopoly rents. In addition, since tying is afforded a *per se* illegality status by the courts, firms that choose to use tying agreements run the risk of having these arrangements declared unlawful by the courts. The question is then why would a firm use a tie-in in order to extract monopoly rents when it could adopt a perfectly legal method mentioned above. The answer possibly lies in one of the alternative theories of tying that argue that the goal of tying is not monopoly extension, but some other less restrictive function.

II.2 Alternative Theories of Tying

Seven theories have been forwarded by various authors in the literature which claim to be more benign welfare explanations for tying than the leverage theory result of welfare losses. Three of the seven involve the use of market power as does the leverage theory. These are metering usage for price discrimination, price discrimination where metering is not the objective, and the prevention of input substitution away from a monopolized good. The remaining four do not involve the direct use of market power.

---

12 See Butler, Lane and Phillips (1984), p. 204-212.

13 These theories are summarized by Ferguson (1965), Wollenberg (1987), and Bays (1989).
These are the evasion of price regulation, cartel enforcement, risk sharing and protection of goodwill. An eighth theory which will not be considered is that of economies of joint production.\textsuperscript{14} This is because when economies are involved, a true tying arrangement is not actually present. When the price of the bundle (of goods) is less than the sum of the individual prices, then no harm can come to consumers. No one complains that the purchase of an automobile, for example, is in fact a tied sale. This is because the price of the assembled automobile is less than the sum of the prices of its separate components due to the joint production economies involved.\textsuperscript{15}

The most commonly offered alternative theory of tying involves using a tying arrangement as a method of price discrimination. This argument was first fully presented by Bowman (1957) in a paper which also discussed other alternatives to leverage as well. This argument has also been advanced by numerous others including Hilton (1958), Burstein (1960a, 1960b), Stigler (1963), Posner (1976, 1979), and Bork (1978).\textsuperscript{16} The argument here is that no leverage into the tied good market is actually taking place. Instead, what is really happening is that the monopolist is attempting to

\textsuperscript{14} For a more detailed explanation of this see Bowman (1957), p. 29. This possibility only appears to have occurred once in the tying cases studied. See \textit{United States v. Greater Buffalo Press, Inc., et al.}, 327 FSupp 305 (1970). Tying was only a part of a larger merger and monopolization case. The case was dismissed and the DOJ appealed, but it did not appeal the dismissal of the tying claim, see 402 US 549 (1971).

\textsuperscript{15} For example, an assembled 1988 Buick Skylark cost $12,568 from the dealer, but the cost of purchasing the replacement parts was $40,280 (and the car is still unassembled). This example is taken from Carlton and Perloff (1990), p. 466.

\textsuperscript{16} Most of these authors give the original credit for their ideas to Aaron Director. Although Director never directly published these ideas himself, they are mentioned briefly in Director and Levi (1956).
maximize profits by using a tying arrangement as a method of price discrimination. This occurs one of two ways, either as way to meter use, or a nonmetering aspect.

II.2.1 Metering

The metering aspect of a tying arrangement is a method of price discrimination by which the more intensive users of the tying good end up paying more for a commodity. This is best illustrated by the classic example from the Button-Fastener case.\footnote{Heaton-Peninsular Button-Fastener Co. v. Eureka Specialty Co., 77 Fed 288 (1896).} A machine had been invented which stapled buttons to high button shoes, whereas it had been previously been done by hand. Use of the machine saved a shoe manufacturer a fixed amount on each button attached to a shoe. So a manufacturer who made more shoes could save more money in total than a manufacturer who made less shoes. Thus the former should be willing to pay more for the use of the machine than the latter. For example, let the user of a machine save $.01 per button attached to a shoe over the previous method used. If we assume that there are 10 buttons per shoe, the manufacturer would save $.10 per shoe. A manufacturer who makes 10,000 pairs of shoe will save $2,000 over the previous method used. But a manufacturer who makes 100,000 pairs of shoes would save $20,000. The later manufacturer should be willing to pay more for the machine than the former. However, determination of who is the relatively more intensive user may be difficult a priori. There is also the problem of
stopping resale by the low volume user to the high volume user. To solve these
problems, the machine was sold with a tying arrangement whereby the purchaser was
required to purchase his requirement of staples from the seller. The staples acted as a
counting device to determine who was the more intensive user of the stapling machine.
Since the staples were priced at higher than the competitive level, the more intensive
user ended up paying more for the machines usage. The tying arrangement acted as a
method for price discrimination. Note that no leverage took place in that the amount of
staples used would be the same as if no tie-in had existed. The example is no different
than if a meter were attached to the machine and the user paid a rate based on the
metered output. The staples merely serve as a meter and allow the machine's inventor to
better maximize profits.\(^{18}\) This reason for tying is also observed in many franchise
situations where the grant of the franchise is tied to supply purchases.\(^{19}\)

Tie-in sales used in this manner can have detrimental welfare effects. Tie-ins used
for metering purposes provide a way for the firm to practice second-degree price
discrimination. Tirole (1988) illustrates this point by treating the tie-in similar to two-
part pricing analysis.\(^{20}\) Noting that under a tying arrangement, the tied good, previously
available at cost, is priced above cost. This causes a price distortion and, hence,

\(^{18}\) Telser (1979) offers this explanation for tie-in sales as well. As an application of his theoretical
analysis, he uses tie-in sales in order to meter usage for price discrimination.

In this case cup purchases were used as the tied good.

consumption distortion that leads to a reduction in welfare compared to the case where tying arrangements are prohibited.21 One important assumption, however, drives this result. Namely, that the firm must serve all types of customers. Without this assumption, if tie-ins are prohibited, then the firm may only serve the high-demand consumer types. In this situation, welfare is lower with the tying prohibition than under the situation where tying is allowed.22 Thus, we conclude that the welfare effects of tying, in this circumstance, are somewhat ambiguous.23

II.2.2 Non-metering Price Discrimination

Price discrimination may still serve as an explanation for tying without the metering aspects. Stigler's (1963) paper provides a price discrimination explanation for tying using block booking as an example.24 If different consumers value the same items differently, then the monopolist may want to only offer those items as part of a bundle. By doing so the monopolist is able to increase his profits over the case where the items are sold individually at uniform prices. Consider the following example offered by

---


23 See also, Adams & Yellen (1976), p. 490-495.

24 For a complete analysis of block booking, see Kenney and Klein (1983). In general, block booking is an example of bundling. For a thorough discussion of bundling, see Adams and Yellen (1976), Schmalensee (1982) and Lewbel (1985). In addition, bundling has also been interpreted as a facilitating device, see Seidmann (1991).
Stigler. Consider two buyers: A would pay $8,000 for film X and $2,500 for film Y and B would pay $7,000 for film X and $3,000 for film Y. Selling the films separately the seller would receive $14,000 in revenues from film X and $5,000 in revenues from film Y for a total of $19,000 in revenues. However, if the seller block booked at a single price of $10,000, then he would receive $20,000 in revenues. Block booking allows the seller to receive higher revenues. When gauging the relative willingness of consumers to pay for individual items is difficult, a seller will prefer to block book those items since the bundle allows him a larger return than individual uniform prices will.

A problem that arises when looking at block booking, i.e. non-metering price discrimination, is that the function of the practice is to raise firm profits. Thus, we have surplus being extracted from the consumers and being placed into the hands of the firms using tying contracts. However, it should be noted that we do not observe the leverage theory's result of lower total welfare. What we have with block booking is an income redistribution from consumers to producers. With a consumer welfare standard as a benchmark, we might prefer a tying prohibition due to the lost consumer surplus, but looking at total welfare we cannot make that conclusion. Thus while block booking may be suspect from a consumer welfare standard viewpoint, we do not get the leverage theory result of a dual monopoly and the resulting loss in overall welfare that would occur.

---

II.2.3 Prevention of Input Substitution

A tying arrangement may be used to prevent inefficient input substitution by a firm. Input substitution can occur when one input is under monopoly control. This control causes the price of the input to be priced at a monopoly level. Thus, the downstream purchaser of the input will attempt to substitute relatively cheaper inputs in the production process for the monopoly-priced input. In order to stop this inefficiency from occurring, the input monopolist can employ a tying arrangement. With the tying arrangement the downstream firm would face the same relative price as if the inputs were supplied competitively. So the inefficient input substitution problem is solved by the tie-in. Since this is exactly what happens under vertical integration by the input monopolist, the prohibition of tying arrangements in this case is somewhat suspect.\(^2\)\(^6\)

The above can be illustrated following Blair and Kaserman (1978). Let \(P(Q)\) be the inverse demand of the final product and \(Q(X_1, X_2)\) be a linearly homogeneous production function. Let \(C_i\) be the constant marginal cost of input \(X_i\). Let \(X_1\) be an input supplied by an upstream monopolist and \(X_2\) be supplied competitively. This implies that \(X_1\) will be supplied at a price greater than marginal cost, i.e. \(P_1 > C_1\) and that \(X_2\) be supplied at a price equal to its marginal cost, \(P_2 = C_2\). The downstream firm

faces a relative price ratio equal to $\frac{P_1}{P_2} = \frac{P_1}{C_2} > \frac{C_1}{C_2}$. This differs from the vertically integrated solution of $\frac{P_1}{P_2} = \frac{C_1}{C_2}$. The downstream firm responds to this by substituting away from the monopolized input, $X_1$, toward the competitively supplied input, $X_2$.

In order to realize the vertically integrated solution, the monopolist can employ a tying arrangement and achieve the same level of profits and input utilization as a vertically integrated firm. This is illustrated as follows. First, it will be shown that tying and vertical integration yield the same level of profits for a firm. It will then be shown that tying vertical integration have the same efficient input utilization.

Vertical integration and tying profits, respectively, are:

$$\Pi_V = P\left[Q(X_1, X_2)\right]Q(X_1, X_2) - C_1X_1 - C_2X_2 \quad (1)$$

$$\Pi_T = P_1(X_1, X_2)X_1 + P_2(X_1, X_2)X_2 - C_1X_1 - C_2X_2 \quad (2)$$

We need to show that $\Pi_V = \Pi_T$ to show the equivalence of tying and vertical integration. After canceling the cost terms from each equation, we have

$$P\left[Q(X_1, X_2)\right]Q(X_1, X_2) = P_1(X_1, X_2)X_1 + P_2(X_1, X_2)X_2 \quad (3)$$

From firm profit maximization:
\[ P[Q(X_1, X_2)] \frac{\partial Q}{\partial X_1} = P_1(X_1, X_2) \quad (4a) \]

\[ P[Q(X_1, X_2)] \frac{\partial Q}{\partial X_2} = P_2(X_1, X_2) \quad (4b) \]

Substitute (4a) and (4b) into (3).

\[ P[Q(X_1, X_2)]Q(X_1, X_2) = P[Q(X_1, X_2)] \left( \frac{\partial Q}{\partial X_1} X_1 + \frac{\partial Q}{\partial X_2} X_2 \right) \quad (5a) \]

\[ = P[Q(X_1, X_2)]Q(X_1, X_2) \quad (5b) \]

Thus, \( \Pi_V = \Pi_T \). Tying and vertical integration yield the same level of profits.

Now it must be shown that tying yields the same efficient input utilization as vertical integration. Efficient production decision making requires that the ratio of the marginal products equals the ratio of the costs. That is,

\[ \frac{\partial Q}{\partial X_1} = \frac{C_1}{C_2} \quad (6) \]

Given \( \Pi_V \) and \( \Pi_T \), the following first order conditions apply.
For \( \Pi_y \):

\[
\frac{\partial Q}{\partial x_1} P + Q \frac{\partial P}{\partial Q} \frac{\partial Q}{\partial x_1} = C_1 \quad (7a)
\]

\[
\frac{\partial Q}{\partial x_2} P + Q \frac{\partial P}{\partial Q} \frac{\partial Q}{\partial x_2} = C_2 \quad (7b)
\]

Or,

\[
\begin{bmatrix}
\frac{P + Q \frac{\partial P}{\partial Q}}{\frac{\partial Q}{\partial x_1}} \\
\frac{P + Q \frac{\partial P}{\partial Q}}{\frac{\partial Q}{\partial x_2}}
\end{bmatrix} = C_1 \quad C_2 \quad (8)
\]

Thus,

\[
\frac{\partial Q}{\partial x_1} = \frac{C_1}{C_2} \quad (9)
\]

For \( \Pi_T \):

\[
P \frac{\partial Q}{\partial x_1} + \frac{\partial^2 Q}{\partial x_1^2} PX_1 + \frac{\partial P}{\partial Q} \frac{\partial Q}{\partial x_1} X_1 + \frac{\partial P}{\partial Q} \frac{\partial Q}{\partial x_2} X_2 + \frac{\partial^2 Q}{\partial x_2 \partial x_1} PX_2 = C_1 \quad (10a)
\]
If $Q$ is linearly homogeneous, then

\[
\frac{\partial^2 Q}{\partial x_1^2} = -\frac{X_2}{X_1} \frac{\partial^2 Q}{\partial x_2\partial x_1} \quad (12)
\]

Substitute (12) into (11a) and (11b).

\[
\frac{\partial Q}{\partial x_1} \left[ P + \frac{\partial P}{\partial Q} \left[ \frac{\partial Q}{\partial x_1} X_1 + \frac{\partial Q}{\partial x_2} X_2 \right] \right] = C_1 \quad (13a)
\]

\[
\frac{\partial Q}{\partial x_2} \left[ P + \frac{\partial P}{\partial Q} \left[ \frac{\partial Q}{\partial x_2} X_2 + \frac{\partial Q}{\partial x_1} X_1 \right] \right] = C_2 \quad (13b)
\]
Thus,

\[
\frac{\partial Q}{\partial x_1} = \frac{C_1}{C_2} \quad (14)
\]

Tying yields the same efficient input utilization as vertical integration. The above shows us that if one input is under monopoly control, then the vertically integrated solution can be achieved by the use of a tying arrangement. Prohibiting tie-ins, in these types of situations, denies the firm the ability to produce at an efficient output level without resorting to vertical integration.

**II.2.4 Evasion of Price Regulations**

Another explanation given for tying arrangements as an instance where leverage is not actually taking place is those circumstances where the price of the tying good is under price regulation (usually a price ceiling). The tying arrangement is a method to evade the price regulation. By forcing the tied good onto consumers at a price higher than the competitive level, the seller is able to effectively charge the market clearing price on a good which has a price ceiling on it. No leverage into the tied good market is taking place here. It is an attempt to sell a good at its market clearing price in order to
prevent the inefficient waste of resources which can accompany price controls. For example, an effective price ceiling causes the price of the good to go below the market clearing equilibrium price and this creates a shortage of the good and resulting welfare loss. A tying arrangement can effectively raise the price of the price regulated good in the following manner. By pricing the tied good above its equilibrium price and forcing the buyer to purchase this good as part of a package along with the tying good (the price regulated good), the buyer views the price increase as basically a price increase in the tying good market. This price increase (of the tying good) would cause a decline in quantity demanded for the tying good and reduce the shortage of the price regulated good. Consider the case *U.S. v. George Fish.*

Fish was a wholesale dealer of fruits and vegetables. He required buyers of lettuce (a rationed and price regulated good) to also purchase melons, broccoli, or celery (which were not rationed or price regulated). This tie-in should be viewed as method of avoiding the governmentally mandated price control, not a method of leveraging monopoly power.

Tying contacts of this type can easily be distinguished from others since one of the goods would have a price control on it. It would be simple to compare whether the leverage theory results are occurring, or if it is just a firm attempting to circumvent the price control. It is apparent that the writers of price control legislation understood that tying was a possible means of circumventing the price regulations since tying was

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27 154 F2d 798 (1946).
generally explicitly prohibited in the price control legislation. For example, price evasions were prohibited "whether by direct or indirect methods, in connection with any offer, solicitation, agreement, sale, delivery, purchase or receipt of or relating to fresh fruits or vegetables alone or in conjunction with any other commodity or by way of commission, service, transportation or any other charge or discount, premium or other privilege, or by tying-agreement or other trade understanding or otherwise." 28

As mentioned earlier, the problem with the evasion of price regulation theory is that the theory is not really an alternative to the leverage theory. The practice of tying here is to avoid a governmentally imposed price ceiling. Leverage is never an option to be considered in cases falling under this theory. The tie-in is just a response to the price regulation, not a method of monopolization. Any distortions are caused by the price regulation, not the existence of a tying arrangement.

II.2.5 Cartel Enforcement

The idea of using a tying arrangement as a method of cartel enforcement was advanced by Peterman (1979) and Cummings and Ruhter (1979). The price being enforced is that of the tied good, typically an input. Firms use a tying arrangement along with a most favored customer clause. 29 The tied good is forced on the consumer, but he

28 Section 11 of Article I of Section 1439.3 of Maximum Price Regulation 426. Emphasis added.

29 For a complete discussion of most favored customer clauses and their relation to cartels and antitrust law, see Hay (1982), Salop (1986), and Cooper (1986).
receives the assurance that the firm using the tie-in will agree to meet any lower price which the consumer may be able to get for the tied good elsewhere. So if there existed a cartel in the tied good market, then the existence of a cheater would quickly be known due to the nature of the tying arrangement contract.

As an example consider the International Salt case.\textsuperscript{30} International Salt (International) leased its Lixator machine for the purpose of dissolving rock salt into brine. International required that its lessees purchase the necessary salt needed from International as well. The Supreme Court held that the arrangement was illegal tying believing that the arrangement would prevent others from supplying salt to machine owners, i.e. market foreclosure or leverage. However, an examination of the contract used by International shows that the tie-in actually served as a most favored customer clause. Part of the rental contract used by International states:

\begin{quote}
If at any time during the term of the lease a general reduction in the prices of grades of salt suitable for the [Lixator] shall be made, said lessees will give [International] an opportunity to provide a competitive grade of salt at any such competitive price quoted, and in case [International] shall fail or be unable to do so, the lessee, upon continued payment of the rental herein agreed upon, shall have the privilege of continuing use of the ...
\end{quote}

\textsuperscript{30} International Salt Co. v. United States, 332 US 392 (1947).
equipment with salt purchased in the open market, until such time as [International] shall furnish a suitable grade of salt at said competitive price.31

We can see that if the goal of International’s tie-in was market foreclosure, surely International would not have allowed its lessees to purchase their salt requirements from other sources.

Note that it is not the tying arrangement which is needed in this instance to get the cartel enforcement aspects. It is in fact the most favored customer clause which drives the result. The tying arrangement just makes it work better. Thus a tying contract which was challenged under these circumstances due to leverage is in error because the most favored customer clause is at the heart of the problem. One might even argue that tying does not actually even exist under these circumstances. The existence of the most favored customer clause implies that the buyer is not obligated to purchase the tied good from the seller all of the time. While it would be true that the buyer is not free to purchase the tied good from whomever he desires all of the time, the most favored customer clause appears to make the dispute more of a contract dispute, not necessarily an antitrust dispute. Thus, elimination of the tie-in does not solve the cartel problem. Attacking the cartel itself as an illegal monopoly would be the correct manner to deal

with such a problem. It is indeed ironic that two of the most important tying cases have these aspects in them.\footnote{See \textit{International Salt Co., Inc. v. United States}, 332 US 392 (1947) and \textit{Northern Pacific Railway Co., et al. v. United States}, 356 US 1 (1958). For a discussion of these two cases, see Peterman (1979) and Cummings and Ruhter (1979). Also, see Seidmann (1991) for a discussion of tying as a facilitating device.}

\section*{II.2.6 Risk Sharing}

Risk sharing is another explanation for the use of tying arrangements.\footnote{For an analysis of the use of vertical restraints as methods to deal with risk, see Rey and Tirole (1986). In particular, their paper analyzes exclusive territories and resale price maintenance as a way that a manufacturer can reduce the risk its retailers face.} It involves the same aspects of the metering explanation.\footnote{See Liebowitz (1983) for a comparison of the price discrimination and risk sharing explanations for tying. He concludes that when items, such as the discount rate and depreciation of the tying good, are taken into account that the risk sharing explanation for tying applies in more general circumstances.} The owner of a machine, for example, does not know which of his customers will fail. So the machine owner sells (leases) the machine at cost on the condition that another good be taken as well. This tied good, based on the output of the customer, would then be the source of the revenues for the machine selling firm. Since the royalty payments are actually based on the tied good, which depends on the final sales of the customer, the successful firms will pay the highest royalties and the unsuccessful ones will only be out the cost of the machine. So the risk has been pooled by the machine owner since the manufacturer is better able to determine the average rate of successfulness than any individual firm's probability of success. Bays (1987) gives an example from the can-closing industry. Firms which
package their products in cans face risk in that they may have to maintain costly over-capacity in times of low demand. A tying arrangement whereby the can closing machinery is priced at a lower level than normal can reduce the firms risk. This occurs because part of the fixed cost of the can closing machinery has been replaced by a variable cost dependent on the demand for the firm's output.

The problem here is that it is difficult to determine the difference between the metering explanation and the risk sharing concept. Since they effectively involve the same thing, determination empirically of which hypothesis applies in a certain instance is virtually impossible without precise data on exactly why a tying contract is being utilized. However, either explanation is still an alternative to the leverage theory, so that it may be less important, in a general sense, to figure out whether it is metering usage or risk sharing than it is to say that either one is a better explanation for tying than the leverage theory.

If we look more closely at the risk sharing and metering concepts, we might possibly view the tie-in as just simply metering. Risk sharing is more or less a special case of metering, where the tie-in just happens to lower the risk faced by the buyer. Thus, the lowering of risk may be viewed as an externality of the tie-in. Presumably, the goal of a firm in these situations is to maximize profits, not to function as an insurance provider for the buyers of its products. Since metering is a profit maximizing function of tying and risk sharing is not, we may conclude that using tying for risk sharing purposes would not be the main function of a tying arrangement. If risk sharing was accomplished,
however, we could view it as an externality of the true reason for tying, metering for price discrimination.

II.2.7 Goodwill Protection

The protection of goodwill is an often given explanation for tie-ins. The tying arrangement is necessary in order to prevent "inferior" goods from being used with the tying good thus harming the reputation of the firm. As an example, if inferior parts were used in the repair of an automobile, then the consumer would blame the automobile manufacturer for making poor quality automobiles and not the manufacturer of the inferior parts.\footnote{This was the argument used in \textit{Pick Manufacturing Co. v. General Motors Corp.}, 80 F2d 641 (1935).} So the tie-in serves to protect the reputation of the tying good manufacturer. A similar explanation is used for the reason tie-ins are employed in franchise businesses.\footnote{For an analysis of the use of tying arrangements in franchise settings, see Klein and Saft (1985).} Here the tie-in is needed in order to prevent free riding on the reputation of the franchise tradename. Poor quality goods can be sold and the harm will be borne by the franchise name, not just the individual store who sold the low quality goods. A tying arrangement is needed in order to insure that the franchisee has the same incentives to provide high quality goods as the franchisor.

A concern in any case dealing with goodwill protection is the use of less restrictive alternatives. Namely, if the goodwill of a firm can be protected without having to resort
to the use of tie-ins, then it would appear to be preferable to use these alternative devices. For example, the issuing of minimum specifications for items to be used with a certain type of machinery can substitute for the use of a tie-in and still protect the reputation of the machine manufacturer. Thus it is important to draw a distinction between situations in which less restrictive alternatives may be preferable to the use of tying arrangements. But this brings up a secondary issue. Just because there exists a less restrictive alternative, it does not mean that it is costless to enforce. For example, a firm can issue a list of specifications that must be followed, but then it must send people out to inspect to make sure that the specifications are being followed. It may, in fact, be more cost effective for the firm to use a tying arrangement in this circumstance, in spite of the fact that there exists a less restrictive alternative.

Thus, tying for goodwill purposes can be seen a valid reason for employing tying arrangements. Less restrictive methods may be available, but may be more costly to the seller to impose. Tying, then, becomes the obvious choice for the seller to employ as a low-cost method of goodwill protection. Leverage would not be a concern in this situation since the seller seeks to use tying as a procompetitive device and expand output, not as an anticompetitive device to restrict output.

II.3 Recent Treatments of Leverage

Whinston (1990) reexamines the leverage hypothesis in models that have scale economies in the tied good production, not the usual competitive, constant-returns-to-
Thus, the structure of the tied good market in Whinston's analysis is oligopolistic. His view of tying is that it can serve as a strategic device which can allow the monopolist to alter the market structure of the tied good through foreclosure. This foreclosure is achieved by the monopolist's precommitment to using tying from the beginning. For example, a computer firm may market devices that are not compatible with any other maker's peripherals. This foreclosure allows the monopolist to lower sales in the tied good market of its rivals and ultimately drive them from the market. The monopolist is able, through its precommitment to bundle, to charge a lower price for the tied good (this price is a fictitious price since the monopolist is using a bundling strategy) than in the no bundling strategy. Thus the monopolist is able to take sales away from its rivals in the tied good market and lower its rival's profits until they eventually find it unprofitable to stay in the market.

Whinston offers us an interesting theoretical possibility. An examination of the data in the cases studied shows some inconsistency with his predictions. In Whinston's models, the monopolist forecloses rivals in the tied good market by making their sales fall, presumably due to the lower (fictitious) price it charges. But in most tying cases, the plaintiffs do not claim that the price charged for the tied good is too low, but that the

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38 See Whinston (1990), p. 839.

price is too high compared to some market price. Thus, the empirical evidence is not consistent with the theory’s prediction.

Whinston's main assumption involves the structure of the tied good market. He assumes that the market is oligopolistic and he uses this to derive his results. But again, an examination of the goods used as tied goods, in the cases studied, shows that the majority of these goods would not be considered as coming from oligopolist markets. Exceptions to this include examples where the tied good is patented or is the trademarked good of a firm. Any market power here, however, does not derive from scale economies in tied good production, but from the lawful grant of a patent or a trademark. In addition, patents and trademarks do not necessarily imply any market power at all. Since scale economies in the tied good, and the resulting oligopolistic market structure, are main assumptions, failure to observe a significant number of instances that fit this assumption brings into doubt the empirical reality of Whinston's conclusions concerning leverage.

Mathewson and Winter (1991) argue that tying can result in leverage under certain conditions. They observe that consumer surplus would still exist at even the monopoly price. The monopolist could then use the threat of losing this surplus to induce customers into accepting a tying contract. Namely, if the consumer surplus from the tying product is high enough, it can be used as a "hostage" to get the customer to take the tied product resulting in leverage taking place.
While it is true that consumer surplus can still exist at a monopoly price, there is no reason to believe that leverage is taking place in the tied good market. The use of a tying contract in this instance is an attempt to capture rents that cannot be captured through the price of the tying good alone. The power associated with the original monopoly has not been transferred into any other market to gain a second monopoly. The firm is using its monopoly power to gain access to these previously unattainable rents. Rents that exist due to the original monopoly. Thus, we conclude that no leverage is taking place, just an attempt to capture rents associated with the original monopoly in the tying good.

Kaplow (1985) contends that the criticisms levied against the leverage theory are flawed and do little to discredit the theory. He claims that the critics belief that monopoly power carries with it a fixed amount of power and we should thus be indifferent as to how it is used is not correct. He faults the critics for relying on a price discrimination explanation for tying, noting that price discrimination is itself illegal under the Robinson-Patman Act. He continues by arguing that the use of static models to explain the concept of leverage, and its shortcomings, is not correct since the effects of tying are meant to accrue in the future. So the appropriate model should be a dynamic one to account for this. Also, Kaplow is critical of how easily the alternative explanations rule out the use of less restrictive alternatives to tying. He notes that price discrimination may be achieved by means other than tying arrangements. Basically,
Kaplow is critical of the alternative theories due to their shortcomings in explaining tying any better than the traditional leverage approach.

While Kaplow's analysis of the alternative theories of tying is certainly interesting, he serves to further add to the confusion. His article does not allow one to conclude whether tying is better explained by leverage, by an alternative theory, or whether all existing theories are inadequate. It only serves the purpose of adding (or keeping) leverage as just another attempt at explaining tying arrangements. He offers no substantive reasons on why the leverage theory is better than other theories whereas the alternative theories often give reasons to support why they should be preferred to a leverage explanation. Thus, Kaplow's paper, by pointing out the problems of the alternative theories while at the same time not offering reasons on why the leverage theory is better, shows us that there is real need for an empirical study on tying arrangements. This would allow the debate over which theory best explains the use of tying arrangements to be answered.

II.4 The Treatment of Tying Arrangements by the Courts

The early tying cases all involved patented goods and were decided under patent laws. Generally, the courts treated the tie-in as a legal method of restriction that was within the bounds of the initial patent monopoly grant. In *Henry v. A.B. Dick* \textsuperscript{41}, the

Supreme Court held that A.B. Dick’s policy of selling its mimeograph machine (a patented good) under the condition that the buyer also purchase A.B. Dick’s ink and stencils was within the scope of the patent. This view was not without its critics. In his dissent in the A.B. Dick case, Chief Justice White viewed a tying arrangement as a method whereby “... a patentee in selling the machine covered by his patent has power by contract to extend the patent so as to cause it to embrace things which it does not include.” 42 This is clearly the leverage view of tying that manifests itself a few years later in the Motion Picture Patents case. 43

The Motion Picture Patents case involved a situation where a manufacturer of a patented motion picture projectors had required that films shown on its projector must be licensed by the manufacturer of the projector. The Supreme Court adopted the leverage theory, expounded by White in his A. B. Dick dissent, in overruling A.B. Dick. Tying became prohibited as a means of limiting the use of a patented good. The courts continued to reemphasize the belief that tying was a monopoly extending device over the next three decades. 44

41 224 US 1 (1912).
42 224 US 1, 51 (1912).
43 Motion Pictures Patents Co. v. Universal Film Manufacturing Co., 243 US 502 (1917).
The courts deviated rarely in their harsh view of tying arrangements.\textsuperscript{45} In FTC \textit{v. Sinclair Refining}\textsuperscript{46}, the court upheld Sinclair's requirement that station owners who leased their storage tanks and pumps only vend Sinclair gasoline from their pumps. The court reasoned that the goodwill of Sinclair could be harmed if station owners were allowed to substitute other brands of gasoline for Sinclair's.\textsuperscript{47}

The \textit{International Salt} case\textsuperscript{48} is generally viewed as the case which extended tying's prohibition into the antitrust arena. Salt would only lease their salt dissolving machines to those who agreed to purchase their salt requirements from Salt. The court did not consider reasons as to why Salt may want to do this, but instead adopted a \textit{per se} prohibition against tying arrangements. The Court stated that, "It is unreasonable, \textit{per se}, to foreclose competitors from any substantial market."\textsuperscript{49} The courts reaffirmed this belief in \textit{per se} illegality in subsequent cases.\textsuperscript{50}

\textit{Northern Pacific Railway v. United States}\textsuperscript{51} extended the \textit{per se} ban on tying to unpatented goods. The case dealt with sales (or leases) of land parcels by Northern

\textsuperscript{45} For an exception, see FTC \textit{v. Gratz, et al.}, 253 US 421 (1920).
\textsuperscript{46} 261 US 463 (1923).
\textsuperscript{47} The station owners were of course free to vend other brands of gasoline so long as they obtained separate storage tanks and pumps.
\textsuperscript{49} \textit{Id.} at 386.
\textsuperscript{51} 356 US 1 (1958).
Pacific and the condition that Northern be given preferential treatment with regard to transporting items of the firms purchasing the land for commercial use. The Supreme Court ruled that Northern’s land holdings were sufficiently unique to give it the requisite economic power needed to fall under the *per se* condemnation. The court stated that tying arrangements “are unreasonable in and of themselves whenever a party has sufficient economic power with respect to the tying product to appreciably restrain free competition in the market for the tied product and a ‘not insubstantial’ amount of interstate commerce is affected.” While the court did say that “proof” must be offered of market power before the *per se* ban was invoked, the court allowed proof based on a good’s uniqueness. This was clearly a very loose requirement for establishing proof of market power.53

In *Paramount Pictures*, the Supreme Court extended the *per se* ban on tying to copyrighted goods. Reasoning that a copyrighted was similar to a patented good, the court took a dim view of Paramount’s requirement that motion picture exhibitors lease films in blocks only. The court saw the arrangement as the tying of one copyrighted film to another. In another block booking case, *U.S. v. Loew’s*, the court reaffirmed its

52 Id. at 6.

53 Market power was usually automatically established when the good was patented.


prohibition of the practice stating that "the requisite economic power is presumed the tying product is patented or copyrighted."\textsuperscript{56}

In *Fortner Enterprises v. U.S. Steel (Fortner I)*\textsuperscript{57}, Fortner (a developer) challenged Steel's financing arrangement. In order to encourage developers to purchase its prefabricated homes, Steel offered 100% financing, a rate not generally available from private lenders. Fortner had taken the deal, but was unhappy with the quality of the homes and challenged the arrangement as an illegal tying agreement as an attempt to get out of the bargain and use Steel's financing to purchase homes from other manufacturers. The court concluded that the attractive terms led to customers preferring Steel's credit to other available credit, thus Steel was offering a unique good. Illegal tying could be said to exist in this case, according to the court.\textsuperscript{58} We can see that if illegal tying can be inferred because a subset of customers prefers the goods of one firm over another's, then clearly the ban on tying is virtually limitless.\textsuperscript{59} The *Fortner I* decision made tying a very uncertain practice for a firm to attempt. The Supreme Court cleared up some of the uncertainties of the *Fortner I* decision in its *Fortner II* decision.\textsuperscript{60}

\textsuperscript{56} *Id.* at 45. For an alternative view of the circumstances of the *Loew's* case, see Stigler (1963). For a discussion of block booking, in general, see Kenney and Klein (1983).

\textsuperscript{57} 394 US 495 (1969).

\textsuperscript{58} *Fortner I* was a summary judgment case.

\textsuperscript{59} See Dam (1969) for a discussion of the *Fortner I* decision.

\textsuperscript{60} *Unites States Steel Corp., et al. v. Fortner Enterprises, Inc.*, 429 US 610 (1977).
In its second hearing of the case, the court focused on the market conditions present and on any barriers that might exist in the offering of credit terms. The conclusion was that Steel did not possess market power in the credit market and thus the tie-in was not illegal. This decision cleared the uncertainties with regard to what market power constitutes and directed the courts to look into the actual market conditions of the tying good to determine if any power exists.

In *Hyde*\(^61\), the Supreme Court determined that a thirty percent market share was not enough to invoke the *per se* rule. The case involved an exclusive contract the hospital had with a group of anesthesiologists. The group had to be used whenever any surgery was performed in the hospital. Hyde was an anesthesiologist who desired staff privileges at the hospital and claimed that the contract amounted to illegal tying. The court disagreed. After determining that the hospital's market share was 30%, it declined to invoke the *per se* ban saying that 30% was insufficient evidence of market power.\(^62\)

### II.4.1 Safe Harbors in the *Per Se* Standard

Certain safe harbors have come about within the strict *per se* standard under which tying is adjudicated. As mentioned earlier, the *Sinclair Refining* case\(^63\) showed that

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\(^62\) In *Hyde*, supra note 61, the Supreme Court also narrowed defeated a motion to treat tying under a rule-of-reason analysis.

\(^63\) Supra note 46.
tying can be justified when used to protect the goodwill of a firm. The courts reaffirmed this defense in *Pick Mfg. v. General Motors*. There GM required its dealers to use only certified GM parts in repair work. The court accepted GM's argument that its reputation could be harmed if dealers could substitute non-certified parts. A subsequent failure of the automobile to perform properly could be incorrectly faulted to GM when in fact a defective replacement part was truly at fault. The courts seem to tighten the requirements in later decisions limiting the goodwill defense to cases where less restrictive alternatives were not generally available. As the court stated in the *Standard Stations* case, "the protection of good will of the manufacturer of the tying device fails in the usual situation because specification of the type and quality of the product to be used in conjunction with the tying device in protection enough....The only situation, indeed, in which the protection of good will may necessitate the use of tying clauses is where specifications for a substitute would be so detailed that they could not practically be supplied." It was not, however, impossible to meet the stricter standards. In *Jerrold*, the court determined that Jerrold's selling of an entire television antennae system which included installation and repair service was not illegal tying since

64 80 F2d 641 (1935).

65 The most common example of a less restrictive alternative is the announcing of specifications that must be adhered to in order to deal with the manufacturer, or its dealers.


Jerrold's reputation could be harmed. This was partially due to the fact that the industry was new and reputable service technicians were not yet available privately. However, after sufficient time had lapsed so that there were service people available, the tie-in would no longer be tolerated. In *Dehydrating Process*\(^6\), a tie-in between silos and unloaders was allowed. This was because Smith's unloader would malfunction when used in conjunction with some other manufacturer's silos. The fault, however, did not lie with the unloader, but the silo. The court determined that the tie-in was necessary in order to protect the goodwill of Smith.

**II.4.2 Limitations**

The courts have placed strict limitations when tying arrangements are used to protect goodwill (quality control) in a franchise setting. Franchising began to grow steadily in the 1960's and the 1970's.\(^6\) In order to protect its tradename and for quality control reasons, franchisors would use tie-ins. Generally, the tie-in placed limits on where the franchisee could obtain its supplies.\(^7\) The courts have usually allowed a franchisor to limit the franchisee's sources to a list of approved suppliers. In fact, the courts prefer the franchisor to specify quality by contract.\(^7\) The definitive example of the courts' limitations is in *Dehydrating Process Co. v. A. O. Smith Corp.*, 292 F2d 653 (1961).

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\(^7\) The usual form of the tie-in requires the franchisee to obtain his supplies from the franchisor, or a third-party supplier designated by the franchisor.

\(^7\) See Klein and Saft (1985), p. 347.
harsh view of tying, in this instance, is *Siegel v. Chicken Delight*.\(^\text{72}\) Chicken Delight required its franchisees to purchase cooking equipment, spice mixes, and packaging material from Chicken Delight. The court took particular exception to the package materials tie-in stating, “…there can be no justification for the tie-in of the paper products.”\(^\text{73}\) Not only did the court not accept Chicken Delight’s quality control defense, but the decision in this case became a catalyst that set off an incredible amount of litigation in the franchise area.\(^\text{74}\) The decision clearly changed the relationship between the franchisor and the franchisee in a contractual setting.\(^\text{75}\)

The *Chicken Delight* decision left little room for franchisors to use tie-ins in their franchise contracts without the fear of having it declared unlawful.\(^\text{76}\) While the *per se* standard does require a showing of market power, this threshold does not seem difficult to achieve. The courts have stated that “…it can hardly be denied that the …trademark is distinctive…unique to it and not other fast food chains.”\(^\text{77}\) Market power was deduced by the mere fact that a franchisor had a trademarked item. However, this clearly offers

\(^{72}\) 448 F2d 43 (1971).

\(^{73}\) 311 FSupp 847, 851 (1970).

\(^{74}\) See Klein and Saft (1985), p. 348.


\(^{76}\) There were eleven cases of illegal tying determination by the courts in the decade following the *Chicken Delight* decision. See Appendix D.

\(^{77}\) 448 F2d 43, 50 (1971).
no proof of significant market power. While any franchisor would suffer from the "hold-up" problem with its franchisees, this is in the post-contract market. The actual market which should concern the antitrust authorities is the pre-contract market. We would expect vigorous competition in this market as franchisors compete for franchisee's dollars. This competition keeps franchisors from extracting disadvantageous contract terms from potential franchisees. Thus having a trademark, such as Chicken Delight, does not give the owner any economic power in the relevant market, the franchising market.

II.4.3 Recent Refinements

Recently, the courts have found a loophole in the strict per se standard. One criterion that has to be met before the per se rule is invoked is that two distinct products must exist. Courts that wish to allow tie-ins to exist, but feel bound by the per se standard, have begun to accept the single product defense. The courts hold that the alleged tie-in actually involves only one product. In the franchise context, this means that the courts hold that the trademark and the inputs of the franchise are a single good. The two main cases in this line of thinking are Principe v. McDonald's78 and Krehl v. Baskin-Robbins79. In Principe, a franchisee challenged McDonald's tie-in of a land lease

78 631 F2d 303 (1980).
79 664 F2d 1348 (1982).
(where the restaurant would be located) and the grant of the franchise. The court concluded that the lease agreement was an integral part of the manner in which McDonald's conducts its franchise business and that it could not be separated from the grant of the franchise. In *Krehl*, the court determined that the trademark merely served to identify the source of the ice cream and was not a separate product. Baskin-Robbins had a policy that required its franchisees to purchase their products from a designated source (either Baskin-Robbins or a licensed manufacturer). This loophole has led to a decline in the number of franchise related cases as well as a decline in cases involving relationships between manufacturers and their dealers.\(^8\) This may, however, be a short-lived victory for these parties.

II.4.4 The *Kodak* Case

The most recent tying case to reach the Supreme Court is the *Kodak* case.\(^8\) The case deals with Kodak's decision to implement a policy of not selling copier and micrographic replacement parts to independent service organizations (ISOs). The effect of this policy was that buyers had to either service the machines themselves, or obtain a service contract from Kodak. The ISOs claimed that this was an illegal tying arrangement of service and parts. The Supreme Court believed that this could be true

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\(^8\) See Tables 4 & 5 and Appendix C.

(the case was a summary judgment case) and remanded the case for a trial. The Supreme Court rejected Kodak’s contention that the parts market is merely an aftermarket of the larger market for copiers (and micrographic equipment). Since Kodak controlled only 23% of the copier market, Kodak did not have the requisite market power to restrain competition in an aftermarket. Any attempts, by Kodak, to raise prices in the aftermarkets would be seen as an effective price increase in the machine itself. This would clearly harm Kodak’s competitive position in the copier market, unless it lowered copier prices to compensate for the price increases. This is akin to the interbrand vs. intrabrand competition story which says that we need not worry about intrabrand competition (in this case, competition for Kodak parts/service), so long as there is interbrand competition (competition in copiers). The reason being is that the interbrand provides a check on intrabrand competition.

While the Supreme Court did determine that it was possible to distinguish between the parts market and the service market, we should note that Kodak’s control of the parts market (it had a trivial 100% market share in its own parts) implies that it does not need to control the service market. Machines are repaired using parts (controlled by Kodak) and service, although certain routine service may be done without the need of parts. A large amount of repair work may be characterized as using parts and a specified amount of service. This implies a fixed proportions relationship between parts and

\[\text{In addition, Kodak controlled less than 20\% of the micrographic market. Image Technical Services, et al. v. Eastman Kodak Co., 903 F2d 612, 616 (1990).}\]
service. Under this type scenario, Kodak can extract all of the available rents through its monopoly on the parts.\footnote{This result was recognized by the dissent in the \textit{Kodak} case. See 112 SCt 2072, 2092.} It is a well-known result that you can not get the monopoly rent twice with only one monopoly.\footnote{See, for example, Posner (1976). p 171-174.} Thus, Kodak would not use a tying arrangement in order to extract rents in the service market, since the rents can be fully extracted by charging the correct price in the parts market.

The legacy of the \textit{Kodak} decision has yet to be determined, but it is already considered a harbinger of the end of the antitrust reform which occurred in the 1980’s.\footnote{See Rule (1992) and Brown (1992).} But it is also seen as a narrow ruling that may be just an empty victory for plaintiff’s in tying cases.\footnote{See Wall (1992), Katz and Rosenthal (1992), and Joseph and Altschuler (1992).} Only time will tell which is the true legacy. There is a belief that the Kodak decision will have a significant impact in markets similar to the copier market, that is markets with aftermarkets of parts and service. Examples include the automotive and computer markets. In support of this belief, the Supreme Court recently vacated an appeals court decision, in a computer case, in light of the \textit{Kodak} ruling.\footnote{\textit{Virtual Maintenance v. Prime Computer}, 113 SCt 314 (1992).}

An unseen application of the \textit{Kodak} case may be in the franchise area. I believe that an overlooked aspect of \textit{Kodak} is its relationship to \textit{Chicken Delight}.\footnote{\textit{Supra} note 72.} That is, it
appears that *Kodak* may send the standards used in adjudicated tying cases back the stricter standards of the early 1970's and *Chicken Delight*. The two cases are not that dissimilar. Each involves basically a contract dispute. In *Kodak*, the ISOs took exception to Kodak's policy of restricting the service and repair purchases of the buyers of Kodak machines. In *Chicken Delight*, Siegel took exception with Chicken Delight's policy of not allowing franchisees to buy supplies from whomever they chose. Both cases dealt with aftermarkets, namely the copier aftermarket and the franchise aftermarket. That is, in both cases the courts have chosen to define the relevant tying good market as the intrabrand market for the defendant's own (trademarked) goods instead of the broader interbrand market where competition exists to much larger degree.

The *Kodak* decision may cause courts to reevaluate their more lenient stance on franchise tying as witnessed by the *Principe* and *Krehl* decisions. I believe that a new wave of franchise litigation may be forthcoming on the heels of *Kodak*. Plaintiffs will be asking the courts to define the tying good market as the trademarked goods of the franchisor's. Franchisors will still argue that the trademark is not separate from the alleged tied good(s). However, a broad interpretation of *Kodak* would have the courts view the package not a one good, but as two distinct products. Furthermore, defining the relevant tying good market as the intrabrand market would certainly lead to the tie-in being declared unlawful since in most franchise cases intrabrand market share would
approach 100%. The Kodak case may be a signal that tying litigation may soon be on
the rise.

II.4.5 Kodak and Lock-in

A recent treatment of leverage taken up by the courts centers around a so-called
market imperfection concept known as consumer lock-in (also known more generally as
a hold-up problem). As related to a tying arrangement, the lock-in theory would state
that the buyer is forced into purchasing high priced tied goods due to the high switching
costs involved with changing the tying good. Commentators have argued that buyers
who are aware of such switching costs problem will attempt to make arrangements to
protect themselves from such opportunistic behavior on the part of the seller. Buyers
of goods that will require firm-specific investments are certainly aware of the potential
lock-in problem and can be expected to attempt protective measures to insure against
opportunistic behavior. Examples include writing contracts that limit what the seller can
do in the future and only purchasing from dealers with “good” reputations for fair
dealing implying that the seller would have more to lose from bad faith dealing than
gaining.

See Mozart Co. v. Mercedes-Benz of North America, 833 F2d 1342 (1987) and Digidyne Corp. v.
Data General Corp., 734 F2d 1336 (1984) for recent treatments of lock-in by the courts in addition to

See Klein, Crawford and Alchian (1978).

In the Kodak case, we are told of the problem of switching costs and the lock-in problem.\textsuperscript{92} If these problems were as severe as indicated, then why do we not evidence of the buyers trying to contract around the problem. This lack of evidence either implies that the problem is not that severe, or that the buyers are relying on the reputation of Kodak as a preventative measure.\textsuperscript{93} It is doubtful that the buyers were too naive to know of potential lock-in problems before they purchased the machines from Kodak.

Since lock-in problems will only develop when the problem arises in an unanticipated manner, the question to be addressed is do we want to prevent tie-ins that may result in lock-in?\textsuperscript{94} Since the problem is ultimately a contracting problem, voluntary parties to agreements that may include a tie-in at some point in the agreement should be left to themselves to sort these issues out. The parties know that contracting is inherently incomplete, thus if the parties willingly put themselves at risk to lock-ins, then the antitrust laws should not bail them out of troubles that might arise.\textsuperscript{95} Contract law would appear to be the appropriate outlet for such disagreements. Some authors have suggested this as a possible alternative to using the antitrust laws.\textsuperscript{96}

\textsuperscript{92} Eastman Kodak Co. v. Image Technical Services, Inc., et al., 112 Sct 2072, 2081-2087.

\textsuperscript{93} See Klein (1994), p. 52.

\textsuperscript{94} Lock-in can also arise due to the last period problem. See Klein (1994), p. 56-57.

\textsuperscript{95} See Klein (1994), p. 62.

III.1 Data Collection

The cases that are the basis of this study were found using LEXIS, a computerized legal research tool. LEXIS allows the user to search the text of court decisions for words, or phrases. The database used for the search was all federal courts. Only cases that occurred after the prohibition of tying in the *Motion Pictures* case\(^9\) are included in the case list. A search was performed using the keyword "tying arrangement". The list of cases found was then supplemented by a second search using the word "tying". This additional search was done to account for phrases such as "tying contract" or "tying

\(^9\) *Supra* note 1.
agreement", or simply "illegal tying". This yielded a working sample of approximately 1000 cases.

Certain types of cases were eliminated. Any case involving a bank, or other thrift institution brought under the Bank Holding Company Act was eliminated due to the differing regulations placed on these firms by this act. Also, cases involving insurance companies were deleted if the case fell under the McCarran-Ferguson Act. The remaining cases were read to determine their relevance to the study. All appeals of a lower court decision were combined into one case. Any case remanded for trial, or a case in which a final decision was not made (such as denial of summary judgment) was deleted. These 347 cases are listed in Appendix A. The cases are listed based on the highest level that each case reached in the federal court system. If a case was appealed, then cites to the lower court opinion (if available) are listed after the initial cite.

The Federal Trade Commission (FTC) cases used in this study were found mainly by using the index in FTC Decisions, a publication of the opinions of the FTC. In the index, the entry "tying contract" or "dealing on an exclusive or tying basis" was used to

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98 A search on the phrase "tie-in" was included, but it is rarely used by the courts without also using the phrase "tying" also. A search on "tie-in" yielded no new cases.

99 It should be noted that some of these cases are appeals opinions of a case, thus the sample should not be considered as 1000 separate cases.


102 *Per curiam* and *cert. denied* citations have been omitted.
find cases that might be applicable. The cases found via this search were then read to
determine if it was a tying case, or not. Since the FTC Decisions publication was only
available through 1989, LEXIS was used to find current FTC cases involving tying.\textsuperscript{103}
The list of relevant FTC cases for the study appears in Appendix A.\textsuperscript{104} These 60
additional cases bring the total for the study to 407 cases.

The cases were read and catalogued in order to do the analyses of Chapters IV and
V. In order to examine the competing theories of tying, the cases have been divided into
group classifications based on which of the competing theories best explains the case.
The case cites and appropriate classifications appear in Appendix B. The analysis of this
appears in Chapter IV. In order to analyze the changing patterns and evolving standards
of tying cases over time, the cases have been divided into five categories. These
categories and respective case cites appear in Appendix C. The analysis appears in
Chapter V. Finally, all court determined cases of illegal tying have been listed in
Appendix D. The cases here are listed by the same method used in Appendix A.

III.2 The Implications of the Selection Hypothesis

Since tying is illegal under the antitrust laws, attempts to study the incidence of tying
are limited to an examination of the litigated cases. This, however, leads to the problem

\textsuperscript{103} LEXIS was not used exclusively for the FTC cases because only decisions after 1950 are available on
LEXIS.

\textsuperscript{104} Note that if an FTC decision was appealed to the federal courts, then the case would be listed under
the appropriate federal court listing.
of selection. The "selection hypothesis" tells us that since litigation is not a random process, an examination of only the litigated cases needs to be done carefully so as to account for any possible biases that may occur in looking at such a sample.\textsuperscript{105} My discussion of selection follows closely that of Ippolito (1991). Ippolito's analysis of the selection hypothesis deals with its implications for resale price maintenance (RPM). Since both RPM and tying are adjudicated under a \textit{per se} standard, we should expect similar predictions from the selection hypothesis.

An examination of Appendix C, or Table 3 reveals that there are 313 non-governmental cases. These 313 non-governmental tying cases have the following characteristics. Tying can be said to be adjudicated based on a \textit{per se} standard. The defendants can be said to have more to lose than the plaintiffs in a tying case. That is, the litigation stakes are asymmetric. Since tying is a type of vertical restraint, a manufacturer who is found guilty of illegal tying will often be forced to change its method doing business with its entire network of dealers. The dealer usually gains the right to purchase the heretofore tied good from whomever he chooses.\textsuperscript{106} The "savings" to the dealer - if any - will certainly be less than the costs to the manufacturer who must revamp its entire distribution network. Since there is a well-established antitrust bar and tying is adjudicated under a \textit{per se} rule, we can assume symmetric litigation costs and a


\textsuperscript{106} The plaintiff would get monetary damages as well.
symmetric predictive error with regard to the outcome of the case. The uncertainty of the case, from a legal point of view is whether the practice used will be judged to be illegal tying, i.e. does it exceed the liability standard.

The characteristics allow tying to fit into the framework of the Priest-Klein selection analysis. Given the above, the selection hypothesis predicts that the success rate will be low for plaintiffs in litigated cases (significantly less than 50%). The settlement rate will be high for challenged practices. And as a result, in litigated cases, the challenged practices will be tangentially related to the standard definition of tying.

Figure 1 illustrates the predictions of the Priest-Klein selection theory under the premise of asymmetric stakes, where the defendant has more to lose than the plaintiff. In Figure 1, an hypothesized population of disputed tying-type practices that might be challenged on tying grounds is arrayed according to the (true) strength of the legal case. The selection theory implies that practices that are clearly not tying are not likely to be challenged and those that are clearly tying are more likely to be challenged but settled without litigation. In the asymmetric stakes scenario, the litigated cases fall between the two extremes and should fall disproportionately into the relatively weak portion of the


110 Figure 1 and the analysis that follows is taken from Ippolito (1991), p. 271-272 and has been altered only to reflect that my discussion deals with tying cases and Ippolito's with resale price maintenance.
FIGURE 1

Illustration of the Selection Hypothesis Predictions
distribution, since most stronger cases are settled. As a result, the litigated cases that exceed the legal standard of liability will constitute less than 50% of the litigated population.\footnote{If the stakes were symmetric, then the theory predicts that the litigated cases would be centered around the legal standard itself and would tend to generate approximately a 50% success rate. See Ippolito, p. 271-272.}

In the 313 non-governmental cases studied, plaintiffs were successful in only 51 of these cases.\footnote{See Table 5.} This is a success rate of 16.3%. A chi-square test shows that this is a highly significant deviation from a 50% success rate that is predicted by the Priest-Klein theory in symmetric stakes cases.\footnote{The test statistic is 142.24. See Mendenhall, Schaeffer and Wackerly (1986), p. 577-582.} This result is consistent with the first prediction of the selection hypothesis.

While data on the settlement rates for tying cases during the period studied are not available, there are past studies that have examined settlement rates in a variety of circumstances. Salop & White (1986) report a settlement rate of 72.2% for tying or exclusively dealing cases in the period from 1973 to 1983.\footnote{Salop & White (1986), p. 1045. Salop & White examined data from five federal districts for the years noted. The number quoted in the text is based on a narrow definition of settlement that includes dismissals in judgments for the defendants.. A broader definition of settlement that includes dismissals in settlements yields a settlement rate of 87.7% for tying and exclusive dealing.} Perloff & Rubinfeld (1988) found a settlement rate of 84.48% for tying.\footnote{See Perloff & Rubinfeld (1988), p. 165. Perloff & Rubinfeld use a modified version of the data used by Salop & White (1986).} Baxter found settlement rate of 81.7% in
all private antitrust cases over the period 1964 to 1970.\textsuperscript{116} These studies lend support to the theory that settlement rates are high for tying disputes. The second prediction of the selection hypothesis appears to be consistent with tying disputes/litigation.

The third prediction of the selection theory, that challenged practices will be tangentially related to the standard definition of tying, must be approached with care. I do not claim to have the expertise necessary to pass judgment on the legal merits of the 313 private cases. Following Ippolito (1991), I have listed numerous characteristics that, if present in a tying case, would cast sufficient doubt on the merits of the tying claim made. These are presented in Table 1 along with the number of cases that apply to each characteristic listed. A listing of the case cites that applies to each category is contained in Appendix E.

Since the \textit{per se} standard is invoked after checking to see if certain conditions are met, the lack of any one of these conditions casts doubt on the strength of the plaintiff's claim.\textsuperscript{117} We see from Table 1 that no market power, no separate products and insufficient commerce account for 120 cases of the 313 non-governmental cases. A fourth condition, coercion, is an element that many circuits adopt as an additional condition to the above three when adjudicating tying. The belief is that the plaintiff who


\textsuperscript{117} The conditions are that there must be two separate products which are tied together, there must exist market power in the tying good market in order to restrain competition in the tied good market and that there must be a not insubstantial amount of commerce involved. See \textit{Digidyne Corp. v. Data General Corp.}, 734 F2d 1336, 1338 (1984).
voluntarily enters into an agreement without being coaxed into it has no basis to state a claim. Forty-one cases meet this criteria of no coercion present.

Other less common practices also cast doubt on a plaintiff's tying claim. Third party tying involves situations where the defendant has allegedly conditioned the purchase the purchase of the tying good to the purchase of the tied good from some third party, in which the defendant has no economic interest.\textsuperscript{118} In \textit{Diversified Packaging},\textsuperscript{119} Kentucky Fried Chicken (KFC) KFC required its franchisees to purchase their supplies from third-party sources approved by KFC. KFC's interest was in providing high-quality inputs to its franchisees and to keep its franchisees from attempting to purchase low-quality inputs and pass on poor quality food to its customers and thereby harm the reputation of KFC. If securing a second monopoly, i.e. leverage, is the goal of the tie-in, then this is certainly a poor method of achieving the goal. The reason for the tie-in will lie outside the realm of leverage and the presence of third-party tying should be a signal to the courts that the tying claim is meritless.

The tied good monopolist characteristic refers to cases where the firm involved already has a monopoly in the tied good, as well as the tying good. In the case of NFL franchises, the alleged tie is between pre-season and regular season tickets. Since the NFL franchises are monopolies in both markets there could be no foreclosure or

\textsuperscript{118} The defendant is not a residual claimant in the third party.

\textsuperscript{119} \textit{Kentucky Fried Chicken Corp. v. Diversified Packaging Corp., et al.}, \textit{549 F2d 368} (1977).
leverage, since there are no other firms to foreclose.\textsuperscript{120} In Coniglio \textit{v. Highwood Services},\textsuperscript{121} the Buffalo Bills required that season ticket holders had to purchase pre-season tickets as a condition upon being granted their regular season tickets. It is clear that leverage is not the goal in this situation since the Bills face no competition in the football ticket market in Buffalo. So there are no firms that can be harmed from foreclosure.\textsuperscript{122} Leverage is of no concern here since there is no second monopoly that can be achieved through tying.

A tie-in sale can take the form of a package sale. This package sale is just another option of purchasing two otherwise separate goods. When the package is not the only available method of purchasing the two goods and when the package is not priced so that it induces all buyers to prefer the package, then we have a situation when the tie-in is just a method of competition.\textsuperscript{123} The goal of the package is to offer to more options to the consumer, not restrict the consumer and attempt leverage.

Some cases involve situations where the plaintiff has not correctly stated a potential violation of the relevant antitrust statues. Usually, this involves the plaintiff not being a

\textsuperscript{120} Both New York and Los Angeles each have two NFL franchises, but it is doubtful whether the fans view these teams as perfect substitutes for each other.

\textsuperscript{121} 495 F2d 1286 (1974)


\textsuperscript{123} If the package is priced such that it induces all customers to purchase the package, then we may have coercion present. An exception to the previous would be a situation in which joint production economies existed.
player in the tied good market, the market of harm via leverage. Cases of this type certainly raise questions and suspicions about the strength of the tying claim. In a more general context, cases in this category would have the following scenario. The firm claiming the illegal arrangement would not actually be a competitor, or otherwise relate to the tie-in in any manner whatsoever, of the firm doing the alleged tying.\(^{124}\) So the firm claiming the illegal tying is in no position to be harmed by the acts they have alleged against the other firm. No harm to competition must be taking place by the arrangement, with respect to the two firms involved in the case. As an example consider *Levitch v. CBS.*\(^{125}\) In this case, Levitch, an independent film/documentary producer claimed illegal tying by CBS. The claim involved the news stories broadcasted to CBS affiliates. Since Levitch was not involved in the production of news stories for news broadcast, he was in no position to be harmed by any type of restriction in that market.

Eight cases can be classified in a block booking scenario.\(^{126}\) The goal of booking is often scene as an efficient method of copyright protection. As an example of this type of case consider *F.E.L. Publications v. Catholic Bishop of Chicago.*\(^{127}\) In this case the archdiocese had desired to publish and distribute a book of hymns. F.E.L. owned the

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\(^{125}\) 495 FSupp 649 (1980).

\(^{126}\) This also includes cases of copyright infringement. See Kenney & Klein (1983) for a complete analysis of block booking.

\(^{127}\) 1982-1 Trade Cases (CCH) P64,632.
copyright on a number of hymns and would only blanket license the entire set, not just the individual hymns the archdiocese desired. We should view this case not as an attempt by F.E.L. to leverage power of copyrighted music, but as an attempt to better enforce copyrights. By dealing in bulk sales, F.E.L. is able to lower the transactions costs associated with licensing. To seek out the individual owners of the copyrights and contract with them could be prohibitively costly. Block booking also eliminates the need to determine an individual price for each piece of music that is to be licensed. This could prove difficult to determine correctly for each individual item involved. Block booking allows the price charged to be an average price, something that would be easier to determine.\(^{128}\) So the blanket license is not viewed as restrictive, but a necessary method of allocating goods to insure the proper protection of the owner's property rights.

The *Colgate* doctrine allows firms to unilaterally determine with whom they will deal.\(^ {129}\) That is, as long as the firm is acting unilaterally in its restrictions, then the restrictions should not be considered conspiratorial in nature. It was stated by the Court as, "... the act does not restrict the long recognized right of trader or manufacturer engaged in an entirely private business, freely to exercise his own independent discretion


as to parties with whom he will deal; and, of course, he may announce in advance the circumstances under which he will refuse to sell.\textsuperscript{130}

We see that 232 of the 313 non-governmental cases (74.1\%) meet at least one of the characteristics listed in Table 1. While these characteristics do not insure with certainty that illegal tying does not exist, they certainly are suggestive of weaknesses in the plaintiff's tying claim. The large percentage of cases meeting these characteristics gives us evidence that litigated cases are generally weak. This evidence, along with the high settlement figures and low plaintiff success rates given earlier, shows us that non-governmental tying litigation is consistent with the prediction of the Priest-Klein selection hypothesis under asymmetric stakes.

The government tying cases do not easily fit the selection hypothesis implications. The number of cases involved is less than one-third that of the non-governmental case sample so we do have a problem in that the sample of cases is somewhat small. Also, the reasons the government institutes a case might, in general, differ from the reasons of a non-governmental plaintiff.\textsuperscript{131} However, we should not observe the government engaging in what would be considered dubious litigation in tying cases. A success rate of 87.2\%, in litigated cases, lends support to this viewpoint.

\textsuperscript{130} Id. at 307.

\textsuperscript{131} See Posner (1972) for a theory of government behavior in this regard.
The analysis above shows that tying is consistent with the Priest-Klein arguments concerning selection. Thus, litigated cases do not provide us with a random sample of all tying instances. In particular, we are drawing upon a sample with asymmetric stakes whereby the defendant has more to lose than the plaintiff. A result of this was that the litigated cases are determined in favor of the defendant a large majority of the time. A question that arises is what conclusions can we make based on the sample of litigated cases that we have to work with.

The Priest-Klein selection theory tells us that with symmetric stakes for the parties involved, the success rate for plaintiffs is approximately 50%. With asymmetric stakes, as we have in tying, the litigated cases are drawn from a scenario where the success rate for plaintiffs will be much lower than 50%. In each of the two situations described above, a boundary between what practices can be successfully challenged by plaintiffs is determined. In the symmetric stakes situation, this boundary is just the legal standard of liability used for the situation being described. In tying cases, we observe that the litigated cases and the resulting success rate by plaintiffs, in these cases, form the boundary around what will be considered illegal tying by the courts, that is the liability standard used in tying cases. Since the standard used for tying is a per se rule, an analysis of the litigated tying cases should give us valid estimates of the types of tying that is deterred on the margin by the per se rule.132

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The leverage theory is the basis of the court's *per se* rule against tying. An examination of the litigated cases will tell us what types of cases are deterred (on the margin) by the rule. If the leverage theory is good policy, then we would expect most of the litigated cases to be explained by the leverage theory. In addition, we can examine movements in judicial standards over time. If the leverage theory is not good policy, then we would not observe many litigated cases being explained by leverage. If the courts were to tighten the legal standard used, for example, to adjudicate tying cases, then we would expect even fewer cases to be explained by the leverage theory. This is because the deterrence effect, at the margin, is to deter more non-leverage instances of tying since leverage was not explaining many cases to begin with.
**TABLE 1**

**Characteristics of Non-Governmental Tying Claims**

<table>
<thead>
<tr>
<th>Characteristics</th>
<th>Number of Cases</th>
</tr>
</thead>
<tbody>
<tr>
<td>No Market Power in the Tying Good</td>
<td>56</td>
</tr>
<tr>
<td>No Separate Products Present</td>
<td>54</td>
</tr>
<tr>
<td>No Coercion Present</td>
<td>41</td>
</tr>
<tr>
<td>Third Party Tying</td>
<td>22</td>
</tr>
<tr>
<td>Tied Good Monopolist</td>
<td>15</td>
</tr>
<tr>
<td>Allowed Increased Competition</td>
<td>12</td>
</tr>
<tr>
<td>Insufficient Commerce Involved</td>
<td>10</td>
</tr>
<tr>
<td>Not a Valid Claim</td>
<td>8</td>
</tr>
<tr>
<td>Block Booking/Infringement</td>
<td>8</td>
</tr>
<tr>
<td>Unilateral Tying/Refusal to Deal</td>
<td>6</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>232</strong></td>
</tr>
</tbody>
</table>

Source: Appendix E

*Some cases may have more than one characteristic present.*
Definitions

No Market Power:
Cases in this category have defendants with less than 30% market share in the tying good.

No Separate Products:
Distinct demands for the tying and tied goods are not present in the case. In these cases, the tied good is useless without the tying good.

No Coercion:
The plaintiff is unable to show an express contractual agreement which would determine that a tie-in formally exists. There is no evidence that the plaintiff was forced to enter into the contract against his will.

Third Party:
The defendant does not sell the tied good, but instead requires it to be purchased from a third party vendor. The defendant is not the owner, or partial owner, of the third party vendor.

Tied Good Monopolist:
The defendant has complete ex ante monopoly control over the tied good.

Allowed Increased Competition:
The tie-in is in the form of a package sale. The package, however, is not the only available option to buyers. The tying and tied goods remain available separately as well.

Insufficient Commerce:
There must a de minimus amount of commerce involved in the tying agreement. This amount is determined by the court.

Not a Valid Claim:
The tied good was not determined to be subject to the antitrust laws, or the plaintiff is not in a position to be a victim of illegal tying by the defendant (as determined by Section 4 of the Clayton Act, see Sullivan (1977), p. 770-777).
TABLE 1
(continued)

Block Booking/Infringement:
The defendant is using block booking as a licensing method of copyrighted material. The case involves a claim of copyright infringement.

Unilateral Tying/Refusal to Deal:
The tie was imposed on one firm only, or the defendant simply refused to deal with the plaintiff on a unilateral basis, i.e. not part of a boycott. The defendant offers the defense, or the court determines, that the tie-in falls under the Colgate doctrine.
IV.1 Leverage vs. Nonleverage

We will now examine the litigated cases to determine if the leverage theory is capable of explaining the facts of the litigated cases. The goal here is to see if the court's belief in leverage as the reason behind a firm's use of tying is a misplaced belief. The analysis is conducted by examining the facts presented in the case opinions and determining whether these facts are consistent with the court's leverage theory, or instead with some nonleverage based theory. The nonleverage theories are the alternative theories of tying previously discussed. Table 2 provides a decade breakdown of the number of cases that apply to the leverage theory and nonleverage theories, as well as including the number of court determined instances of illegal tying that fall under each category. Appendix B provides a list of the case cites for the leverage theory and each of the (alternative) nonleverage based theories.
The nonleverage based theories, or alternative theories, of tying are metering, non-metering price discrimination, protection of goodwill, evasion of a price regulation, prevention of input substitution, cartel enforcement, risk sharing and joint production economies. These theories apply to a case if the case exhibits characteristics that would lead one to conclude that the basis for the tie-in was for the achievement of the theory's purpose. If a case had any of these characteristics present, then the case was placed into the nonleverage category. The characteristics of the nonleverage theories are described below.

Metering allows the firm employing the tie-in to determine the amount of usage of a good. In a metering case, the tied good is used in conjunction with the tying good and the amount of the tied good used would serve as a counting device. This allows the firm to determine the usage intensity of the tying good. Furthermore, the tied good would not reflect upon the reputation of the firm using the tying arrangement. Thus, the tied good does not reflect on the goodwill of the firm.

Requirements to purchase goods from the defendant that are complementary to the tying good, but would not function as an adequate metering device are the characteristics of the non-metering price discrimination theory. So as to distinguish this type of situation from a metering one, evidence of the lack of the tied good's metering ability would be given in the facts of the case. A common example of a type of case that would fit into this theory is a block booking scenario.
Protection of goodwill deals with the reputation of the firm for providing high quality goods and taking measures to insure that this takes place. In these types of situations the tied good is used in combination with the tying good to produce another good. If substandard tied goods are used in combination with the tying good, then the firm may suffer harm. The facts of the case will present evidence of the possible reputational harm that could come about without the tie-in. Circumstances where the tie-in is used to prevent the plaintiff from purchasing the tied good from sources other than the defendant, or an approved source, are types of scenarios that would apply in this situation. Note that this differs from a metering scenario in that the goods used for metering purposes do not reflect on the firm's reputation.

The tying good is under a maximum price regulation in the evasion of a price regulation theory. However, the tied good is (price) unregulated. Thus, the tying arrangement becomes a method whereby the firm can avoid the price ceiling.

In the prevention of input substitution theory, the goal of the tie-in is remove pricing distortions caused by a monopoly input supplier. In cases that would apply to this theory, both the tying and tied goods would be inputs sold to a downstream firm with the tying good being sold by a monopolist.

In the cartel enforcement theory, the tying arrangement is accompanied by a most favored customer clause written into the contract for purchases of the tied good. Thus, any attempts at cheating on the cartel price will be caught by other members of the cartel.
The risk sharing theory involves situations where the use of tying allows the firm to lower uncertainty to its customers. Examples include, reciprocal dealing agreements whereby the defendant guarantees a price and a market for a good in exchange for the right to sell another good to the party involved. Or, a leasing arrangement (for the tying good) where demand for the tied good is seasonal. In this type of example, we would observe evidence of the seasonal nature of the tied good in the facts of the case.

In the joint production economies theory, the package of the tying and the tied goods can be produced for an amount less than the two goods could be produced independently. The facts of the case would present evidence of these joint production economies.

In addition to the nonleverage theories given above, there is one more instance in which leverage does not take place. This is the situation where there is no tying arrangement to begin with. There is no evidence presented that the purchase of the tied good is required in order to receive the tying good. Or, it could be the case that there are not simply two goods present in the case, i.e. there is not a tying good and a tied good present. Lastly, it could be that the tying claim stated by the defendants was determined to be invalid by reasons stated by the courts. These are situations in which leverage is not taking place, but would not be captured by the above nonleverage based theories due to the circumstances described.

Leverage can be described as occurring under the following conditions. The firm has substantial market power in a relevantly defined tying good market so as to foreclose
competition in the tied good market. There exists separate and distinct demands for the tying good and the tied good. A not insubstantial amount of commerce is involved in the tie-in. Finally, the goal of the tie-in is the attainment of market power in the tied good, thus none of the nonleverage based arguments for tying should apply to the facts of the case.

The results of the analysis given in Table 2 are quite revealing. We see that the leverage provides a poor explanation for the facts of the litigated cases. Only 4.2% of the litigated cases exhibited leverage characteristics. The remaining 95.8% of the litigated cases exhibited nonleverage characteristics. The courts' belief in leverage as the explanation for tying seems to be misplaced. From Table 2, we see that nonleverage instances of tying comprise 88% of the total number of all court determined instances of illegal tying. In addition, 30% of all nonleverage instances of tying were determined to be illegal by the courts. These results tell us that the per se prohibition of tying is clearly too extreme. Based on the implications of the selection theory and the results of Table 2, the per se standard deters more nonleverage uses of tying than leverage uses. A less stringent standard, such as a rule-of-reason standard, would cause a reduction in the deterrence of the nonleverage uses of tying. This would allow beneficial instances of tying to occur without the fear of the practice being prohibited by the courts based on a per se standard.
### TABLE 2

Decade Breakdown of Tying Cases, Leverage vs. Nonleverage Theories

<table>
<thead>
<tr>
<th>Year</th>
<th>Nonleverage</th>
<th>Leverage</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1920's</td>
<td>12 (92.3)</td>
<td>1 (7.7)</td>
<td>13</td>
</tr>
<tr>
<td>1930's</td>
<td>6 (75)</td>
<td>2 (25)</td>
<td>8</td>
</tr>
<tr>
<td>1940's</td>
<td>33 (94.3)</td>
<td>2 (5.7)</td>
<td>35</td>
</tr>
<tr>
<td>1950's</td>
<td>17 (89.5)</td>
<td>2 (10.5)</td>
<td>19</td>
</tr>
<tr>
<td>1960's</td>
<td>31 (93.9)</td>
<td>2 (6.1)</td>
<td>33</td>
</tr>
<tr>
<td>1970's</td>
<td>97 (97)</td>
<td>3 (3)</td>
<td>100</td>
</tr>
<tr>
<td>1980's</td>
<td>164 (97.6)</td>
<td>4 (2.4)</td>
<td>168</td>
</tr>
</tbody>
</table>

* The 1920’s includes cases back to 1917 and the 1990’s includes cases through June 30, 1992.
TABLE 2  
(continued)

<table>
<thead>
<tr>
<th>Year</th>
<th>Nonleverage</th>
<th>Leverage</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1990's</td>
<td>30 (96.8)</td>
<td>1 (3.2)</td>
<td>31</td>
</tr>
<tr>
<td>Totals</td>
<td>390 (95.8)</td>
<td>17 (4.2)</td>
<td>407</td>
</tr>
<tr>
<td>Illegal Tying Cases (% of total illegal tying cases)</td>
<td>117 (88)</td>
<td>16 (12)</td>
<td>133</td>
</tr>
<tr>
<td>Illegal Tying Cases (% of total cases in category)</td>
<td>117 (30)</td>
<td>16 (94.1)</td>
<td>133</td>
</tr>
</tbody>
</table>

Notes: Percentages are given in parenthesis.

Source: LEXIS. Appendix B. Appendix D. Cases classified as leverage of nonleverage according to classifications on p.65-69.
IV.2 Leverage vs. Alternative Theories

The object of this subsection is to examine the litigated cases of tying to determine which of the competing theories of tying, including leverage, best explains the litigated cases. Recall that the alternative theories to leverage are metering, non-metering price discrimination, protection of goodwill, evasion of price regulation, prevention of input substitution, cartel enforcement, risk sharing and joint economies. Table 3 provides a decade breakdown of the cases by each theory. In addition, Appendix B contains a list of the case cites for each theory listed in Table 3.

An interesting feature of Table 3 is that nearly 50% of the cases (201 out of 407) were unable to be associated with any of the competing theories of tying due to the lack of the existence of a tying arrangement to begin with. The competing theories seek to explain why firms employ tying arrangements. This presupposes the fact that a tying arrangement already exists. What if a tie-in does not exist in the case? How can we classify which theory applies when there is no tying arrangement to attempt to classify. Therefore, I have introduced the category "No Tying" as an outlet for these situations. Note that this is a prediction of the selection hypothesis, i.e. that a disproportionate amount of the litigated cases will only be tangentially related to the standard definition of tying.\textsuperscript{133} It is then not surprising that this category is needed.

\textsuperscript{133} See supra notes 109-130 and accompanying text. See Table 1. In addition, see Ippolito (1991), p. 271.
As an example of how a case would get classified in the no tying category consider the following case, *CIA Petrolera Caribe v. Avis Rental Car.* Caribe's claim was that Avis engaged in illegal tying by forcing its customers to purchase gasoline from Avis, who purchased their supply of gasoline from one of Caribe's competitors. However, Avis did no such thing. The renter has the option of filling the car's gasoline tank before its return and does not have to purchase gasoline from Avis. This is clearly stated in the rental contract. The renter only pays for gasoline from Avis when the car is returned without a full gasoline tank (most cars are rented with full tanks). The key here is that the renter chooses from whom to purchase gasoline and is not forced to take any item against his will. We see in a case such as this there is clearly no evidence of tying whatsoever. It would be difficult, i.e. impossible, to place a case like this into one of the competing theories of tying when no tie-in has taken place. The need therefore exists for the no tying category to deal with cases such as the above.

Among the competing theories of tying, protection of goodwill (goodwill) provides an explanation for the most cases, 22.1% of the total. The goodwill category is

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134 735 F2d 636 (1984). The case included Hertz and National Rental Car as defendants as well. All defendants are simply referred to as Avis in the analysis.

135 Avis' rental agreement states, in part, that "if ... the vehicle is returned with less gasoline than when rented, an additional charge to compensate Lessor (Avis) for such deficiency ..." See 576 FSupp 1011, 1014 (1983). There is no requirement to purchase gasoline from Avis.

136 An interesting sidebar to this case is that the vice-president of Caribe, Felipe Lopez, testified that he had recently rented a car from Avis and was aware of the fact that he did not have to purchase gasoline from Avis as a condition of renting the car. See 735 F2d 636, 638 (1984).
dominated by franchise related cases. Franchisors can be the victim of free riding by its franchisees, who may attempt to substitute low quality goods in order to gain short-term rents. However, the franchisor will suffer long-term reputational harm from this behavior and will take steps to prevent this free riding. A tie-in is used whereby the franchisor limits the suppliers with which the franchisee may deal. This prevents low quality goods from being sold by franchisees since the franchisor should be able to more successfully police a limited number of suppliers versus hundreds, or thousands, of franchisees. Thus, the tie-in serves to protect the property rights of the franchisor and is not an attempt to gain control of some tied good market via leverage.

The goodwill explanation for tying has increased in importance over time. By the 1960's the goodwill category dominates the competing theories of tying. As franchising increased as a method of business operation, we see an increase in the number of cases in this category. The tightening of the standards in the Chicken Delight case caused increased litigation in this area. The trend, however, has fallen off. As the courts became reluctant to accept plaintiffs arguments in franchise tying cases during the

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137 63% of the cases in the goodwill category are franchise related, see Appendix B.

138 See supra notes 118-119 and accompanying text.


middle 1980's, the numbers have fallen off, from 45.4% to 16.1% of the total cases in the period of the 1960's to the 1990's. Certainly the decisions in *Principe* and *Krehl*\(^{142}\) made plaintiffs less likely to bring cases due to the lower probability of victory, thus we should expect less overall litigation in this area. In addition, *Chicken Delight* may have changed the way some franchisors wrote their contracts so as to not run afoul of the antitrust laws.\(^ {143}\) This would also have led to a decline in the number of litigated cases in this area.

Looking at Table 3, we see that metering and price discrimination are the two most important explanations of tying through the 1940's. Roughly 68% of the cases (38 out of 56 over the period) can be explained with one of the two theories. Recall that both theories are price discrimination related, with metering being a special case. The circumstances under which each category applies has already been explained.\(^ {144}\)

Metering is where the tied good is used as a counting device in order to induce high volume users of the tying good to pay a higher price on the package. The firm offers the tying good for a very inexpensive price, possibly cost, but uses a tying arrangement with another good that serves as a meter. The price of the metering good is above cost so

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\(^{143}\) See Breit & Elzinga (1989), p. vii. In addition, see *supra* notes 69-77 and accompanying text.

\(^{144}\) See *supra* notes 16-25 and accompanying text for a discussion of the metering and non-metering price discrimination.
that the firm's royalties depend on the sales of the tied good. This implies that relatively more intensive users end up paying more, thus price discrimination has occurred. No leverage has taken place since the amount of the tied good used has not been decreased.\footnote{In fact, the amount of the tied good used may increase.} The tie-in merely allows the firm the more efficiently exploit its legal monopoly power in the tying good market.

A metering case is best illustrated with an example. In \textit{Judson Thomson Mfg. v. FTC},\footnote{132 F2d 952 (1945).} riveting machine lessees were required to purchase their rivets from the machine's manufacturer. The price of the rivets was generally 10\% greater than the market rate for rivets.\footnote{The rental rate of the machines was based on a multi-part tariff. See Burstein (1960b), p. 73 note 29.} This allowed the return on the machine to vary with the intensity of use by the buyer. The users with the high intensity of usage pay a higher rate than low intensity users. The tie-in acts as a meter to allow such price discrimination to be achieved. No leverage has taken place. The amount of the tied good (rivets) purchased would remain the same absent the tie-in.

A non-metering price discrimination case often takes the form of a package sale designed to extract rents from consumers that under uniform pricing would not be possible.\footnote{See Stigler (1963), reprinted in Stigler (1968), p. 165-166. See \textit{supra} note 25 and accompanying text for an example.} While the result of this practice can be the transfer of wealth from
consumers to producers, note that we do not get the leverage theory's conclusion that overall welfare falls.

Recalling that 68% of the cases fell into either explanation, it is not surprising that the earliest attacks on the leverage theory came from authors promoting price discrimination/metering as the primary explanations of tying. Burstein even went so far as to state, "Why do I discard the extension-of-monopoly hypothesis? First, because it simply does not fit the facts of many litigated cases .... Second, Because almost every case that can be explained by the extension-of-monopoly hypothesis can be explained by the alternative theory which serves to explain many other cases as well.")

An examination of Table 3 reveals that many of the theories explaining tying explain few, if any, litigated cases. Price regulation, input substitution, joint economies, risk sharing and cartel enforcement together only account for 13 cases, or 3.2% of the total. I do not believe that these low numbers imply that these theories do not have any explanatory power, but instead I view it as evidence of the very specific nature of these theories. For example, price regulation applies only to instances where the tying good is sold under a legislated price ceiling. We could observe these types of cases only when faced with goods having price regulations on them. Since WWII was the only period that price regulations were widely used in the time periods studied, we should expect to

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149 See Director & Levi (1956), Bowman (1957) and Burstein (1960a & 1960b).

150 Burstein (1960b), p. 63. Burstein is referring to the price discrimination explanation for tying (including metering).
observe most cases falling into this time period.\textsuperscript{151} Input substitution (prevention of input substitution) can be observed only if both goods are inputs and the tying good is monopolized.\textsuperscript{152} The cartel enforcement theory would be observed only when a cartel was present.\textsuperscript{153} In these types of cases, the tie-in is accompanied by a most-favored customer clause.\textsuperscript{154} The joint economies theory is only applicable when scale economies are present. This is not a condition that is apt to lead to very much litigation since the goods in question will be less expensive with the "tying arrangement" than without it.\textsuperscript{155} We see that these are not general situations and thus should only expect a limited number of cases to be observed with these conditions. This manifests itself by just 3.2% of the litigated cases being explained by these theories. But these low numbers should not be viewed as evidence of a limited ability of these theories in offering explanations for tying practices. This is opposed to the leverage theory that as a general theory applies under any condition. The leverage theory's low percentage (4.2%) may be taken as evidence of its failure to carry the burden of proof as explaining the existence of tying.

\textsuperscript{151} Note that 75% of the cases fall into this time period. See Table 4. The other cases involve a price regulation on liquor (a good commonly regulated) and Medicaid price regulations. See Appendix B.

\textsuperscript{152} Zero cases were found be explained by this theory. For an explanation of the prevention of input substitution theory, see supra note 26 and the accompanying text.

\textsuperscript{153} In this type of case, it would be better to attack the source of the cartel's monopoly power. Prohibiting a tying arrangement does not eliminate the cartel's monopoly position.

\textsuperscript{154} See supra notes 29-32 and accompanying text for an explanation of circumstances under which this category would apply and a discussion of the two cases that the theory applies. See Peterman (1979) and Cummings & Ruhter (1979).

\textsuperscript{155} See supra note 15.
An examination of Table 3 shows us that the courts' faith in the leverage theory to explain tying has been misplaced. Only 17 cases (4.2%) have a feasible leverage story as an explanation for the use of tying. The courts view leverage as the primary reason why tying is used, hence it is afforded *per se* illegal status. But an examination of the cases shows us that leverage is in fact rarely the explanation for the use of tying. Looking at Table 3, we can draw some comfort in noting that the courts did find that illegal tying existed in 94.1% of the cases in the leverage category. However, most instances of metering (84.6%) and nonmetering price discrimination (72.3%) were declared to be illegal tying by the courts. Given the ambiguous welfare implications of price discrimination (and metering), a closer examination of the practices involved than is allowed under the *per se* standard could reveal which are welfare enhancing. We also take little comfort in noting that goodwill instances of tying, a procompetitive practice, were found to be illegal 34.4% of the time. In addition, 4% of the instances in which no tying was actually taking place were found to be illegal by the courts. Clearly the *per se* label is too harsh and some revision is needed so that non-leverage explanations can be judged on their merits. A rule-of-reason approach would allow the defendant the opportunity to offer an explanation for tying that was potentially beneficial. The current *per se* label can lead to potentially beneficial practices being prohibited.

The results of Table 3 may be given as follows. Leverage is a poor explanation of the litigated tying cases, explaining only 4.2% of the total. We saw that roughly 68% of
the early tying cases (38 out of the 56 pre-1950 cases) could be explained as attempts at price discrimination (either metering or non-metering). Including price regulation cases (cases obvious in appearance), the percentage jumps to roughly 79%. Thus, we see that even from the early era of tying's prohibition, the courts objection to tying based on leverage grounds was not warranted. In fact, leverage is capable of explaining only 9% (5 out of 56) of the cases over the time period (pre-1950 cases).

As the price discrimination reasons for tying fade away, goodwill gains in stature. As franchising rose in prominence as a method of business organization, we saw the increased importance of goodwill as a method of explaining litigated instances of tying. However, by the 1970's and certainly by the 1980's, the no tying explanation came to dominate the competing theories of tying. In the 1980's and 1990's, the no tying category accounted for 72% (143 out of 199) of the litigated cases.

We now see that most litigated cases do not even involve a tying practice, but are attempts by plaintiffs to exploit the per se status of tying. If the standards were changed to rule-of-reason status, then potential plaintiffs would hopefully limit their charges that were at least situations in which a tie-in exists in the first place. This would allow the courts to examine the practice and determine if any anticompetitive effects are occurring, i.e. leverage. Given the implications of the selection theory, the above results tells us that the per se standard deters more non-leverage uses of tying than

\[156 \text{ See supra notes 105-132 and accompanying text.}\]
leverage ones. Thus, a relaxation of the standard would, on the margin, be a reduction in the deterrence of non-leverage uses for tying.\footnote{157 Ippolito reaches similar conclusions for resale price maintenance. See Ippolito (1991), p. 291.}
TABLE 3

Decade Breakdown of Tying Cases by Alternative Theories, 1917-1992

<table>
<thead>
<tr>
<th>Year</th>
<th>No Tying</th>
<th>Goodwill</th>
<th>Metering</th>
<th>Price Discrim.</th>
<th>Price Reg.</th>
<th>Leverage</th>
<th>Totals</th>
</tr>
</thead>
<tbody>
<tr>
<td>1920's</td>
<td>0 (0)</td>
<td>1 (7.7)</td>
<td>7 (53.8)</td>
<td>4 (30.8)</td>
<td>0 (0)</td>
<td>1 (7.7)</td>
<td>13</td>
</tr>
<tr>
<td>1930's</td>
<td>0 (0)</td>
<td>1 (12.5)</td>
<td>4 (50)</td>
<td>1 (12.5)</td>
<td>0 (0)</td>
<td>2 (25)</td>
<td>8</td>
</tr>
<tr>
<td>1940's</td>
<td>1 (2.9)</td>
<td>2 (5.7)</td>
<td>15 (42.9)</td>
<td>7 (20)</td>
<td>6 (17.1)</td>
<td>2 (5.7)</td>
<td>35</td>
</tr>
<tr>
<td>1950's</td>
<td>5 (26.3)</td>
<td>4 (21)</td>
<td>2 (10.5)</td>
<td>4 (21)</td>
<td>1 (5.3)</td>
<td>2 (10.5)</td>
<td>19</td>
</tr>
<tr>
<td>1960's</td>
<td>8 (24.2)</td>
<td>15 (45.4)</td>
<td>2 (6.1)</td>
<td>6 (18.2)</td>
<td>0 (0)</td>
<td>2 (6.1)</td>
<td>33</td>
</tr>
<tr>
<td>1970's</td>
<td>44 (44)</td>
<td>30 (30)</td>
<td>5 (5)</td>
<td>17 (17)</td>
<td>0 (0)</td>
<td>3 (3)</td>
<td>100</td>
</tr>
</tbody>
</table>

*The 1920's includes cases back to 1917 and the 1990's includes cases through June 30, 1992.*
TABLE 2  
(continued)

<table>
<thead>
<tr>
<th>Year</th>
<th>No Tying</th>
<th>Goodwill</th>
<th>Metering</th>
<th>Price Discrim.</th>
<th>Price Reg.</th>
<th>Leverage</th>
<th>Totals</th>
</tr>
</thead>
<tbody>
<tr>
<td>1980's</td>
<td>120 (71.4)</td>
<td>32 (19)</td>
<td>3 (1.8)</td>
<td>8 (4.8)</td>
<td>0 (0)</td>
<td>4 (2.4)</td>
<td>168</td>
</tr>
<tr>
<td>1990's</td>
<td>23 (74.2)</td>
<td>5 (16.1)</td>
<td>1 (3.2)</td>
<td>0 (0)</td>
<td>1 (3.2)</td>
<td>1 (3.2)</td>
<td>31</td>
</tr>
<tr>
<td>Totals</td>
<td>201 (49.4)</td>
<td>90 (22.1)</td>
<td>39 (9.6)</td>
<td>47 (11.5)</td>
<td>8 (2)</td>
<td>17 (4.2)</td>
<td>407</td>
</tr>
<tr>
<td>Illegal Tying Cases</td>
<td>8 (4.0)</td>
<td>31 (34.4)</td>
<td>33 (84.6)</td>
<td>34 (72.3)</td>
<td>8 (100)</td>
<td>16 (94.1)</td>
<td>133 (32.7)</td>
</tr>
</tbody>
</table>

Notes: Percentages are given in parenthesis.  
Zero (0) cases were classified under the input substitution theory.  
Zero (0%) cases of illegal tying.  
One (1) case was classified under the joint economies theory (1970's).  
Zero (0%) cases of illegal tying.  
Two (2) cases were classified under the risk sharing theory (1940's and 1980's).  
One (50%) case of illegal tying.  
Two (2) cases were classified under the cartel enforcement theory (40's and 50's).  
Two (100%) cases of illegal tying.  

Illegal tiling cases are court determined illegal tiling.

Source: LEXIS. Appendix B. Appendix D.
TABLE 2
(continued)

Definitions

No Tying:
This category refers to situations where a tying arrangement does not exist. No actual evidence was presented to the court that the tied good purchase was required in order to receive the tying good. No evidence was presented that a tied good, or separate tying and tied goods, was actually present. An invalid tying claim (as determined by the court) was made by the plaintiff.

Goodwill:
The tied good is used in combination with the tying good to make another good. If substandard tied goods are used in conjunction with the tying good, then the firm may suffer harm. Involves cases in which the defendant's reputation could be harmed without the tie-in. Evidence of possible reputational harm is either presented by the defendant, or stated by the court. Situations where the tie-in is used to prevent the plaintiff from purchasing the tied good from sources other than the defendant, or an approved source, are types of scenarios that would apply. This differs from a metering scenario in that goods used for metering purposes would not reflect on the firm's reputation.

Metering:
The tied good is used in conjunction with the tying good and the amount of the tied good used would serve as a counting device. This allows the firm to determine the usage intensity of the tying good.

Price Discrimination:
Block booking scenarios. Requirements to purchase goods from the defendant that are complementary to the tying good, but would not function as an adequate metering device. Evidence of the lack of the tied good's metering ability presented by the court. The plaintiff would have also filed a Section 2 of the Clayton Act claim (a Robinson-Patman Act claim) along with the tying claim.

Price Regulation:
The tying good is under a maximum price regulation. The tied good is (price) unregulated.
Input Substitution:
Both the tying and tied goods are inputs sold to a downstream firm with the tying good being sold by a monopolist.

Joint Economies:
The package of the tying and the tied goods can be produced for an amount less than the two goods could be produced independently. Evidence of these joint economies is stated by the court.

Risk Sharing:
A reciprocal dealing agreement whereby the defendant guarantees a price and a market for a good in exchange for the right to sell another good to the party involved. Leasing arrangements (for the tying good) where demand for the tied good is seasonal. Evidence of the seasonal nature of the tied good stated by the court.

Cartel Enforcement:
The tying arrangement is accompanied by a most favored customer clause written into the contract for purchases of the tied good.

Leverage:
The defendant has market power, over 30% in a relevantly defined tying good market, there are two separate goods present based on demand characteristics and a not insubstantial amount of commerce is involved. In addition, no alternative theory applies to the facts of the case.
CHAPTER V

ANALYSIS OF CASE PATTERNS

The object of this section is to analyze empirically tying arrangement cases to examine the patterns that have emerged over time. All litigated cases of tying, since its prohibition in 1917, are examined. Taking note of the possible biases introduced by the selection theory, this study explains why the nature of challenged arrangements and the plaintiffs involved are changing over time. If the alternative theories offer superior explanations for tying, then it would be preferable for the courts to recognize them as legitimate reasons for tying. However, since tying is per se illegal, the courts are not allowed to look explicitly at these alternatives.158 But the courts have found a way to accept alternative theories, while remaining in the per se framework for tying. Namely, the courts adopt the stance that two distinct products do not exist.159 The courts have

158 The goodwill defense is accepted under certain conditions, see discussion at supra notes 63-80 and accompanying text.

159 For example, in Wells Real Estate, Inc. v. Greater Lowell Board of Realtors, et al., 850 F2d 803 (1988), the court determined that membership in the local real estate board was not a separate product
begun to accept the alternative theories somewhat, if the case can fit into this "loophole" in the current *per se* framework.

This loophole is achieved by broadening the tying good market definition to include the tied good market as well. In the *per se* framework there are conditions that must be met before the *per se* standard is applied. One condition is that the firm employing a tie-in must have market power in the tying good market. Broadening the tying good market so as to include the tied good as well clearly means that this market power criteria will not be met. We see that in the 1970's the courts moved to tighten the market definitions used, but that a decade later the courts moved to adopt more liberal market definitions. We expect that this change in the standards used to adjudicate tying cases would cause the plaintiffs involved in cases to change as well. The prediction of the selection hypothesis is that, on the margin, a tightening of the standards would deter more non-leverage uses of tying than leverage ones. Thus, a relaxation of the standard would cause, on the margin, a reduction in the deterrence of non-leverage uses of tying. This makes the *Kodak* case (the most recent tying case to reach the Supreme Court)

from the multiple listing service that the board offered to its members only. See also the discussion at *supra* notes 78-80 and accompanying text.

160 The conditions are that there must be two separate products which are tied together, there must exist market power in the tying good market in order to restrain competition in the tied good market and that there must be a not insubstantial amount of commerce involved. See *Digidyme Corp. v. Data General Corp.*, 734 F2d 1336, 1338 (1984).

161 In *Hyde*, *supra* note 61, the Supreme Court set this threshold at a 30% market share. The DOJ (1985) has adopted this standard as well.

important. The Supreme Court's unwillingness to accept Kodak's definition of the relevant tying good market as the interbrand copier market in favor of the narrower market definition of just Kodak parts. This may be an indication that the courts are moving back to the narrower market definition standards of the 1970's.\footnote{See Virtual Maintenance \textit{v.} Prime Computer, 113 SCt 314 (1992). In addition, see discussion \textit{supra} notes 81-88 and accompanying text.}

As a result of the changing standards used in adjudicating tying arrangement cases, we should observe a shifting pattern of plaintiffs as well. When the standards were tightened in the early 1970's we should see an increase in case activity in response to this. The liberalizing of the standards in the 1980's, in the general category of manufacturer/dealer relationships, should cause cases in this area to drop off. In addition, cases should fall off in other areas in which the loophole applies.

After the cases were read and catalogued, the cases were classified based on five categories. The cases that appear in each category are listed in Appendix C. These are manufacturer/dealer, private, competitors, government, and FTC (non-court). Table 4 shows the case breakdown by decade of tying arrangement cases based on these categories. Table 5 is a decade breakdown, using the same classification method as Table 4, of the illegal tying cases. Recall that by illegal tying, we mean that a claim of illegal tying prevailed in the federal court system. Illegal tying was determined to exist in 133 cases, 75 cases by court determination and 58 from the FTC cases. In addition, Appendix D contains a listing of all court determined cases of illegal tying. Table 6
shows a decade breakdown of all government instituted tying arrangement cases. Here
the government cases are broken down into special sub-categories.

Looking at Table 4, we see that there was a large increase in civil cases that took
place during the 70's and 80's. The 90's show no signs of this trend letting up, if the first
part of the decade is any indication.\footnote{Recall that the 90's column in Table 4 includes cases through July 1, 1992. This marks 25% of the
decade, so that multiplying these numbers by 4 gives us a look at the entire decade, assuming that the
rest of the 90's is exactly like the first quarter.} The government's enforcement, both the
Department of Justice (DOJ) and the Federal Trade Commission (FTC), fell off
dramatically. While the decline in the 80's is predictable, the DOJ seems to have stopped
enforcement basically in the 60's, generally considered a time of prime enforcement.
What can we say is the cause of these large increases in civil cases and decline in DOJ
enforcement?

\subsection*{V.1 Manufacturer/dealer Cases}

Manufacturer/dealer refers to the vertical relationship between a manufacturer and a
dealer. This can typically involve, for example, a franchisor imposing restrictions on a
franchisee. The franchisee is required to purchase its requirements of equipment and
supplies from the franchisor as a condition upon being granted the initial franchise. The
purpose of this requirement can often be to protect the trademark reputation of the
franchisor.\footnote{In Francis B. Schuler, Jr. v Better Equipment Launder Center, Inc., 1973-2 Trade Cases (CCH)
P74,617, as a condition upon being granted the right to use the "One Hour Martinizing" logos, Schuler} A related situation involves gasoline stations and suppliers. The supplier is
often a refiner (or his agent) who is the trademark owner. These cases are similar in that
the supplier does not allow its stations to vend other types of branded gasoline while
using the trademark of the refiner. Again this requirement is to protect the trademark
reputation of the supplier.\(^{166}\) Another example can be seen in car dealer cases. Typically
the automobile manufacturer requires its dealers to carry the full line of automobiles it
offers.\(^{167}\) Finally, the case may involve a manufacturer requiring its dealers to carry a full
line of its products, similar to the car dealer cases,\(^{168}\) or the manufacturer may require its
dealers to take additional items in order to get a particularly desirable one.\(^{169}\)

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\(^{166}\) In both George Pugh v. Mobil Oil Corp., 533 FSupp 169 (1983) and James Scott Davidson v. Crown
Central Petroleum Corp., 1977-1 Trade Cases (CCH) P61,277, the dealers had desired to sell different
brands from the defendant's brand.

\(^{167}\) In both Bob Maxfield, Inc. v. American Motors Corp., et al., 637 F2d 1033 (1981) and Southern
Pines Chrysler-Plymouth, Inc. v. Chrysler Corp., 826 F2d 1360 (1987), the car dealers complained that
they were forced to take certain unpopular cars in order to get the more popular ones. This can be seen
as a method of competition by the auto makers against each other at all levels of automobiles (compact,
mid-size, luxury, etc.). If the dealer across the street carries all levels of cars, then an auto maker wants
its dealers to carry competing models on their lots.

\(^{168}\) In Arthur H. Pitchford v. Pepi, Inc., 531 F2d 92 (1976), Pepi required its dealers to carry its full line
of scientific instruments. In Sargent-Welch Scientific Co. v. Ventron Corp., 567 F2d 701 (1977),
Ventron required Sargent-Welch to carry both lines of its precision weighing devices. See Burstein
(1960b) for a discussion of full-line forcing.

\(^{169}\) In Smith Machinery Co., Inc. v. Hesston Corp., 878 F2d 1290 (1989), Hesston required its dealers to
carry its tractors in order to get its line of farm implements. This can be seen as a method of
competition against Deere (the leader in the tractor industry). See also, Reborn Enterprises, Inc. v. Fine
The manufacturer/dealer category has shown the largest increase in case activity over time (see Table 4). There were no cases in this category until the late 50's. The early cases mainly dealt with car dealers or gasoline stations. The large increase, starting in the 70's, can be traced to a court decision. In the Chicken Delight case, a franchisee successfully sued Chicken Delight for using tying arrangements with regard to supplies used in its franchise operation. This case should be seen as the courts applying a tighter threshold test for market power under the per se standard. The court viewed the tying good market as the post-contract market of Chicken Delight franchisees. Thus Chicken Delight had a monopoly over these people. This tighter market definition should be contrasted with the looser market definition of the pre-contract market for franchisees. In this market, franchisors compete for the available franchisees so that if the use of tie-ins by franchisors harmed franchisees, we should see potential franchisees

170 This is not actually all that surprising when we recall that tying was first prohibited in patent cases and that most early tying cases were patent related. See discussion supra notes 40-48 and accompanying text.

171 Four of the six cases in the 50's and 60's are either one or the other. This is not surprising since as late as 1969 approximately 68% of all franchised businesses were either car dealers or gasoline stations, so we can assume that this number would be no less in previous years, since franchising in other areas did not fully develop until the 70's. Contrast that with the fact that by 1992 less than 25% of all franchises businesses were either car dealers or gasoline stations. See Department of Commerce (1988), p. 28-40 and International Franchise Association (1992).


173 This decision is viewed as having changed the way franchisors operate their businesses. See Breit and Elzinga (1989), p.vii and Klein and Saft (1985), p.348. One can only wonder if the same results would have happened sooner if the decision in Bernard Susser, et al. v. Carvel Corp., 332 F2d 505 (1964) would have been in favor of Susser. That case involved the tying of ice cream equipment and mixes to the initial granting of the franchise.
avoiding franchisors that use tie-ins. In addition, market power would be very hard to prove with this definition of the tying good market. This decision was probably responsible for the ten-fold increase in manufacturer/dealer cases in the 70's (see Table 4) as well the increases in the other categories. For example, in the post-Chicken Delight era (1973 forward), growth in franchise litigation was by 663.6% while franchising as a whole grew by only 20.1%. After this decision, the manufacturer/dealer category moves from the category with the lowest percentage of cases to the highest (see Table 4). This is because Chicken Delight sent a signal that the courts were moving to tighten the per se standard for tie-ins. Even though Chicken Delight was a franchise case, we should observe its implications over all types of cases. This is because the principle involved, tightening the threshold test for market power, is easily applied to other areas. For example, in the time period between the Chicken Delight and Krehl decisions (1973-1982) growth in franchise litigation was 336.4%. However, for the same time period, overall franchising declined by 2.1% and private antitrust litigation declined by 7.8%. The trend of increased case activity continued in the 80's with a 50% increase in cases

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174 Growth in tradename franchising (gasoline dealers, car dealers and soft-drink bottlers) was by 471.4% and growth in business format franchising (all other types of franchises) was 1000%. Growth in overall franchising was -48.8% for tradename franchising and 115.3% for business format franchising. See Appendix C.

175 Tradename franchise litigation grew by 185.7% and business format franchise litigation grew by 600%. See Appendix C.

176 Tradename franchising declined by 33.6%, but business format franchising grew by 41.5%. See Appendix C. See Salop & White (1988), p. 4.
from the 70's. The trend, however, seems to be reversing. So far, in the 90's, only four cases have occurred. This represents only 12.9% of the total cases brought and the manufacturer/dealer category has fallen behind the competitor and private categories in terms of the percentages of cases brought.

We can explain this decline from the following perspectives. The winning percentages for plaintiffs have fallen off drastically. In the 70's, plaintiffs prevailed in 21% of the cases,¹⁷⁷ but, in the 80's, this percentage fell to 7.5%.¹⁷⁸ This decline can be traced to the court's acceptance of the goodwill defense argument.¹⁷⁹ In two cases in the early 80's, the court drew the distinction a business format and distribution format franchise. The two cases are Frank A. Principe v. McDonald's System, and Norman E. Krehl v. Baskin-Robbins Ice Cream.¹⁸⁰ Where the trademark only specifies the origin of the product, or where the name implies a method of doing business, then the courts ruled that no separate products were present, hence no illegal tying was present.¹⁸¹ In these

¹⁷⁷ See Table 5. In the 70's, seven of the nine illegal tying decisions involved franchise related businesses.

¹⁷⁸ See Table 5. In the 80's, two of the five illegal tying decisions involved franchise related businesses. But one of these cases, Vincent Esposito, et al. v. Mister Softee, Inc., 1980-1 Trade Cases (CCH) P63,089, occurred before the Krehl decision, supra note 79.

¹⁷⁹ See supra notes 63-80 and accompanying text.

¹⁸⁰ 631 F2d 303 (1980) and 664 F2d 1348 (1982), respectively. See also, the discussion at supra notes 78-80 and accompanying text.

¹⁸¹ The courts had recognized long ago that, in gasoline station situations, tie-ins may be used to protect the reputation of the trademark owner when the name only served to specify the origin of the product. See F.T.C. v. Sinclair Refining Co., 261 US 463 (1923). But compare Standard Oil of California v. U.S., 337 US 293 (1948).
types of cases, the franchisee is viewed, basically, as a conduit through which the trademarked goods of the franchisor flow. This is a definition that is similar to the relationship between a gasoline station and the refiner. This may be seen as a de facto rule of reason analysis that allows the courts to actually accept the goodwill defense on a broader scale than generally allowed. In the post-Krehl period (1983 forward), there has been a decline in franchise litigation of 39%. Franchising overall, however, increased by 23% during the same time period. Generally speaking, these two cases represent a loosening of the standards imposed by the Chicken Delight decision. By drawing a distinction between the two types of franchise operations, the court was liberalizing the threshold test used for determining the existence of market power. By ruling that only one product is present, the court is in fact broadening its definition of the tying good market to include what was heretofore the tied good market. Thus, the per se standard was loosened somewhat by these decisions.

It would appear that the types of plaintiffs have changed in response to this. In the post-Krehl period (1983 to present), only 49% of the manufacturer/dealer cases involved a type of franchising, whereas 78% of the cases from Chicken Delight to Principe involved franchised businesses (see Appendix C). As for illegal tying decisions by the

183 Tradename franchise litigation declined 25.9% and business format franchise litigation declined 50%. In fact, since 1988, there have only been two franchise related litigated cases. See Appendix C.
184 Tradename franchising declined 18.6%, however business format franchising grew by 47.8%. See Appendix C.
court, 80% of the cases before *Principe* were franchise related, but only 25% of the cases in the post-*Krehl* period were (see Appendix C and Appendix D). We see that as the courts have become less reluctant to condemn franchise tying, the number of cases has fallen off.\(^\text{185}\) The shift in cases recently has been to the more conventional manufacturer/dealer relationship, that is cases between a manufacturer and one of its dealers.\(^\text{186}\) However, the *Kodak* case may be changing, once again, the types of plaintiffs involved in tying cases. A broad interpretation of the decision, in the case, may cause franchisors to have their franchise contracts challenged, in a manner similar to the *Chicken Delight* era.\(^\text{187}\)

V.2 Competitor Cases

The competitors classification refers to a claim of illegal tying by a firm that believes that it is being excluded from the tied good market by some other firm's tying contract. An example is where a firm offers a package sale to consumers. A firm that sells a good which had been included in the package would claim that it has been foreclosed from selling its goods to customers who are forced to buy the package. *Town Sound v. Chrysler* provides an example.\(^\text{188}\) Chrysler had begun making automobiles with sound

\(^{185}\) In contrast, franchising, in general, is on the rise. See International Franchise Association (1992).

\(^{186}\) Three of the four cases in the 90's and six of the eight cases since 1989 involve this more conventional manufacturer/dealer relationship. See Appendix C.

\(^{187}\) See *supra* notes 72-77 and accompanying text.

\(^{188}\) *Town Sound and Custom Tops, Inc. v. Chrysler Motors Corp.*, 959 F2d 468 (1992).
equipment as a standard feature. Town Sound sold sound equipment to car dealers and consumers. Town Sound claimed that Chrysler’s action had foreclosed it from the sound equipment market for Chrysler cars and was illegal tying (the claim was not upheld by the courts). Other examples of competitor tying cases include service tie-ins, supplier tie-ins, and cemetery cases.

As the number of cases involving the manufacturer/dealer relationship declines, we note that the number of cases in the competitor category is rising sharply (see Table 4). In the 1970's, the competitor category explained 18% of the cases and by the 1990's the percentage had rise to 45.2%, the highest of any category (see Table 4). An examination of winning percentages for plaintiffs in this category shows that is the highest of all of the civil classifications, 29.1% (see Table 5). While this percentage is

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189 See Service & Training, Inc. v. Data General Corp., 1992-1 Trade Cases (CCH) P69,810 and Virtual Maintenance, Inc. v. Prime Computer, Inc., 957 F2d 1318 (1992). In these examples, firms have alleged that the manufacturer has tied a hardware maintenance contract to the purchase of desirable diagnostic software. Also, the most recent tying case to reach the Supreme Court, Eastman Kodak Co. v. Image Technical Services, Inc., et al., 112 SCt 2072 (1992), involved a service tie-in to copier and micrographic equipment (the case was remanded for trial, so it is not listed in the case list — Appendix A).

190 See Kentucky Fried Chicken Corp. v. Diversified Packaging Corp., et al., 549 F2d 368 (1977) and KFC Corp. v. Marion-Kay Co., Inc., 620 FSupp 1160 (1985). KFC used approved sources as well as supplying franchisees itself.


192 Note that the competitor category was the dominant category, among non-governmental categories, in the early decades of tying (1920's through 1940's). See Table 4.

193 As shown in Table 5, this winning percentage has fallen over time from a virtual 100% winning percentage for plaintiffs.
declining over time, it does appear that this type of case has the most characteristics in common with the leverage theory. The harm from a tie-in may be said to occur due to market foreclosure. That is, the tie-in, by forcing a buyer to purchase the tied good from the seller, forecloses competitors in the tied good market from competing for those sales. This foreclosure harms the competitive process by not allowing the buyer to choose for himself the tied good seller. So this category of cases has the most potential for observing tie-ins that could truly harm competition. That is, the plaintiffs in a competitor case have the most potential for being harmed and the defendant's use of a tie-in shows the most potential for being an attempt to monopolize a second market, i.e. leverage power.

As the courts become more reluctant to believe an illegal tying arrangement is occurring in other types of cases, plaintiffs become less likely to engage in dubious litigation, since the probability of winning is low. Thus, cases which show the most promise of victory become relatively more prevalent. These cases are ones that involve competitors in the tied good market since foreclosure is more realistic in cases of this type. So the case numbers seem to suggest that tying cases are moving to situations that tend to involve competitors in the tied good market and not other categories. The *Kodak* decision may cause even a larger number of cases in this category in the near
future. The Kodak case itself is a competitor case, so its application could be widely felt among firms and tying arrangements that are similar to the one used in Kodak.\(^{194}\)

\section*{V.3 Private Cases}

The private classification serves as a kind of default category. If a case could not be placed in one of the other previous classifications, then it was labeled private. An example of this is Driskell v. Dallas Cowboys.\(^{195}\) Here an individual claimed illegal tying in that he was forced to purchase pre-season tickets as a condition on the purchase of season tickets (for regular season games). As we can see, this type of case would not fall under any of the aforementioned categories. Other examples of this type include doctor/hospital cases,\(^{196}\) copyright or trademark infringement cases,\(^{197}\) and condominium tie-in cases.\(^{198}\)

\begin{itemize}
  \item \(^{194}\) The Supreme Court's vacation of the decision in Virtual Maintenance v. Prime Computer, 113 SCt 314 (1992) provides an example.
  \item \(^{196}\) See Jefferson Parish Hospital District No.2, et al. v. Hyde, 466 US (1984); Mohammad Shaft, M.D. v. St. Francis Hospital of Charleston, West Virginia, et al., 1991-1 Trade Case (CCH) P69,500; James B. Beard v. Parkview Hospital, 912 F2d 138 (1990); and James G. P. Collins v. Associated Pathologists, Ltd., et al., 844 F2d 473 (1988). In these types of cases, a doctor is challenging the exclusive contracts that hospitals use with physician groups. For a complete discussion of this practice see Lynk & Morrissey (1987).
  \item \(^{198}\) These cases often involve the tying of management services to the condo purchase, see Donald L. Foster v. West Alexandria Properties, Inc., 1980-1 Trade Cases (CCH) P63,223, or the requirement to lease other items (such as a recreational or commercial area), see Meyer Levinson, et al. v. Maison Grande, Inc., et al., 517 FSupp 963 (1981).
\end{itemize}
The private category of cases has also seen a large increase in case activity over time. The cases in this category generally involve an individual challenging the practice of a firm, or a firm challenging a contractual arrangement of another firm.\textsuperscript{199} Basically, the dispute is over the manner in which goods are sold. The claims in these types of cases are often of questionable merit. A comparison of the case cites from the private case listing in Appendix C with the case cites used for Table 1 (Characteristics of Non-governmental Tying Claims) contained in Appendix E reveals that 84.3\% (91 out of the 108 cases) are common to both. Recalling that Table 1 listed characteristics that if present, in a tying claim, would cast serious doubt on the claims merit, we see that approximately 84\% of the private case tying claims would be considered questionable.\textsuperscript{200} In addition, a comparison of the private case listings with the "No Tying" category (Table 3) case listing found in Appendix B shows that 78.7\% of the cases are common to both. This means that approximately 79\% of the private cases have the characteristic that there is no tying arrangement is actually present.\textsuperscript{201} This provides further evidence of the questionable merit of most of the tying claims in the private case category. As


\textsuperscript{200} See discussion at supra notes 109-122 and accompanying text. See Table 1.

\textsuperscript{201} See discussion at supra notes 126-129 and accompanying text. See Table 3.
these types of cases came to dominate litigation this area, winning percentages for plaintiffs have fallen off drastically.\textsuperscript{202}

While this seems to be translating into fewer cases, the trend is not as apparent as with the manufacturer/dealer cases. The percentage fall off in cases explained has only fallen from 38.1% to 32.2% in the private case category. This could be explained by the fact that private cases tend to be instituted by individuals against a single firm, while manufacturer/dealer cases generally involve a practice (or distribution method) that is more general in nature. For example, a franchisee who claims illegal tying against a franchisor of fast-food restaurants has an application to other franchise areas due to the vertical nature of the relationship. However, this concept does not translate very well into the private category of cases.\textsuperscript{203} Thus, the same kinds of general rules that can apply in a manufacturer/dealer case do not translate very well into cases in the private category, so that the decline in winning percentages for plaintiffs has been less dramatic.\textsuperscript{204}

\textsuperscript{202} Plaintiffs' winning percentages fell from 28.6% in the 60's to 3.1% in the 80's and so far 0% in the 90's. See Table 5.

\textsuperscript{203} For example, the characteristics common to a doctor/hospital case are not going to match the characteristics of a football ticket case very well. See James G.P. Collins \textit{v.} Associated Pathologists, Ltd., \textit{et al.}, 844 F2d 473 (1988) and Angelo F. Coniglio \textit{v.} Highwood Services, Inc., \textit{et al.}, 495 F2d 1286 (1974) for examples of the two types of private cases listed

\textsuperscript{204} The \textit{Hyde, supra} note 61, decision did provide some set of general rules, but this does not seem to have manifested itself in a stemming of the tide of doctor/hospital cases. See Appendix C.
The *Kodak* decision may have an impact in the private category as well. However, since many of the recent cases in this category involve examples of situations in which the tying claim is of questionable merit, we should observe only a small impact due to the *Kodak* decision. This is because *Kodak* only translates into this category through a general tightening of standards, whereas its implication can be seen as affecting certain industries directly in the other two aforementioned categories.

V.4 Government and FTC Cases

The FTC classification describes those cases in which the FTC investigated the tying practices of a firm. In all but two cases, a cease and desist order or a consent order to stop the tying practice was entered.\textsuperscript{205} This category does not include those cases that were subsequently appealed to the federal courts.

Table 6 provides a decade breakdown by sub-category for government cases. A government case is any tying case instituted by a governmental agency that makes it to the federal courts. These divisions are price regulation, FTC appeals, state/local and DOJ cases. The parenthetical entries of Table 6 show a breakdown of illegal tying (government) cases (note that illegal tying means that a claim of illegal tying prevails in the federal courts). As we can see from Table 6, one-half of all government cases were DOJ instituted ones, with the majority of the rest being FTC appeals. The price

\textsuperscript{205} The two cases are *In the Matter of Chock Full O'Nuts Corp., Inc.*, 83 FTC 575 (1973) and *In the Matter of Carvel Corp., et al.*, 68 FTC 128 (1965).
regulation cases of the 40's are all examples of a firm attempting to evade a price ceiling imposed on goods during W.W.II.\textsuperscript{206} From Table 6, it appears that government enforcement of tying laws has fallen off dramatically. In fact, there has only been one DOJ case in the last twenty years.\textsuperscript{207} When we consider that the two most recent cases were state/local government ones\textsuperscript{208} and that three of the six cases from the 60's were TBA appeals cases\textsuperscript{209}, we can only conclude that the federal government (DOJ) has all but abandoned enforcement of the tying prohibition.

This seems odd when we consider that the government’s winning percentage is 70.6%. When the two state/local cases are excluded, we see that the federal government’s winning percentage is 75%. This is two and one-half times better that the next closest category competitors has a 29.1% winning percentage (see Table 5). When the FTC cases are included as well (see Table 5), the combined winning percentage is an 87.2%, approximately three times the winning percentage of the next closest category.

\textsuperscript{206} See, for example, \textit{Coffin-Redington Co. v. Porter}, 156 F2d 113 (1946) and \textit{Bowles v. Cudahy Packing Co.}, 154 F2d 891 (1946).

\textsuperscript{207} See \textit{United States v. Greater Buffalo Press, Inc., et al.}, 327 FSupp 305 (1970). Tying was only a part of a larger merger and monopolization case. The case was dismissed and the DOJ appealed, but it did not appeal the dismissal of the tying claim, see 402 US 549 (1971).

\textsuperscript{208} These are \textit{City of Chanute, Kansas, et al v. Williams Natural Gas Co.}, 955 F2d 641 (1992) and \textit{State of Illinois v. Panhandle Eastern Pipeline Co.}, 935 F2d 1469 (1991). Both of these cases involve claims against natural gas pipeline transportation firms (which are regulated). The plaintiffs felt that the firms would tie natural gas purchases to the transportation of the natural gas.

\textsuperscript{209} \textit{FTC v. Texaco, Inc.}, 393 US 223 (1968); \textit{Atlantic Refining Co. v. FTC}, 381 US 357 (1965); and \textit{Shell Oil Co. v. FTC}, 360 F2d 470 (1966).
However, choosing cases with a high probability of victory may not be the prime objective in government cases.\textsuperscript{210}

The decline in government instituted cases is the most puzzling. While the FTC did not stop its enforcement of tying laws until the 80's, the DOJ has not instituted a case in over 20 years (see Table 6).\textsuperscript{211} The lack of cases in the 80's does not provide a problem, since the DOJ lessened its enforcement of the antitrust laws in general during the entire decade. In addition, in its \textit{Vertical Restraints Guidelines} (1985), the DOJ provided situations in which it felt that tying was not anticompetitive.\textsuperscript{212}

The puzzle deals with cases in the 60's and the 70's. In this twenty year period, the DOJ instituted only three cases (see Table 6 and Appendix C). In the twenty year period encompassing the 40's and 50's, there were eleven cases (see Table 6). However, the total number of antitrust cases instituted by the DOJ in each twenty-year window was approximately the same.\textsuperscript{213} So the question remains, why did the DOJ care less about tying during the 60's and 70's. One possible explanation is that the DOJ felt private enforcement was providing the correct decisions and it did not feel the need to institute

\textsuperscript{210} See Posner (1972).

\textsuperscript{211} \textit{Supra} note 207.

\textsuperscript{212} Pages 38-42 deal with tying arrangements. Basically, the guidelines recognize that tying may be used for procompetitive reasons and that tying does not "have a significant anticompetitive potential" (p. 40). It also states that tying will not be challenged when the market share of the firm is thirty percent or less in the tying good market.

types of cases which it believed had already been addressed.\textsuperscript{214} \textit{Chicken Delight} had tightened the standards used in the market power threshold test. The DOJ may have felt that this decision was applicable in all situations of tying and so it did not feel the need to expand the decision into other areas. Also, FTC enforcement was occurring and the DOJ may have considered this, along with civil decisions, was enough enforcement so that it did not need to get involved. Whether this is true or not, the DOJ relaxed tying law enforcement at a time when it vigorously enforced other antitrust violations.

The above analysis shows us that the pattern of tying cases has changed over time. In particular, we noticed that, overall, civil cases have increased dramatically since 1970. Much of this can be traced to the decision in the \textit{Chicken Delight} case.\textsuperscript{215} That decision is seen as a move by the courts to tighten the \textit{per se} standard used in tying cases. This was done by defining the tying good market very narrowly so that market power can easily be shown to exist. Thus we observed an increase in case activity. This activity has subsided substantially in the manufacturer/dealer category. That decline was traced to the courts' adoption of a more liberal tying good market definition. But activity in the competitor category is still rising. Private category cases seem to be falling off, but not

\textsuperscript{214} For example, see Harvey Siegel, \textit{et al.} \textit{v. Chicken Delight, Inc.}, 448 F2d 43 (1971); \textit{Advance Business Systems and Supply Co. v. SCM Corp.}, 415 F2d 55 (1969); \textit{Heat Transfer Corp. v. Volkswagenwerk, A.G., et al.}, 553 F2d 964 (1977). In addition, there was enforcement taking place by the FTC, see Appendix C.

\textsuperscript{215} \textit{Supra} note 72.
as fast as the manufacturer/dealer category. This is in spite of the courts' increasing unwillingness to accept the plaintiffs' arguments in these types of cases. We see that as the \textit{per se} standard used for tying cases has changed over time, the patterns of tying cases have changed over time as well. As the \textit{per se} standard changed, we noticed an increased willingness by the courts to accept the alternative theories for tying.\footnote{While tying is not treated under the rule-of-reason analysis, the goodwill defense has clearly been adopted by the courts. However, the alternative theories provide explanations for tying that are far superior under many situations.}

The reason as to why the DOJ stopped enforcement in an era of prime enforcement, by the agency, is still puzzling. One explanation was that the DOJ was satisfied that private enforcement was doing the job correctly. For example, the \textit{Chicken Delight} decision tightened the threshold test for market power in tying cases and the DOJ may have felt this decision gave the courts the focus they needed in all types of tying cases. So it did not find it necessary to attempt to expand the \textit{Chicken Delight} principle to other areas of tying. In addition, FTC enforcement of tying laws remained fairly constant until the 1980's (see Table 4), so the DOJ may have felt no need to enter the ring. Also, by the time the courts had liberalized the threshold test in tying cases (in the 1980's), DOJ enforcement in all antitrust areas was being contracted.

However, these recent changes in tying cases may be due for yet another change. The trend toward acceptance of the alternative theories might be changing in the near future with the decision in the \textit{Kodak} case. The Supreme Court's refusal to accept
Kodak's argument could be an indication that the courts are tightening the *per se* standard for tying arrangement cases. We view the *Kodak* ruling as a retreat from the more lenient standards that came about in the early 1980's to the more strict standards of the early 1970's, epitomized by the *Chicken Delight* case.
TABLE 4

Decade Breakdown of Litigated Tying Cases, 1917-1992*

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<th>Category</th>
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<th>30's</th>
<th>40's</th>
<th>50's</th>
<th>60's</th>
<th>70's</th>
<th>80's</th>
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<td>2 (10.5)</td>
<td>7 (21.2)</td>
<td>21 (21)</td>
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<td>10 (32.2)</td>
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<td>38 (22.6)</td>
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<td>13 (37.1)</td>
<td>6 (31.6)</td>
<td>6 (18.2)</td>
<td>1 (1)</td>
<td>0 (0)</td>
<td>2 (6.4)</td>
<td>34 (8.3)</td>
<td></td>
</tr>
<tr>
<td>FTCb</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7 (53.8)</td>
<td>1 (12.5)</td>
<td>16 (45.7)</td>
<td>8 (42.1)</td>
<td>10 (30.3)</td>
<td>17 (17)</td>
<td>0 (0)</td>
<td>1 (3.2)</td>
<td>60 (14.7)</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>13</td>
<td>8</td>
<td>35</td>
<td>19</td>
<td>33</td>
<td>100</td>
<td>168</td>
<td>31</td>
<td>407</td>
</tr>
</tbody>
</table>

Notes: Percentages are listed in parentheses

Source: LEXIS. Appendix C.

* The 20's column includes cases back to 1917 and the 90's column includes cases through July 1, 1992.

b These are cases in which the FTC decision was not appealed to the federal courts.
### TABLE 5

Decade Breakdown of Illegal Tying Cases, 1917-1992

<table>
<thead>
<tr>
<th>Category</th>
<th>20's</th>
<th>30's</th>
<th>40's</th>
<th>50's</th>
<th>60's</th>
<th>70's</th>
<th>80's</th>
<th>90's</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>manufacturer/dealer</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>2</td>
<td>9</td>
<td>5</td>
<td>0</td>
<td>16</td>
</tr>
<tr>
<td>private</td>
<td>0</td>
<td>2</td>
<td>2</td>
<td>0</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>0</td>
<td>10</td>
</tr>
<tr>
<td>competitors</td>
<td>2</td>
<td>2</td>
<td>4</td>
<td>1</td>
<td>2</td>
<td>4</td>
<td>8</td>
<td>2</td>
<td>25</td>
</tr>
<tr>
<td>government</td>
<td>1</td>
<td>1</td>
<td>13</td>
<td>4</td>
<td>5</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>24</td>
</tr>
<tr>
<td>FTC</td>
<td>7</td>
<td>1</td>
<td>16</td>
<td>8</td>
<td>9</td>
<td>16</td>
<td>0</td>
<td>1</td>
<td>58</td>
</tr>
<tr>
<td>Total</td>
<td>10</td>
<td>6</td>
<td>35</td>
<td>13</td>
<td>20</td>
<td>31</td>
<td>15</td>
<td>3</td>
<td>133</td>
</tr>
<tr>
<td>Illegal tying as a percentage of cases brought</td>
<td>76.9</td>
<td>75</td>
<td>100</td>
<td>68.4</td>
<td>60.6</td>
<td>31</td>
<td>8.9</td>
<td>9.7</td>
<td>32.7</td>
</tr>
</tbody>
</table>

Notes:

Without the FTC listings, there are 75 instances of illegal tying.

Illegal tying breakdown (as a percentage of the 75 illegal tying cases)

- manufacturer/dealer: 21.3% (including FTC cases: 12.0%)
- private: 13.3% (including FTC cases: 7.5%)
- competitors: 33.3% (including FTC cases: 18.8%)
- government: 32.0% (including FTC cases: 61.7%)

---

* Illegal tying as determined by the courts. The 20’s column includes cases back to 1917 and the 90’s column includes cases through July 1, 1992.

* These are cases in which the FTC decision was not appealed to the federal courts.
<table>
<thead>
<tr>
<th>Won/lost percentages</th>
<th>Manufacturer/dealer: 13.4%</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Private: 9.3%</td>
</tr>
<tr>
<td></td>
<td>Competitors: 29.1%</td>
</tr>
<tr>
<td></td>
<td>Government: 70.6% (including FTC cases: 87.2%)</td>
</tr>
</tbody>
</table>

Source: LEXIS. Appendix B and Appendix D.
### TABLE 6

Decade Breakdown of Government Cases*

<table>
<thead>
<tr>
<th>Category</th>
<th>20's</th>
<th>30's</th>
<th>40's</th>
<th>50's</th>
<th>60's</th>
<th>70's</th>
<th>80's</th>
<th>90's</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>government</td>
<td>4(1)</td>
<td>2(1)</td>
<td>13(13)</td>
<td>6(4)</td>
<td>6(5)</td>
<td>1(0)</td>
<td>0(0)</td>
<td>2(0)</td>
<td>34(24)</td>
</tr>
<tr>
<td>SUB-CATEGORY</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>price regulation</td>
<td>0(0)</td>
<td>0(0)</td>
<td>5(5)</td>
<td>1(1)</td>
<td>0(0)</td>
<td>0(0)</td>
<td>0(0)</td>
<td>0(0)</td>
<td>6(6)</td>
</tr>
<tr>
<td>FTC appeals</td>
<td>2(0)</td>
<td>1(0)</td>
<td>2(2)</td>
<td>0(0)</td>
<td>4(4)</td>
<td>0(0)</td>
<td>0(0)</td>
<td>0(0)</td>
<td>9(6)</td>
</tr>
<tr>
<td>state/local</td>
<td>0(0)</td>
<td>0(0)</td>
<td>0(0)</td>
<td>0(0)</td>
<td>0(0)</td>
<td>0(0)</td>
<td>2(0)</td>
<td>2(0)</td>
<td>2(0)</td>
</tr>
<tr>
<td>DOJ cases</td>
<td>2(1)</td>
<td>1(1)</td>
<td>6(6)</td>
<td>5(3)</td>
<td>2(1)</td>
<td>1(0)</td>
<td>0(0)</td>
<td>0(0)</td>
<td>17(12)</td>
</tr>
</tbody>
</table>

Notes:

Occurrences of illegal tying determination by the courts are listed in parentheses
Winning percentage by government (claim upheld by court): 70.6%
  - Price regulation: 100%
  - FTC appeals: 66.7%
  - State/local: 0%
  - DOJ cases: 70.6%

Source: LEXIS. See Appendix C.

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*The cases in this table do not include cases brought by the FTC that were not appealed to the federal court system.*
CHAPTER VI

CONCLUSIONS

We have shown that tying is consistent with the selection theory for the case where there is asymmetric stakes. In particular, the success rate for plaintiffs was low. The settlement rate was high for challenged practices and the challenged practices were tangentially related to the standard definition of tying used by the courts. An analysis of the litigated was determined to be a relevant sample that could be used to study the deterrent effect of the per se prohibition of tying at the margin of the liability standard.

An examination of the litigated tying cases to determine if the leverage theory was capable of explaining the practices in question was done. The results, shown in Table 3, told us that the leverage theory was capable of explaining the practice used in only 4.2% of the cases studied. Thus, the per se prohibition can be said to deter more non-leverage uses of tying than leverage ones. The findings show that the per se rule against tying is not warranted. The adoption of a less strict standard, such as a rule-of-reason analysis, would allow practices to be judged based on their merits and not against the harsh per se standard. In addition, less non-leverage uses for tying would be deterred under a less
strict standard. The call for a rule-of-reason approach in tying situations has received support in the courts also.\textsuperscript{217}

However, it was shown that the standards used in adjudicating tying have changed over time. Tables 4 & 5 showed that the plaintiffs involved in tying litigation have changed dramatically over time. In particular, there has been a marked shift away from cases involving the manufacturer/dealer vertical relationship toward cases where the parties involved are competitors in the tied good market. Also, the winning percentages of plaintiffs in tying cases have been falling over time. Finally, the government appears to have all but abandoned challenging tying practices, although at one time it was more-or-less the sole challenger of such practices. But all of this may be changing in the future. Just as the standards used to judge tying were loosening, we observe that a stricter standard may be gaining favor. However, there are those who believe that the \textit{Kodak} decision is not broad enough to cause the standards to regress back the level of twenty years ago.\textsuperscript{218} We hold that tying may experience an increase in litigation due to the \textit{Kodak} decision. In particular, an increase in franchise litigation, not unlike the increase in litigation after \textit{Chicken Delight}, could be forthcoming.

\textsuperscript{217} In the \textit{Hyde} case, \textit{supra} note 61, Justice O'Connor and three other justices argued for the abandonment of the \textit{per se} standard. Justice O'Connor stated it as follows, "The time has therefore come to abandon the 'per se' label and refocus the inquiry on the adverse economic effects, and the potential economic benefits, that the tie may have." 466 US 2, 34 (1984).

\textsuperscript{218} See Joseph and Altschuler (1992).
These uncertainties with regard to the changing standards used in the *per se* approach in adjudicating tying cases listed above along with the evidence presented on the leverage theory's lack of explanatory power give credence to the statement that the *per se* label should be dropped. In its place should be a rule-of-reason analysis. This less stringent policy approach would allow firms the outlet to offer efficiency explanations for their practices and not have to face the harshness of the *per se* standard. If the practice actually did have possible leverage consequences, then these would be considered along with any possible benefits. If the benefits were small, or nil, compared to the leverage concerns, then the courts can still condemn the practice.
APPENDIX A

TYING ARRANGEMENT CASES
UNITED STATES SUPREME COURT

FTC v. Texaco, Inc., 393 US 223 (1968); 383 F2d 942 (1967); 69 FTC 22 (1966).
Atlantic Refining Co. v. FTC, 381 US 357 (1965); 331 F2d 394 (1964); 58 FTC 309 (1961).
Mercoid Corporation v. Minneapolis-Honeywell Regulator Co., 320 US 680 (1944); 133 F2d 811 (1942); 43 FSupp 878 (1942).
Mercoid Corporation v. Mid-Continent Investment Co., et al., 320 US 661 (1944); 133 F2d 803 (1942); 43 FSupp 692 (1942).
B.B. Chemical Co. v. Ellis, et al., 314 US 495 (1942); 117 F2d 829 (1941); 32 FSupp 690 (1940).
Morton Salt Company v. G.S. Suppiger Co., 314 US 488 (1942); 117 F2d 968 (1941); 31 FSupp 876 (1940).
Leitch Manufacturing Co. v. Barber Company, 302 US 458 (1938); 89 F2d 960 (1937); 14 FSupp 212 (1936).
Carbice Corp. of America v. American Patents Development Corp., et al., 283 US 27 (1931); 38 F2d 62 (1930); 25 F2d 730 (1928).
FTC v. Sinclair Refining Company, 261 US 463 (1923); 282 Fed 81 (1922); 276 Fed 686 (1921); 2 FTC 127 (1919).


FTC v. Gratz, et al., 253 US 421 (1920); 258 Fed 314 (1919); 1 FTC 249 (1918).


Motion Pictures Patents Co. v. Universal Film Manufacturing Co., et al., 243 US 502 (1917); 235 Fed 398 (1916).
UNITED STATES COURT OF APPEALS

James B. Beard v. Parkview Hospital, 912 F2d 138 (1990).
<table>
<thead>
<tr>
<th>Cases</th>
<th>Docket Numbers</th>
<th>Year</th>
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<tbody>
<tr>
<td>Xeta, Inc. v. Atex, Inc.</td>
<td>852 F2d 1280</td>
<td>1988</td>
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<tr>
<td>Wells Real Estate, Inc. v. Greater Lowell Board of Realtors, et al.</td>
<td>850 F2d 803</td>
<td>1988</td>
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<tr>
<td>James G. P. Collins v. Associated Pathologists, Ltd., et al.</td>
<td>844 F2d 473</td>
<td>1988</td>
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<tr>
<td>Kanamarlap Rao v. Pontiac General Hospital</td>
<td>835 F2d 879</td>
<td>1987</td>
</tr>
<tr>
<td>The Mozart Co. v. Mercedes-Benz of North America, Inc.</td>
<td>833 F2d 1342</td>
<td>1987</td>
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<tr>
<td>Directory Sales Management Corp. v. Ohio Bell Telephone Co., et al.</td>
<td>833 F2d 606</td>
<td>1987</td>
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<tr>
<td>&amp; 1986-2 Trade Cases (CCH) P67,250.</td>
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<tr>
<td>Metrix Warehouse, Inc. v. Daimler-Benz Aktiengesellschaft</td>
<td>828 F2d 1033</td>
<td>1987</td>
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<tr>
<td>Southern Pines Chrysler-Plymouth, Inc. v. Chrysler Corp.</td>
<td>826 F2d 1360</td>
<td>1987</td>
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<td>Ryko Manufacturing Co. v. Eden Services, et al.</td>
<td>823 F2d 1215</td>
<td>1987</td>
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<td>Albert Souza, etc. v. Estate of Bernice Pauahi Bishop</td>
<td>821 F2d 1332</td>
<td>1987</td>
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<td>Gordon O. White, M.D. v. Rockingham Radiologists, Ltd., et al.</td>
<td>820 F2d 98</td>
<td>1987</td>
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<td>Tic-X-Press, Inc. v. The Omni Promotions Co. of Georgia, et al.</td>
<td>815 F2d 1407</td>
<td>1987</td>
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<tr>
<td>Famous Brands, Inc. v. David Sherman Corp.</td>
<td>814 F2d 517</td>
<td>1987</td>
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<tr>
<td>Barber &amp; Ross Co. v. Lifetime Doors, Inc.</td>
<td>810 F2d 1276</td>
<td>1987</td>
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<tr>
<td>Fox Motors, Inc. v. Mazda Distributors, et al.</td>
<td>806 F2d 953</td>
<td>1986</td>
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<tr>
<td>A.I. Root Co. v. Computer/Dynamics, Inc.</td>
<td>806 F2d 673</td>
<td>1986</td>
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<tr>
<td>John M. Dimeadowich v. Bell &amp; Howell</td>
<td>803 F2d 1473</td>
<td>1986</td>
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<tr>
<td>49er Chevrolet, Inc., et al. v. General Motors Corp., et al.</td>
<td>803 F2d 1463</td>
<td>1986</td>
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<td>The Great Escape, Inc. v. Union City Body Co., Inc., et al.</td>
<td>791 F2d 532</td>
<td>1986</td>
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<td>General Motors Corp. v. Gibson Chemical &amp; Oil Corp., et al.</td>
<td>786 F2d 105</td>
<td>1986</td>
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<td>Terre Du Lac Association, Inc. v. Terre Du Lac, Inc., et al.</td>
<td>772 F2d 467</td>
<td>1985</td>
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<td>Grand Light &amp; Supply Co., Inc. v. Honeywell, Inc.</td>
<td>771 F2d 672</td>
<td>1985</td>
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<tr>
<td>Amey, Inc. v. Gulf Abstract &amp; Title, Inc., et al.</td>
<td>758 F2d 1486</td>
<td>1985</td>
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<tr>
<td>Carl Sandburg Village Condominium Association No. 1, et al. v. First</td>
<td>758 F2d 203</td>
<td>1985</td>
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<tr>
<td>Condominium Development Co., et al.</td>
<td>&amp; 586 FSupp 155</td>
<td>1984</td>
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<tr>
<td>Power Test Petroleum Dist., Inc. v. Calcu Gas, Inc.</td>
<td>754 F2d 91</td>
<td>1985</td>
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<tr>
<td>Jack Walters &amp; Sons Corp. v. Morton Building, Inc.</td>
<td>737 F2d 698</td>
<td>1984</td>
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<tr>
<td>&amp; 1983-1 Trade Cases (CCH) P65,284.</td>
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</table>
Association for Intercollegiate Athletics for Women v. NCAA, 735 F2d 577 (1984); 558 FSupp 487 (1983).
Midwestern Waffles, Inc. v. Waffle House, Inc., et al., 734 F2d 705 (1984); 1983-2 Trade Cases (CCH) P65,567.
California Glazed Products, Inc. v. The Burns and Russell Co. of Baltimore City, 708 F2d 1423 (1983).
Kentucky Fried Chicken Corp. v. Diversified Packaging Corp., et al., 549 F2d 368 (1977); 376 FSupp 1136 (1974).
Southern Concrete Co. v. United States Steel Corp., et al., 535 F2d 313 (1976); 394 FSupp 362 (1975).
Holleb & Co. v. Produce Terminal Cold Storage Co., 532 F2d 29 (1976); 1975-2 Trade Cases (CCH) P60,436.
Marion Davis v. Marathon Oil Co., 528 F2d 395 (1975).
Keith B. Redd v. Shell Oil Co., 524 F2d 1054 (1975); 1974-2 Trade Cases (CCH) P75,390.
Rex Chainbelt, Inc. v. Harco Products, Inc., 512 F2d 993 (1975); 1974-2 Trade Cases (CCH) P75,154.
Cities Service Oil Co. v. Coleman Oil Co., Inc., 470 F2d 925 (1972).
Shell Oil Co. v. FTC, 360 F2d 470 (1966); 58 FTC 371 (1961).
Anchor Liquor Company v. United States, 158 F2d 221 (1946).
Coffin-Redington Company v. Porter, 156 F2d 113 (1946).
Bowles v. Cudahy Packing Co., 154 F2d 891 (1946); 58 FSupp 748 (1945).
United States v. George F. Fish, Inc., et al., 154 F2d 798 (1946).
Judson L. Thomson Manufacturing Co. v. FTC, 150 F2d 952 (1945); 38 FTC 135 (1944).
Signode Steel Strapping Co. v. FTC, 132 F2d 48 (1942); 33 FTC 1049 (1941).
United States v. General Motors Corp., et al., 121 F2d 376 (1941).
Pick Manufacturing Company v. General Motors Corp., et al., 80 F2d 641 (1935).
FTC v. Paramount Famous-Lasky Corp., et al., 57 F2d 152 (1932); 11 FTC 187 (1927).
Radio Corporation of America v. Lord, et al., 28 F2d 257 (1928); 24 F2d 565 (1926).
UNIVERS STATES DISTRICT COURT

Montgomery County Association of Realtors, Inc. v. Realty Photo Master Corp., et al.,
(CCH) P69,677.
Continental Trend Resources, Inc., et al. v. Oxy USA, Inc., et al., 1991-2 Trade Cases
(CCH) P69,510.
LEXIS 14771.
Camellia City Telecasters, Inc. v. Tribune Broadcasting Co., Inc., et al., 762 FSupp 290
Dr Pepper Bottling Co. of Texas v. Del Monte Corp., 18 U.S.P.Q. 2d (BNA) 1065
Raymond S. O'Riordan v. Long Island Board of Realtors, Inc., et alia, 707 FSupp 111
(1988).
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P68,372.
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P68,163.
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(BNA) 1143 (1988).
Thomas Fox v. Comprehensive Accounting Corp., 1984-1 Trade Cases (CCH) P65,993.
Hugh O. Grandstaff v. Mobil Oil Corp., 1979-1 Trade Cases (CCH) P62,421.
ILC Peripherals Leasing Corp. v. IBM, et al., 448 FSupp 228 (1978).
BBD Transportation Co., Inc. v. United States Steel Corp., 1976-2 Trade Cases (CCH) P61,079.
Stan Kane v. Martin Paint Stores, Inc., 1975-1 Trade Cases (CCH) P60,379.
Margaret M. Landon v. Twentieth Century-Fox Film Corp., 384 FSupp 450 (1974).
Brandeis Machinery and Supply Corp. v. Barber-Greene Co., 1973-2 Trade Cases (CCH) P74,672.
Stanley Company of America, Inc. v. American Telephone & Telegraph, 4 FSupp 80 (1933).
FTC CASES

In the Matter of Gerald S. Friedman, M.D., 1990 FTC LEXIS 49.
In the Matter of Xerox Corporation, 86 FTC 364 (1975).
In the Matter of Sanford Industries, Inc., et al., 85 FTC 1076 (1975).
In the Matter of Fashion Two Twenty, Inc., et al., 83 FTC 1052 (1973).
In the Matter of Fairchild Camera and Instrument Corp., et al., 68 FTC 864 (1965).
In the Matter of Carvel Corp., et al., 68 FTC 128 (1965).
In the Matter of Kaiser Jeep Corp., et al., 65 FTC 562 (1964).
In the Matter of American Linen Service Co., Inc., et al., 65 FTC 1356 (1964).
In the Matter of Photostat Corporation, 56 FTC 300 (1959).
In the Matter of Sunshine Biscuits, Inc., et al., 51 FTC 25 (1954).
In the Matter of Champion Spark Plug Company, 50 FTC 30 (1953).
In the Matter of Duan, Inc., et al., 48 FTC 789 (1952).
In the Matter of Gamble-Skogmo, Inc., et al., 48 FTC 1396 (1952).
In the Matter of Horlicks Corporation, 47 FTC 169 (1950).
In the Matter of Minneapolis-Honeywell Regulator Co., 44 FTC 351 (1948).
In the Matter of Pure Carbonic, Inc., et al., 44 FTC 1029 (1948).
In the Matter of Tubular Rivet & Stud Co., 38 FTC 144 (1944).
In the Matter of Penn Rivet Corporation, 38 FTC 153 (1944).
In the Matter of Edwin B. Stimpson Company, 38 FTC 162 (1944).
In the Matter of Milford Rivet & Machine Co., 38 FTC 180 (1944).
In the Matter of Shelton Tack Co., 38 FTC 198 (1944).
In the Matter of The Brunswick-Balke-Collender Co., 35 FTC 736 (1942).
In the Matter of General Motors Corp., et al., 34 FTC 58 (1941).
In the Matter of R.T Vanderbilt Co., Inc., et al., 34 FTC 378 (1941).
In the Matter of Corn Products Refining Co., et al., 34 FTC 850 (1942).
In the Matter of The Gerrard Co., Inc., et al., 33 FTC 1036 (1941).
In the Matter of Acme Steel Company, 33 FTC 1062 (1941).
In the Matter of Walter Kiddle & Co., Inc., et al., 30 FTC 757 (1940).
In the Matter of Kaumagraph Co., et al., 20 FTC 1 (1934).
FTC v. The Chamberlin Cartridge & Target Co., 2 FTC 357 (1920).
FTC v. The John H. Wilkins Co., 2 FTC 403 (1920).
FTC v. Galena Signal Oil Co., 2 FTC 446 (1920).
APPENDIX B

ALTERNATIVE THEORY BREAKDOWN
GOODWILL

FTC v. Texaco, Inc., 393 US 223 (1968); 383 F2d 942 (1967); 69 FTC 22 (1966).
Atlantic Refining Co. v. FTC, 381 US 357 (1965); 331 F2d 394 (1964); 58 FTC 309 (1961).
FTC v. Sinclair Refining Company, 261 US 463 (1923); 282 Fed 81 (1922); 276 Fed 686 (1921); 3 FTC 78 (1920); 3 FTC 77 (1920); 3 FTC 68 (1920); 2 FTC 346 (1920); 2 FTC 127 (1919).

Midwestern Waffles, Inc. v. Waffle House, Inc., et al., 734 F2d 705 (1984); 1983-2 Trade Cases (CCH) P65,567.
California Glazed Products, Inc. v. The Burns and Russell Co. of Baltimore City, 708 F2d 1423 (1983).
Kentucky Fried Chicken Corp. v. Diversified Packaging Corp., et al., 549 F2d 368 (1977); 376 FSupp 1136 (1974).
Keith B. Redd v. Shell Oil Co., 524 F2d 1054 (1975); 1974-2 Trade Cases (CCH) P75,390.
Shell Oil Co. v. FTC, 360 F2d 470 (1966); 58 FTC 371 (1961).
Pick Manufacturing Company v. General Motors Corp., et al., 80 F2d 641 (1935).

Thomas Fox v. Comprehensive Accounting Corp., 1984-1 Trade Cases (CCH) P65,993.
Stan Kane v. Martin Paint Stores, Inc., 1975-1 Trade Cases (CCH) P60,379.

In the Matter of Fashion Two Twenty, Inc., et al., 83 FTC 1052 (1973).
In the Matter of Fairchild Camera and Instrument Corp., et al., 68 FTC 864 (1965).
In the Matter of Carvel Corp., et al., 68 FTC 128 (1965).
In the Matter of Kaiser Jeep Corp., et al., 65 FTC 562 (1964).
In the Matter of Sunshine Biscuits, Inc., et al., 51 FTC 25 (1954).
In the Matter of General Motors Corp., et al., 34 FTC 58 (1941).
METERING

Mercoid Corporation v. Minneapolis-Honeywell Regulator Co., 320 US 680 (1944); 133 F2d 811 (1942); 43 FSupp 878 (1942).
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CHARACTERISTICS OF NON-GOVERNMENTAL TYING CLAIMS CITES
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