Notes and Comments

The Logic of Foreclosure: Tie-In Doctrine
after Fortner v. U.S. Steel

The Supreme Court has long held tying arrangements—sales of one product conditioned upon purchase of another—illegal per se under the Sherman Act whenever the seller "has sufficient economic control with respect to the tying product to appreciably restrain free competition in the market for the tied product." Economists have sharply criticized the Supreme Court cases developing the prohibition. These commentators have occasionally disclaimed concern "with the development of the law of tie-ins as such" and have often proceeded without adequate exposition of the Court's rationale. This Note describes that rationale—a notion that it is unfair to foreclose competitors in one market through the use of power developed in another market—and develops its economic and legal implications. Other economic effects of tie-ins, such as effects on market structure or consumer welfare, appear thus far to have had little influence on the Court's decisions and are here treated only peripherally.

Judicial policy against tie-ins found its first expression in a series of patent infringement cases in which the Court was presented with petitioners who sold patented machinery subject to the condition that other


2. Northern Pac. Ry. v. United States, 356 U.S. 1, 6 (1958). The tying product is a product which A may obtain only if A agrees also to purchase the tied product. The tied product, however, may usually be purchased without an agreement to take the tying product. Where neither product is available separately, each product is both tying and tied.

The requirement that a "not insubstantial amount of interstate commerce" in the tied product be affected, Northern Pac. Ry. v. United States, 356 U.S. 1, 6 (1958), is no longer a check on the scope of the prohibition, but serves only as a de minimis requirement. Fortner Enterprises, Inc. v. United States Steel Corp., 394 U.S. 495, 501 (1969).


5. See, e.g., Bowman, supra note 3, at 19-20; Markovits, supra note 3, at 1398.
goods be purchased for use with the patented machine. The Court refused to enjoin buyers from using alternatives to the tied good, since to do so would encourage attempts to avoid the fundamental government policy of limiting the economic power of a patentee to the market for the patented good itself. The Clayton Act’s prohibition against sales conditioned on refusals to deal with the seller’s competitors was cited, but only as an expression of the public policy which prevented the Court from extending equitable relief to the seller.

In the first Sherman Act tying agreement case, *International Salt v. United States,* the Court was again faced with a patented tying product, a machine which added salt to canned goods. Lessees of these machines were required to purchase from the lessor the salt used in the machines. The Court affirmed summary judgment and an injunction against enforcement of the lease provisions, holding it illegal per se to “foreclose competitors from any substantial market.” The Court relied on Judge Learned Hand’s Second Circuit opinion in *Fashion Originators Guild v. FTC,* a case in which the FTC successfully enjoined a combination of dress manufacturers from directly coercing retailers into refusing to sell competing dresses. Hand’s opinion stresses the foreclosure of competing manufacturers, noting that competition between the conspirators was probably sufficient to “keep prices as low and as wayward as they were before.”

The *International Salt* opinion did not discuss economic power in the tying market. The Court upheld the trial court’s refusal to hear evidence offered by the defendant, and uncontradicted by the government, that other salt dispensing machines were readily available substitutes for the defendant’s patented machines. The only evidence of


8. 332 U.S. 392 (1947) (unanimous as to violation).

9. The Court discussed the patent infringement cases and the patent in the present case only to note that the patent did not take the case beyond the reach of the normal prohibition. 332 U.S. at 595-96.

10. 532 U.S. at 596. The case introduced the concept of a not insubstantial volume of business affected, but apparently only in connection with the per se rule derived from *Fashion Originators Guild v. FTC,* 312 U.S. 457 (1941).

11. 114 F.2d 80 (2d Cir. 1940), aff’d, 312 U.S. 457 (1941).

12. 114 F.2d at 84-85. Compare the Supreme Court opinion, which stressed tendency to create monopoly, the limitations placed on retailers, and per se rules against boycotts. 312 U.S. at 464-65.

13. Northern Pac. Ry. v. United States, 356 U.S. 1, 10 n.8 (1958); Standard Oil Co. v. United States, 337 U.S. 293, 305 (1949). The availability of equivalent machines and the lack of any meaningful monopoly conferred by the patent could hardly have been lost on the seven members of the *International Salt* case who had earlier sat on Morton Salt Co.
economic power of any kind over the tying product was that it was patented and therefore could not be exactly duplicated by competitors.

*International Salt* and three decisions which followed shortly thereafter seemed to indicate that the economic power required to make a tie-in illegal was merely whatever the Court felt would “appreciably restrain” the tied market. As far as the cases showed, that requirement would be met in the case of any differentiated product—one that gave some basis for some buyers to prefer it over others. There was dicta concerning “monopoly in the popular sense,” but on the facts before the Court little real economic power had been proven in any of the cases.

A very different interpretation of past cases was put forth by Justice

v. G.S. Suppiger Co., 314 U.S. 483 (1942), which involved a machine patented by a competitor that performed the same function as the machine in *International Salt*.

14. In *United States v. Griffith*, 334 U.S. 100 (1948), the Court reversed a trial court’s refusal to enjoin a collective buying agreement by movie exhibitors by which they bought movies from distributors subject to contracts which limited the access by their competitors to first and second-run films. The Court analyzed the defendants’ power to gain such favorable and restrictive contracts as a function of the buying group’s ownership of theatres in a number of towns where there were no competing theatres. Mr. Justice Douglas’s analogy to the tie-in cases reveals that he saw foreclosure of competitors as the central evil in both tie-ins and in the present case and economic power as merely an aggravating circumstance.

It is indeed “unreasonable, per se, to foreclose competitors from any substantial market.” *International Salt* . . . . It follows a fortiori that the use of monopoly power, however lawfully acquired, to foreclose competition, to gain a competitive advantage, or to destroy a competitor, is unlawful. *Id.* at 107. In fact, the Court had no findings on the record below that control of single-theatre towns gave any substantial economic power over the decisions of nation-wide distributors, and Mr. Justice Douglas admitted that a single “monopoly” town is a “feeble, ineffective weapon.” *Id.* On the same day as *Griffith* the Court, again per Mr. Justice Douglas, linked a Sherman Act prohibition more closely with the patent infringement cases. In *United States v. Paramount Pictures*, 334 U.S. 131 (1948), the Court affirmed a holding below that defendant motion-picture distributors had violated the Sherman Act by, among other restraints, “block booking” or the refusal to license single feature movies without an agreement by the exhibitor to license other features or groups of features. This practice was felt to “prevent competitors from bidding for single features on their individual merits,” *id.* at 156-57, and to violate the public policy defended in the infringement cases. There was no evidence that the films were not economically interchangeable. Exhibitors frequently leased films without taking opportunities to view them. *Id.* at 157-8 n.11.

*Standard Oil Co. v. United States*, 337 U.S. 293 (1949), decided that Standard’s requirements contracts with its independent dealers were illegal when they bound 6.7% of California dealers to Standard for periods of one year. The opinion by Justice Frankfurter discussed *International Salt*.

That decision, at least as to contracts tying the sale of a nonpatented to a patented product, rejected the necessity of demonstrating economic consequences once it has been established that “the volume of business affected” is not “insignificant or insubstantial” and that the effect of the contract is to “foreclose competitors from a substantial market.” *Id.* at 304. In this section and in dicta later, *id.* at 307-08, Frankfurter apparently interprets *International Salt* to say that proof of economic power in the tied product is not a prerequisite to illegality of the tie-in but merely an aggravating factor that makes more certain the “economic damage” that need not be proved.

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Clark in *Times-Picayune Publishing Co. v. United States*. Defendant, owning the only morning paper and one of the two evening papers in New Orleans, refused to sell advertising space in either paper singly. The Supreme Court reversed a lower court holding that the practice was a violation of the Sherman Act. After reviewing a series of cases, none of which differentiated the Sherman and Clayton Act prohibitions on tying arrangements, Justice Clark decided that Sherman Act— as opposed to Clayton Act—violations were limited to “monopolists” in the tying market who restrained a “substantial” volume of commerce in the tied market.

From the “tying” cases a perceptible pattern of illegality emerges: When the seller enjoys a monopolistic position in the market for the “tying” product, or if a substantial volume of commerce in the tied product is restrained, a tying arrangement violates the narrower standards expressed in § 3 of the Clayton Act because from either factor the requisite potential lessening of competition is inferred. And because for even a lawful monopolist it is “unreasonable, per se, to foreclose competitors from any substantial market,” a tying arrangement is banned by § 1 of the Sherman Act whenever both conditions are met.

The Court explicitly defined the relevant market of the tying product—an exercise that had apparently been unnecessary in earlier tie-in cases—as the total New Orleans market for general and classified newspaper advertising. The Court denied on two grounds that the practice was an illegal tie-in under the Sherman Act. First, the Times-

17. Justice Clark discussed seven cases, 345 U.S. at 606-08. The first, FTC v. Gratz, 253 U.S. 421, 426 (1920), is by his own account contrary to the “rule.” United Shoe Mach. Co. v. United States, 258 U.S. 451, 457-58 (1922), and FTC v. Sinclair Refining Co., 261 U.S. 463, 474-75 (1923), are consistent with either of Justice Clark’s rules, since both power and restraint were found in the former and neither in the latter. Justice Clark’s treatment of International Business Mach. Co. v. United States, 298 U.S. 131, 135-36 (1936), seems to confirm the Clayton “either” rule but it gave weight to both power in the tying product and substantial restraint in the tied product.
Picayune's forty per cent of that total market was not "dominance" as required in the Court's per se rule. Second, the arrangement was not a case of "tying" at all, since morning and evening advertising are the "selfsame product." 21

In *Northern Pacific Ry. v. United States* 22 and *United States v. Loew's Inc.*, 23 the opinions of Justices Black and Goldberg limited *Times-Picayune* to its immediate facts 24 and continued the development of Sherman Act tie-in law along lines more consistent with *International Salt*. A superficial similarity to Clark's rule in *Times-Picayune* remained, but the new statement linked rather than dichotomized tying market power and tied market restraint.

Tying agreements . . . 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 tied product and a "not insubstantial" amount of interstate commerce is affected. 25

By stating the power requirement as "sufficient . . . to appreciably restrain," Black effectively glossed over Clark's insistence on a showing of "dominance" in the tying market. 26 If a significant amount of trade in the tied product is restrained by the tie, it follows that the tying power is *sufficient* to restrain it. Direct proof of "dominance" or "economic control," or even of the extent of the tying market, is, according to Justice Goldberg, "seldom . . . necessary," 27 since leverage sufficient to restrain the tied market is said to follow from "the tying product's desirability to consumers or from the uniqueness of its attributes." 28 Both Justices Black and Goldberg noted that this ap-
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approach is consistent with the earlier patent tie-in cases: the existence of a patent gives rise to a presumption of uniqueness but certainly not to an inference of monopolistic control of an entire market. Accordingly, neither in *Loew's* nor in *Northern Pacific* did the Court require careful definition of the tying market or proof of the extent of the tying seller's share—in both cases "uniqueness" was enough.

The easing of the standard for economic power from *Times-Picayune's* "dominance" to *Loew's* "uniqueness" can be understood as reflecting the Court's perception of the dangers inherent in tying arrangements, and an economic theory about the conditions sufficient to produce those dangers. The Court has consistently maintained that one of the evils of tying arrangements is that "buyers are forced to forego their free choice between competing products" in the tied market. On one level this statement is clearly nonsensical. In principle, buyers always balance their desires for any product with its price. With or without a tie-in, buyers can be forced to accept goods they prefer less than others by the offering of a price differential which more than compensates for the difference in attractiveness. Whatever the buyer regards as burdens of the tie-in, whether low quality of the tied good, inability to deal with preferred tied good sellers, or the risk inherent in being restricted to a given purchase in advance, these burdens should be fully reflected in a decrease in what the buyer will pay for the package. But this fact is so obvious, and has been brought to the Court's attention so often over such a long period of time, that it must be

30. United States v. Loew's Inc., 371 U.S. 38, 45-48 (1962), held illegal the practice of "block booking" of films in sales by distributors to television stations. The copyright on the films and their variations "in theme, in artistic performance, in stars, in audience appeal," 371 U.S. at 48, were relied on to establish distinctiveness. The Court did not attempt to refute defendants' assertion that all types of television programming were relatively interchangeable and that films constituted less than 8% of such programming. *Northern Pac. Ry. v. United States*, 356 U.S. 1, 7 (1958), while not enunciating a standard of uniqueness, affirmed a summary judgment injunction against enforcement of defendant's contracts requiring that purchasers and lessees of Northern Pacific's land use the railway to transport all products raised or manufactured thereon. The court below had made no finding as to the extent of the market for land, nor of Northern Pacific's share of that market, and the Supreme Court merely noted factors that made the land "prized" by certain buyers. Members of the *Times-Picayune* majority disagreed in *Northern Pacific*, saying that a market determination was necessary. 356 U.S. at 13.
31. Mr. Justice Goldberg in United States v. Loew's Inc., 371 U.S. 38, 45-46 (1962), makes it clear that he derived the uniqueness test from the power he felt necessary to create the evils discussed infra.
33. This argument was stated as early as 1917 by Mr. Justice Holmes in Motion Picture Patents v. Universal Film Mfg. Co., 243 U.S. 502, 519-20 (dissenting opinion). Since then
presumed to have penetrated the judicial mind. Tie-in doctrine rests on something more than a mistake in logic.

One basis for the "restraint on buyer freedom" argument might be the notion that even where the disadvantages of the tie are fully reflected in a lower price, it is inconsistent with the idea of liberty to allow the buyer to sell his freedom to make a separate choice between competing tied products. Similarly, it might be felt that the making of fragmented decisions on the quality of goods benefits the community in terms of market allocations, and should not be bargained away by the individual. Further, even in transactions between merchants, not all preferences are adequately quantifiable; and as transactions are made more complex, buyers are less able to guarantee that all of their preferences are reflected in price.

But the principal evil at which the doctrine is aimed is the use of tying arrangements to deny competitors free access to the market for the tied product. Though any seller forecloses his competitors from the demand satisfied by the sale, and though the tying merchant can foreclose his competitors only by the normal means of foregoing profit, the tying arrangement may be different from other foreclosures. The tying seller may be enabled effectively to cut prices in the tied product as a result of his efficiencies in the production of the tying product. The tied-market competitor can push his costs down hardly an economic commentator has failed to make this point in one form or another. See, e.g., Bork, Antitrust in Dubious Battle, FORTUNE, Sept. 1969 at 105; Bowman, Tying Arrangements and the Leverage Problem, 67 YALE L.J. 19, 20-24 (1957); Pearson, Tying Arrangements and Antitrust Policy, 60 NW. L. REV. 626, 633-34 (1965). The argument is also stated by Justice McKenna with respect to patent tie-ins in United States v. United States Shoe Mach. Co., 247 U.S. 32, 65 (1918). Cf. United Shoe Mach. Co. v. United States, 258 U.S. 451, 462 (1922).

35. In Northern Pac. Ry. v. United States, 356 U.S. 1, 8 (1958), the land buyers apparently did not demand any reduction in price for giving up their right to choose between competing sources of transportation.

Judicial notions of the need to prevent transactions restricting future decisions may be found in the earliest common-law restraint of trade cases prohibiting a man from selling his right to participate in a given occupation.

Such contracts injure the parties making them . . . . They tempt improvident persons, for the sake of present gain, to deprive themselves of the power to make future acquisitions. And they expose such persons to imposition and oppression.

. . . They tend to deprive the public of the services of men in the employment and capacities in which they may be most useful to the community as well as themselves. Alger v. Thacker, 36 Mass. (19 Pick) 51, 54 (1837).

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as far as possible, yet lose sales because *in a separate industry* the tying seller has been able to gain an advantage over his competitors.\(^37\) In order to protect himself, the tied-market seller must enter a new business, which may require large outlays of capital and in which he may not have developed expertise.

This foreclosure rationale applies to potential as well as existing competitors. New entrants into either a marginal tied product market or one in which a large portion of potential buyers have a need for the tying as well as the tied product will face higher barriers to entry than they would in the absence of the tie.\(^38\) If the customers for both products represent a significant segment of those the buyer would wish to draw away from existing producers, he will have to develop two new businesses instead of one.

The policy against foreclosure of existing and potential competitors is not designed as part of a theory on the consumer welfare effects of particular market structures. The Court is, rather, reacting to the failure of economic theory to provide workable standards for measuring such broad economic effects. Here, as in other areas of antitrust, the Court is responding to economic indeterminacy with “a method of analysis placing primary emphasis on equality of opportunity, free access to markets by competitive sellers, and complete freedom of choice by buyers.”\(^39\) Tie-in law has developed on quasi-tort lines to protect businessmen from what the Court conceives as an unfair method of competition.

The Court’s uniqueness test is adequate to identify a number of situations in which this type of foreclosure is likely to occur. When-

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\(^37\) If the larger companies have achieved economies of scale in their credit operations, they can of course exploit these economies legitimately by lowering their credit charges to consumers who purchase credit only, but economies in financing should not, any more than economies in other lines of business, be used to exert economic power over other products that the company produces no more efficiently than its competitors.\(^7\) Tie-ins . . . cripple other companies that are equally, if not more, efficient in producing their own products.


\(^38\) Tying agreements deny competitors access to the market for the tied product, not because the party imposing the tying requirements has a better product or a lower price but because of his power in another market.


\(^39\) This policy is not clearly enunciated in all the tying cases, but see Fortner Enterprises, Inc. v. United States Steel Corp., 394 U.S. 495, 509 (1969). C.f. FTC v. Sinclair Refining Co., 261 U.S. 463, 466 (1923). KAYSER & TURNER, ANTITRUST POLICY 157 (1965), seem to consider this as the most important policy involved in the tying prohibition.

ever there are some buyers who find a seller's product uniquely attractive, and are therefore willing to pay a premium above the price of its nearest substitute, the seller has the opportunity to impose a tie to some other good. Even assuming that he changes the money price of neither good, there will be some buyers of the tying good who will refuse the package because they have no desire for the tied good. But there will also be some buyers, who previously bought the tied good from the seller's tied-market competitors, who will sacrifice their tied good preference in order to obtain the seller's unique tying product. These buyers are effectively denied to the tied product competitor, and in order to regain them the competitor will have to lower his price or offer some tying product equally attractive to that of the tying sellers.40

The Court's per se rule against the use of a unique product in tie-ins thus makes perfectly good sense if its purpose is to avoid foreclosure. The rule identifies one set of situations in which foreclosure is likely to result from the tie. A showing of market "dominance" or "monopoly power" neither is nor should be required, since it is the effect on particular customers which is important.

In terms of marginalist economic theory, the rule can be restated as follows: whenever a seller faces a negative sloping demand curve for his tying product, he can, even without altering his previous prices for the separate goods, impose a tie and foreclose competitors. The sloping demand curve represents the seller's ability to raise the "price" of the tying product by imposing the sacrifice of preference, yet still retain some customers.41 Such a curve will exist whenever the tying product is significantly "differentiated,"42 that is, when through use of patents, trademarks, brand names, copyrights, advertising, secret production techniques, or other variations which cannot be freely reproduced,43 the seller is able to convince some buyers that there is no exact substitute for his product and so create buyer loyalty within some price range.

Product differentiation, or "uniqueness," is thus an indication that a tie-in is likely to produce foreclosure. However, as the follow-

40. But see p. 95 infra.
42. See Bain 352-53; Bober 269.
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ing marginal analysis should show, a theoretically more stringent standard could be devised to show when a seller is in a position to foreclose.

The seller of a differentiated product can always raise his price and still retain some customers, but he may be prevented from doing so by the fear that this would eventually cause new suppliers to enter his market and take away his customers. Fairly close substitutes may also be available from competitors already in operation, and buyers may be likely to switch when his price gets “out of line” with the competition. If entry is very easy and substitutes very close, the seller’s price will be virtually fixed, and he will charge only that price which yields sufficient profit to keep him from using his capital elsewhere (“competitive profit”). On the other hand, when barriers to entry are significant and there are few substitutes, it will be possible for the seller to raise his price above the “competitive profit” level and earn “monopoly profits.” How much he actually does raise price will be limited first by the fact that at some point entry will be feasible, and second by the extent to which higher prices force some customers to accept substitute goods or forego purchase.

Supposing that monopoly profits are available, it will be possible for the seller to take out his monopoly profits through a tie-in of some other good. Rather than raising the cash price of the tying product, and pocketing the profit, he can, in effect, use the profit as a subsidy to the price of the tied product and foreclose tied market competitors. He will do so, of course, only if the tied market sales will more than compensate him (although perhaps only in the long run) for his sacrifice of profit on the tying product.

As the above analysis indicates, there are two levels of facts which give increasing certainty that the tie results in foreclosure of tied market competitors: differentiation in the tying product and presence of monopoly profits in the tying market. Determination of the presence of monopoly profit presents severe problems of factual inquiry—mostly relating to the degree and kind of oligopoly in the tying market.

44. BAIN 289-92, 335-39, 364; BOBER 273.
46. The Court may safely assume that sellers will tie only when the practice is profitable. It may well be, however, that the seller expects profits from the tie separate from those gained by foreclosure. This, considered as a lack of intent, does not necessarily reduce the likelihood that foreclosure will result. But such other profits may sometimes indicate societally beneficial effects of the tie-in that outweigh the interest in protecting competitors. See p. 101 infra. It also seems likely that intent to foreclose is not an element of the illegality of tie-ins because it is so difficult to prove.
An attempt to resolve these problems on a case-to-case basis would lead to voluminous records and the most minute factual analysis, yet would probably result in decisions made on little more than intuition. Given the low interest in protecting even non-foreclosing tie-ins from the antitrust laws, the Court has not surprisingly chosen to treat proof of monopoly profits as unnecessary when certain types of product differentiation are present. Refusal to inquire into monopoly profits is justified where the differentiating quality is (a) easily identifiable, and (b) likely in a large number of situations to give rise to monopoly profits. The classes of product differentiation which thus far have been held to meet these requirements are patents, copyrights and the assumed uniqueness of land. Whether other differentiations will give rise to similar per se rules is a question for developing case law, but it would seem that trademarks and physical product differentiations of a type requiring long-range capital investments to replicate should be given the same treatment.

The notion that foreclosure is at the root of tie-in law is supported by Fortner Enterprises, Inc. v. United States Steel Corp., in which the Supreme Court reversed a summary dismissal of an antitrust treble damages suit. U.S. Steel Credit Corporation provided plaintiff land developer with a two million dollar loan subject to a promise to use 85% of that amount for the purchase and installation of U.S. Steel's prefabricated homes. Plaintiff asserted that the tie-in was illegal and claimed damages based on profits lost due to the above-market cost of the houses and their inferior quality. The lower court

47. See BAIN 130 & n.1.
50. The degree of difficulty of proving monopoly profits arising from a particular type of differentiation may influence the decision to avoid such proof. Fortner Enterprises, Inc. v. United States Steel Corp., 394 U.S. 495 (1969), seems to present a type of tying product—loans—where the factors of production are simple enough to make a market power inquiry relatively easy.
55. See p. 99 infra. Since there will be a substantial time lag between the initial monopoly profits and the entry of new producers in these cases, there will be substantial foreclosure. Note also the Court's apparent willingness to forego proof of economic conditions in "physical" barrier cases. Fortner Enterprises, Inc. v. United States Steel Corp., 394 U.S. 495, 505 n.2 (1969).
57. Id. at 497.
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dismissed, partially on the ground that the credit's sole unique quality—that U.S. Steel agreed to loan an amount equal to 100% of the developer's land as security—had been shown uniquely attractive only to the petitioner, and that no economic control or unique attractiveness had been shown "with respect to buyers generally."

The Supreme Court reversed. Mr. Justice Black's majority opinion argues that the "sufficient economic control" which makes a tie-in illegal may exist "only with respect to some of the buyers" in the tied market; there need be no showing that buyers in the tying market generally find the product uniquely attractive. This, of course, is in line with the theory of foreclosure outlined above. As long as some buyers find the tying product sufficiently attractive to warrant accepting a sacrifice of preference in the tied market, tied market sellers may be foreclosed. Having disposed of the lower court's argument, however, Black faced a further problem.

In previous cases the tying product's uniqueness—and hence its utility in creating leverage—derived either from legal or from physical limitations on its supply. If buyers were willing to pay a premium (by sacrificing preference in the tied market) in order to obtain International Salt's machines or Northern Pacific's land, it was because it was simply impossible for them to obtain exactly similar goods from competitors. In Fortner, however, the unique attribute of the tying loan—100% coverage of the security—was, as far as the Court could know, freely replicable by tying market competitors. The only thing peculiarly attractive about U.S. Steel's offer was the low price of the tying product compared with the price of an identical product from other sources.

Although this kind of "uniqueness" does not fall squarely within the rule developed in International Salt, Northern Pacific and Loew's, 58. Id. at 499.
59. Id. at 503.
60. The Court twice recognized that part of the loan's uniqueness was that it was "cheap." 394 U.S. at 504-05.
61. Justice Black's opinion in Fortner can be read as considering the tying product as differentiated but applying to it the "monopoly profits" test noted pp. 95-96 supra. On the criteria suggested there, such a refusal to accept the per se product differentiation rule would seem to be justified since the differentiation of 100% financing seems unlikely, without more, to suggest monopoly profits. If Justice Black is following this approach, his inquiry into substantial cost differentials would be virtually identical to that described pp. 98-99 infra because monopoly profits in differentiated product markets may follow from significant cost advantages over potential new producers of the differentiated product. See Boren, supra note 41, at 273. However, it does seem correct to regard, as the dissenters clearly do (see, e.g., 394 U.S. at 515), the product as undifferentiated and apply the rule called forth by an analysis of undifferentiated markets. A difference merely in price can indicate the possibility of foreclosure, but not because it necessarily implies a sloping demand curve (as is the case in a truly differentiated product).
it can also permit the tying seller to foreclose competitors in the tied market. The Court correctly identified the situations where foreclosure can result from a uniquely low price on an otherwise undifferentiated product as those in which the tying seller has some cost advantage over his tying market competitors.\textsuperscript{62} Such a situation is illustrated by the following hypothetical.

If some seller developed a process by which he—and he alone—could produce flour\textsuperscript{63} at one half its previous cost, and if he could provide a sufficient quantity, he might choose to cut his price drastically and dominate or monopolize the market. As an alternative, say if his supply of flour were limited, he might supply less than the whole market at the old price and collect the difference between his cost and that of his competitors as extra profit. A third possibility would be to supply less than the whole market, offering a low price, but tying in some other profitable good.\textsuperscript{64} The seller could thus translate his cost advantage from the tying to the tied market and foreclose competitors. The tied market competitor would be able to offer an equivalent low price only by finding another industry in which he could earn profit sufficient to subsidize the tied product price to the same degree.

The cost advantages which permit the tying flour seller to foreclose his competitors produce "economic rent." In its most general form, economic rent arises whenever there are different costs for different units of a resource\textsuperscript{65} used in the production of a good for sale.\textsuperscript{66} In any market, the same price will be paid for the same good, whatever the conditions under which it was produced. This market price is high enough to give a competitive profit to the least cost-efficient

\textsuperscript{62} 394 U.S. at 505-06 & n.2. Since \textit{Fortner} involved a summary dismissal of an undeveloped complaint, the Court could only speculate as to the economies enjoyed by U.S. Steel Credit Corporation. U.S. Steel extended credit secured by land in different areas of the country and thus may have faced less risk of a decrease in the value of land in one area.

\textsuperscript{63} The Court's use of wheat as an illustration of an undifferentiated product permitting the evils of the tie-in, 394 U.S. at 509, seems significant in view of its earlier use of flour as the kind of undifferentiated product not coming within the pure uniqueness rule. Northern Pac. Ry. v. United States, 356 U.S. 1, 7 (1958).

\textsuperscript{64} See note 37 supra. No allegation is made here that he would necessarily derive any greater value from his technological innovation than he would have gained by selling the flour separately. But whatever the seller's motive, the tie is potentially harmful as a foreclosing device.

\textsuperscript{65} "Resources" is used to refer to any element contributing to the price or cost of a commodity. "Factor" is the more precise term of art.

\textsuperscript{66} The theory of differential rent was first put forth with respect to land by Adam Smith and clarified by Ricardo. Marx and Marshall ("\textit{quasi-rent}") extended the concept to other resources. See E. Roll, \textit{A History of Economic Thought} 165-66, 189-87, 278-81, 400-01 (3d ed. 1959) [hereinafter cited as \textit{ROLL}]. Cf. E. Stokes, \textit{The English Utilitarians and India} 87-89, 93 (1959).
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seller in the market. To the extent that any seller has costs of production or sale below those of his least efficient stable competitor, the difference in cost is rent.\textsuperscript{67} Differential rent will tend to increase as less efficient, more costly resources and firms are drawn on to satisfy an increasing demand.\textsuperscript{68} Rent will tend to decrease to zero as the inefficient sellers or new entrants successfully adopt the more productive methods of the rent receivers.\textsuperscript{69} The surplus profit, or rent, will continue to exist only for the time period required for competitors to change their production methods,\textsuperscript{70} unless, of course, the cost saving resource is in permanently short supply and new units can be obtained only at higher cost.\textsuperscript{71} As long as the seller's cost advantage exists, the resulting rent constitutes a pool from which he can draw in order to subsidize the price of a tied product, and thereby foreclose competitors.

Like the choice of "uniqueness" or a high degree of product differentiation in the earlier cases, the choice of "significant cost advantages" as a standard makes sense in undifferentiated product situations because of the underlying policy against foreclosure.\textsuperscript{72} There is nothing in the Court's opinion to indicate that the economic rent need be permanent.\textsuperscript{73} Proof of defendant's cost advantages over the economist's "short range" ought to be enough to render a tie-in illegal.\textsuperscript{74} This is consistent with the Court's historical refusal to allow any substantial foreclosure—the tied product competitor should not be forced to wait for relief by way of problematic long-range changes occurring in a market he cannot affect.

The significant cost advantage standard also resembles the earlier choice of "uniqueness" in that it is not comprehensive: there may be foreclosure by a seller of an undifferentiated tying product even when all tying market sellers have identical costs. This will occur when the

\textsuperscript{67} This formulation is a derivation of that set out by \textit{Roll} at 278-79. That formulation is altered slightly by the ideas of Ricardo, \textit{id.} 183-87, and modern marginal analysis, see notes 44-46 \textit{supra}.

\textsuperscript{68} \textit{Roll} 166; J. Robinson, \textsc{The Economics of Imperfect Competition} 102-10 (1954).

\textsuperscript{69} \textit{Roll} 279; note 45 \textit{supra}.

\textsuperscript{70} See \textit{Bober}, note 41 \textit{supra}, at 596.

\textsuperscript{71} \textit{Roll} 279; \textit{Bober} 395-96. See J. Robinson, \textsc{The Economics of Imperfect Competition} 113 (1954).

\textsuperscript{72} See p. 96 \textit{supra}.

\textsuperscript{73} The Court indicated in its discussion of "economic barriers," 594 U.S. at 503-05 & n.2, that the concerns that must be "barred" were the current competitors in the tying market. If the Court had been willing to consider the lack of long-range cost advantages as negating the necessary "sufficient economic control," the position of potential entrants would have to be examined.

\textsuperscript{74} The "short run" is roughly that period of time that elapses before sellers in a market can effectuate changes in their capital plant. See \textit{Bain}, \textit{supra} note 41, at 90-91.
The number of sellers is sufficiently small and the barriers to entry sufficiently great so that, by tacit agreement or conscious parallelism, the sellers are able to raise price and obtain monopoly profits (meaning, as before, profits greater than those necessary to keep them from shifting their capital elsewhere).\textsuperscript{76} And wherever there are monopoly profits, there is a fund from which the tied product price can be subsidized.

One possibility in the identical cost oligopoly situation is for one seller to set his price below that of the others and impose a tie. While they take their monopoly profit in cash, he takes his in the form of extra sales in the tied market. Another possibility is for all the oligopolists to impose a tie and attempt to transfer their joint power from the tying to the tied market. The test for the possibility of foreclosure here would have to be similar to that in the case of the differentiated product not subject to a per se rule based on patents, brand names, or the like. Unless the Court decides to use some indicator of monopoly profit short of a full scale market analysis, the trial court will have to examine such factors as barriers to entry, past pricing policy, number of oligopolists, and conditions in related product markets.\textsuperscript{76}

The logic of the Court's foreclosure doctrine has led from a rather limited prohibition on tying with patented goods to a general theory prohibiting tie-ins wherever there exists appreciable market power over the tying product. The Court's rules make sense in terms of economic analysis of the tie-in situation: where any degree of market power over the tying product exists, foreclosure of tied market competitors is possible. Uniqueness provides a convenient standard for identifying such situations. Where the uniqueness standard is not helpful, the Court can use the "significant cost advantage" standard to identify some of the situations in which monopoly profits in the tying market make foreclosure potentially profitable. Where costs are similar, an investigation of barriers to entry and market structure might be used to locate a surplus available to subsidize the price of the tied product. Experience with cases may produce rules by which this third type of test for the foreclosure danger can be made less onerous than it now appears.

It is true that tying arrangements may have economic effects other than foreclosure. Prices, output, profits, market structure and, ulti-

\textsuperscript{75} See Bain 273-96, 332-39.
\textsuperscript{76} See p. 96 supra.
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mately, consumer welfare will be affected, for good or ill, by the tie. As the Court begins to feel able to identify the factual situations in which non-foreclosure effects are sufficiently beneficial to outweigh the harm to tied product competitors, it can make exceptions for those situations within the existing framework. One such exception has already emerged to allow infant industries to protect good will by tying technologically interdependent goods and services. It has been argued that significant cost advantages accrue from the tie-in and are passed on to consumers. In the event that defendants are able to come forward with proof of such advantages and to convince the Court that they outweigh the evils of foreclosure, another exception might be created. On the other hand, where the tie-in can be shown to harm parties other than tied market competitors—as for example consumers unable to make rational choices when confronted with complex package deals—the Court may appropriately widen rather than narrow the rule.

77. See Markovits, Tie-ins, Reciprocity, and the Leverage Theory, 76 YALE L.J. 1397 (1967).
79. See Bowman, Tying Arrangements and the Leverage Problem, 67 YALE L.J. 19, 29 (1957). It should be noted that the cost advantage so justifying a foreclosure would have to come not from lower cost of the package as opposed to the separate goods, but from economies deriving from refusal to sell the tying good in addition to the package. It is hard to imagine situations in which such economics would result.