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May 2003

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It is almost inevitable in a dynamic economy and society such as that exists in the United States, that law lags developments in the market place. The financial services industry provides a vivid illustration.

For several decades, banking organizations were finding ways, albeit inefficiently, to operate in multiple states through separate banks, despite the federal prohibition of interstate branching. Eventually, in 1994, Congress enacted the Riegle-Neal Interstate Banking Act to allow nationwide banking. Similarly, during the 1980s and 1990s, banking organizations were attempting to offer a broader array of financial services to meet market demands, within the confines of the Bank Holding Company Act (BHCA), which to some extent inhibited them from doing so. Eventually, Congress fundamentally overhauled the BHCA in 1999, through the Gramm-Leach-Bliley Act (GLBA), and allowed banks and other financial institutions to operate, if they so chose, as fully diversified financial institutions.

The financial marketplace, as a result of these two acts, is very different than it was just a short time ago. Consumers and firms can now do business with the same bank in multiple states without having to open accounts with separate banks. In addition, the changes under GLBA have unleashed a number of major financial institutions to offer an array of banking and non-banking services to their customers. In the process, financial markets are gradually becoming more competitive, which was the main objective of both the Riegle-Neal Act and the GLBA.

The failure of Enron and several other major companies in 2002, however, has caused some to question the wisdom of the GLBA, and specifically the closer alliances between commercial and investment banking that it and preceding deregulatory measures have permitted. In particular, charges have been leveled at bank lenders that they may have extended loans to these companies (which later could not repay them) at bargain basement rates on the condition that they use the investment banking services of the banks' affiliates. If true, then such "tying" arrangements would violate at least three provisions of federal law: the long-standing anti-tying prohibition under Section 106 of the BHCA; the requirement under Section 23B of the Federal Reserve Act that bank loans made to customers of affiliates under many circumstances be on "arms-length" terms; and the general requirements under federal banking laws that banks operate in a "safe and sound" manner. Both the Comptroller of the Currency and the Federal Reserve Board have looked into these charges and so far found them without basis (although the regulators are continuing their investigation).

Nonetheless, the tying allegations that have surfaced in the wake of the corporate accounting scandals of 2002 raise a more fundamental policy question: should the law continue to flatly prohibit banks from offering many tied products and services?[1] At first blush, it may seem heretical to even raise the question since the BHCA has contained this prohibition since 1970, and the GLBA expressly did not change it. However, banking is the only sector of the economy subject to a near-absolute prohibition on tying, the rule elsewhere being that tying is subject to the *antitrust laws*, which prohibit tying only where a firm has market power in the tying product or service and thus is in a position to compel consumers to buy another product or service with it. In all other instances, the presumption in our market economy is that if businesses want to offer consumers a better deal if they purchase two or more products or services together rather than if purchased separately, consumers ought to have this opportunity to save money. And, in fact, that is exactly what has happened in various sectors throughout the economy.

But is banking so different that it deserves a different rule, one that limits the ability of banks to bundle services together? In part, the answer is yes. The main liabilities of banks—their deposits—are insured by the federal government (up to $100,000 per account) and thus their financial condition is also monitored and regulated. Accordingly, government has a legitimate reason to ensure that banks do not compromise their safety and soundness by bundling their banking services with services of affiliates in a way that would compromise the safety and soundness of the bank. In addition, individual customers of banks in particular may not fully realize the availability of other

[1] As discussed in more detail below, Section 106 of the BHCA does not prohibit all bank tying arrangements.

sources of credit and thus may be especially prone to pressure applied by a bank to condition a loan on the purchase of another unrelated product or service.

These legitimate qualifications, however, do not justify the near-absolute ban on bundling of services offered by banks and their affiliates that is now in place. Business customers of banks, especially those above a certain size, surely can be expected to know that in today's financial marketplace, there are many options for credit—not just from other banks, but from finance companies and, in the case of larger, public firms, the commercial paper market. Certainly, the anti-tying prohibition on bank services supplied to these customers can be safely replaced by the general antitrust rule applicable to all other firms in the economy. Meanwhile, to prevent banks from undercharging for credit as a way of enticing customers to purchase other products, any change in the anti-tying law can be accompanied by clarifying language requiring bank loans to customers of the banks' affiliates who may be no longer covered by the anti-tying prohibition to be made on arms-length terms.

Why is reform of anti-tying restriction in banking so important? Because allowing banks and their affiliates to offer bundles of services they believe their customers want is necessary for realizing the full potential of competition that is the bedrock principle on which our economy is based. Indeed, firms increasingly want their financial service firms to provide packages of such services—loans and investment banking, in particular—precisely so that they can save money in purchasing these services. If banks can respond to these requests, there is no logical reason why they shouldn't also be allowed to market such packages to other business customers—under appropriate conditions—and thus enhance competition in these lines of business.

Gramm-Leach-Bliley and Changes in the Financial Marketplace

The Gramm-Leach-Bliley Act (GLBA) culminated nearly twenty years of efforts to modernize American financial law to allow banking organizations and other financial institutions greater freedom to offer bundles of financial services to consumers and businesses. GLBA did so by authorizing the creation of "financial holding companies" (FHCs), which can carry out different financial activities, provided that the main functions—banking, insurance underwriting and brokerage, and securities underwriting and brokerage—are carried out in separate subsidiaries (and regulated as such), either of the FHC or the bank(s).[2]

By authorizing so-called "one stop" financial shopping, the GLBA was intended to enhance competition in financial services, especially in lines of activity—notably, securities underwriting—that historically have been concentrated and thus characterized by limited competition. Another objective was to encourage financial institutions to realize "economies of scope"—or cost savings from offering multiple services rather than only one or a few.

While the financial marketplace has changed since GLBA became law, so far there has not been the rush toward financial conglomerates that many had anticipated prior to the Act. To be sure, there are now currently over 600 FHCs registered with the Federal Reserve. But the lion's share of these FHCs act no differently than the bank holding companies they once were, with still limited non-bank activities.

Nonetheless, a number of large banking organizations—Citigroup, Bank of America, J.P.Morgan Chase, Mellon, among others—have taken advantage of their liberalized activity authority under GLBA to offer securities underwriting and some insurance services along with their traditional banking services. Meanwhile, some large insurance companies—notably State Farm and Metropolitan, among others—have added depository and lending services to their insurance products. More than 150 diversified financial companies are now registered as "unitary thrift holding companies" with the Office of Thrift Supervision, with essentially no limits on their activity authority.[3]

In principle, the ability to offer one-stop shopping for financial services should enable diversified financial firms to reclaim some of the relationships with their customers that, to some extent, have fallen by the wayside in recent years.[4] Smaller banks and other financial service firms have long competed on the strength of their abilities to

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[2] Underwriting, real estate development, merchant banking and other activities "financial in nature" must be in subsidiaries of the holding company (FHC), while agency and brokerage activities can be carried out as subsidiaries of the bank or banks belonging to the FHC. Since the enactment of the Reigle-Neal Interstate Branching Act of 1994, which authorized interstate branching, many banking organizations have consolidated their separate banks chartered in different states into fewer banks or even a single multi-state branch bank.

[3] See www.ots.treas.gov/holdsql/hold.cfrm?catNumber=61.

[4] Whether diversification leads to cost savings, or "economies of scope", is an unanswered question because the limited evidence so far is mixed. See Ingo Walter, Strategies in Financial Services: Is Bigger and Broader Better?" *Brookings-Wharton Papers on Financial Services*, 2003 [forthcoming].

provide personalized and customized services to their customers. Deregulation and the technological transformation of much of finance, however, has gone some way toward undermining the relationships between larger banks and their business customers in particular. Commercial loans, lines of credit, and other bank-provided financing arrangements have become commodities and the firms that supply them pretty much substitutable for one another. A similar development has occurred in investment banking.

But relationships remain important, even for large corporate customers, and may be becoming increasingly important for some of them. A survey conducted by the Association for Financial Professionals in 2000 indicated that half of the 444 respondents preferred to obtain credit, mergers and acquisitions advice, investment management and hedging services from a combined commercial and investment bank than from separate organizations.[5] There is some market confirming this survey result. Several large corporations—including Ford Motor and Vodafone—have asked both their investment and commercial banks for loans as a condition for giving them investment banking business.[6] Leading investment banks have responded to this shift in the marketplace by boosting their lending capability, either directly or through support for separately capitalized lending facilities.

There is or should be nothing remarkable about customers wanting better deals through bundled arrangements. As discussed in greater detail below, customers in other contexts have sought bundles of products and services, and firms have been eager to supply them. Customers respond affirmatively to bundled offers where they can achieve cost savings or greater convenience, or both. Outside the banking context, the law allows firms wide scope for bundling or tying so that the market can generate these benefits. The only exception is where firms that have market power in one of the products or services insist that consumers buy another. In that case, the antitrust laws quite properly step in to prevent firms from using tied offerings to harm consumers.

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[5] Reported in Emily Thornton, "They're Investment Banks, Not Lenders," *Business Week*, October 16, 2000.

[6] Ibid.; Randall Smith, "Under Pressure, Goldman Approves AT&T Loan – Investment Banks Debate Role in Changing Landscape." *The Wall Street Journal Europe*, November 8, 2000

Limits on Service Bundling in the Financial Marketplace: The Law and Recent Concerns

Financial services firms—specifically banks and institutions owning banks—are governed by a very different rule, however, when it comes to service or product bundling. Since 1970, the BHCA (Section 106), as reaffirmed by the GLBA, has specifically barred banks from conditioning the extension of credit on the purchase of other non-banking services. This prohibition also extends to banks offering *optional* bundles of services that include bank loans, where the bundle is priced lower than the sum of the prices of the individual services separately sold. It is also generally understood that there is no market power test under the BHCA, as there is outside the banking context, discussed shortly.[7]

The bar against tying credit to other services is absolute only so far as it goes, however. It does not apply to the products and services offered by non-banking affiliates; to banking relationships with foreign customers; and to the provision of credit with "traditional banking" products, such as a deposit or trust services.

If other firms are not subject to a strict anti-tying ban—except where they have market power—why has Congress required banks to operate under a different rule? A key rationale is the view that the credit process is inherently one of an unequal bargaining position: customers may not know that they can obtain credit on the same terms elsewhere and thus may feel pressured to take out loans on potentially disadvantageous terms or to buy products and services they don't want if they are told that they cannot obtain a loan unless they purchase the bundle the bank asks them to buy.

While the anti-tying provisions do not inhibit banks from responding to *customer requests* for bundles of loans with other services, they clearly impede banks from making such offers in the first place and thus competing on their ability to offer bundled products and services as a way of building customer loyalty to a single firm for multiple products and services. Such an outcome runs squarely against the practice outside the banking industry, where firms are free to promote the offering of multiple products or services together.

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[7] Although there is some debate about the absence of a market power test under the BHCA, I assume in this paper that the conventional view about its absence is correct. The BHCA also authorizes consumers or competitors who have suffered injury due to violations of Section 106 to obtain treble damages in a civil suit.

Judging from recent developments, however, this inconsistency has not been uppermost in the minds of some policy makers. To the contrary, concerns have arisen that certain large "universal banks" have violated the anti-tying provisions by conditioning the extension of credit to customers on their purchase of investment banking services. One widely cited survey, by the Association for Financial Professionals, indicates that over half of companies with revenues in excess of $1 billion report that a commercial bank had denied or changed the terms of credit after the company did not award the banking organization other financial business, such as investment banking or advisory services.[8] A related charge is that, in order to attract investment banking business, these banks have under-priced their loans, which if true, would contravene Section 23B of the Federal Reserve Act, which requires banks to extend loans to customers of affiliates on arms-length terms.[9] Section 23B is in place to ensure that banks do not threaten their safety and soundness by extending credit on terms that do not satisfy a market test.

These charges have surfaced apparently for at least two reasons. One is that investment banks affiliated with commercial banks have increased their market share, at the expense of other investment banks—a trend that critics have suggested is at least one indication that commercial banks may have engaged in tying of commercial and investment bank services, or have under-priced loans in an effort to attract investment banking business. A second reason is that a number of large banks that are part of diversified financial organizations recently have suffered substantial loan losses, which some critics attribute to an excessive willingness to extend credit to corporate customers as a way of obtaining their investment banking business.

Both regulators to whom these concerns have been voiced—the Federal Reserve Board and the Office of the Comptroller of the Currency—have looked into the tying and loan under-pricing allegations and, so far at least, have found the evidence for them to be lacking.[10] This is broadly consistent with the findings of an earlier joint investigation by

[8] *Credit Access Survey: Linking Corporate Credit to the Awarding of Other Financial Services* (Association for Finance Professionals, March 2003).
[9] These concerns were voiced in letters from Representative John Dingell to Federal Reserve Board Chairman Alan Greenspan and Comptroller of the Currency John D. Hawke, July 11, 2002 and to the same regulators again on September 12, 2002. See also "The Ties That Bind?", *The Wall Street Journal*, April 21, 2003.
[10] The responses are in joint letters from Chairman Greenspan and Comptroller Hawke in letters to Representative Dingell dated August 13, 2002 and October 16, 2002.

the Federal Reserve and the OCC in 1992, when they then found at best very limited evidence of tying.[11] There is a good economic reason why the large commercial banks affiliated with investment banks are unlikely to under-price their loans to corporate customers in particular: because these loans are typically syndicated to banks, which would have no incentive to purchase them if the interest rates on these loans were at below-arms length levels. As for the concern that universal banks have engaged in tying or under-pricing to increase their share of the investment banking business, it is hardly surprising that investment banks affiliated with commercial banks have attracted an increasing share of this business since those affiliations largely have come about through merger. The resulting combinations—Citibank with Salomon Smith Barney, Bank of America with Montgomery Securities, UBS with Paine Webber/Warburg, and Deutsche Bank with Deutsche Morgan Grenfell—thus naturally account for a substantial share of the total investment banking business.

What about the claim that large banks have had incentives to tie credit in order to attract lucrative investment banking business—and that, in exploiting these incentives, a number have made unwise credit decisions? Bank loans to various telecommunications firms that have since gone bankrupt are widely cited as a case in point. Some of these matters are still subject to various investigations; eventually the facts will come out. But as a general proposition, the mere fact that loans have proved unwise in retrospect is not proof of tying or the fact that banks would deliberately lower their guard in making loans in order to attract other business. During the 1980s America's largest banks managed to lose far more and over an extended period on their loans to developing country governments, commercial real estate projects and some leveraged buyouts, when they were not allowed to affiliate broadly with non-banking entities. In light of this experience, large banks are well aware that the losses on a bad loan can far outweigh any short-run profit they may earn on non-banking fees were they to engage in the kind of tying that has been alleged.

[11] The findings are reported in a 1997 report by the General Accounting Office, *Bank Oversight: Few Cases of Tying Have Been Detected* (GAO/GGD-97-58), May 8, 1997.

In any event, whether or not regulators or the courts find evidence of unlawful tying, the controversy over the issue raises a larger public policy issue over the wisdom of the anti-tying ban itself. Should the law even continue to prohibit banks from tying loans to other non-banking products and services in all circumstances and for all customers? For reasons developed further below, this is not as radical a proposition as it may appear. The reason: tying is treated very different in contexts outside the banking industry. To understand how and why this is so, it is useful to examine that experience before turning to the question of how bundling in the financial services arena ought to be treated.

Anti-Tying Law and Enforcement Outside the Banking Industry

Outside the banking industry, tying and bundling of different products and services is commonplace. Walk into most fast food restaurants and one will find an array of "bundled" food offerings—burgers, fries and coke; consumers will find similar bundled offers from auto companies and their finance affiliates, or from different wireless telephone providers, as discussed in greater detail below. In each of these cases, *consumers* decide whether to take the package deal, buy the products or services separately from the same provider, or go to a different provider down the street.

There are instances, however, where tying can be anti-competitive and hurt consumers, as the antitrust laws have long recognized.[12] The Supreme Court has most recently spelled out the criteria for finding a *per se* tying violation in Jefferson Parish Hospital District No. 2 v. Hyde.[13] In that 1984 ruling, the Court reaffirmed the importance of *market power* as a key element for finding an unlawful tie, but went on to specify four criteria that must be met in order for a tying arrangement to violate the antitrust laws: (1) there must be two separate products, (2) the seller must condition the sale of the tied product on the buyer's purchase of the tying product, (3) the seller must have market power, or be able to force the purchase of the tied product because of its power in the market for the tying product, and (4) there must be substantial potential impact on competition. The Court held that a tie meeting these conditions should be

[12] Tying can be unlawful under Sections 1 and 2 of the Sherman Act and Section 3 of the Clayton Act.
[13] Jefferson Parish Hospital District No. 2 v. Hyde, 446 U.S. 2 (1984).

illegal *per se* on the grounds that "it is far too late in the history of our antitrust jurisprudence to question the proposition that certain tying arrangements pose an unacceptable risk of stifling competition."[14] A brief discussion of the significance of each of these four criteria is found in Appendix A.

There are three basic types of anticompetitive tying theories that find support in modern economic literature and that have been used to explain the charges brought in some important tying cases. Each of these theories involves the enhancement or extension of market power in the tying good, but the incentives and mechanisms in each case are different. These theories are: (1) leveraging, (2) price discrimination, and (3) regulatory avoidance.

Leveraging

This theory is the most intuitive and the one that has most often been cited in antitrust cases over the years. The notion is that if a firm initially has market power over the tying product, it can extend or "leverage" that market power to another product tied to its initial product. By forcing buyers to purchase the tied product as well as the tying product, the firm can charge prices reflecting market power in both markets and thereby increase its profits at the expense of buyers.

Economists associated with the so-called "Chicago school" of antitrust law and economics have criticized the leveraging theory, however. They correctly pointed out that if the products are perfect complements —one product naturally associated with another (for example, a car with a car radio)—there is generally no additional market power to be gained by tying. Put differently, the anticompetitive incentive to tie weakens as the products approach the status of perfect complements.

But what about situations where the products are not perfect complements—such as computer software and certain computer hardware equipment? In these cases, a firm that has market power in one of the products can have both the power and the anticompetitive incentive to tie. Indeed, the subsequent economic literature has confirmed

[14] However, the Court did not find a violation in the particular case before it, either *per se* or under a rule of reason analysis, because it found that the hospital accused of anticompetitive tying did not possess market power in the tying good (hospital services in this case).

that a leveraging theory could be valid in this range of imperfect complements, but not without significant ambiguities.[15]

Price Discrimination

A second theory suggesting that tying may have anticompetitive effects centers on the ability of the tying firm to achieve price discrimination by bundling its product with another. This theory is applicable only when the tied and tying products are complements. Perhaps the most famous case involved IBM tying the sale of tabulating cards to its key punch machines, which the Supreme Court found to be an illegal tie.[16] IBM used this practice to mark up the price of its cards when selling the machines on which they were used.[17] Those buyers who used the machine more intensively used more cards and therefore paid a higher total effective price for the machine. Thus, IBM was able to use the tie as a "metering" device to determine which consumers were the most intensive users and willing to pay the most for the machine. By charging higher prices in this way to those most willing to pay, IBM was able to raise its profits on machines by this form of price discrimination.

Despite the court's holding in the IBM case, there continues to be some dispute about whether this type of conduct is truly anticompetitive. In particular, as discussed below, there may be circumstances where the packaging of two products may benefit consumers if the firm is able to take advantage of economies of scale and scope in the process.

Avoidance of Regulation

A third situation in which tying may produce anticompetitive effects relates to cases where the firm with market power is subject to regulation that inhibits it from fully

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[15] The intuition here is that by tying in an effort to achieve a dominant market position in both goods, the firm will take into account the interrelated demands of those goods in setting its prices. This will lead to greater profits than could be achieved if the firm did not have the power to set the price of the tied good optimally. This situation differs from the perfect complements case, where in essence, there is a single demand for the two perfectly complementary goods. See Burstein, Meyer L., "The Economics of Tie-in Sales," Review of Economics and Statistics, 442, February 1960, 68-73 and Blair, Roger D. and Kaserman, David L., "Vertical Integration, Tying and Antitrust Policy," American Economic Review, 68, June 1968, 397-402.

[16] IBM Corporation v. U.S., 298 U.S. 131 (1936).

[17] In the purest form of this theory, IBM buys cards at a competitive price on the open market and resells them via the tie at a marked up price. For a discussion of this theory, see Dennis W. Carlton and Jeffrey M. Perloff, Modern Industrial Organization, Harper Collins, 1994 at 476-479.

exercising that power. The firm then engages in tying as a way of circumventing regulation. This tie may be effective between products that are complements to any degree and even between products with unrelated demands.

The classic example of tying to avoid regulation involves a regulated utility, such as an electric power supplier or a local telephone service provider, which attempts to tie its regulated service to an unregulated one. By charging a higher than competitive price on the unregulated service, the utility is able to earn the monopoly profits on its tying service which regulation denies it.

One example of regulatory avoidance outside the public utility context is provided by a 1990 consent order issued by the Federal Trade Commission involving an operator of dialysis clinics in southern California.[18] This operator operated outpatient dialysis clinics and provided inpatient dialysis services in the area, but held market power due to scale economies only over outpatient clinics. The firm could not take advantage of its market power, however, due to Medicare pricing regulations. The nephrologists who served dialysis patients in both inpatient and outpatient settings, and effectively directed which facilities and services their patients would use, required staff privileges at the operator's outpatient clinics in order to conduct their practices. The operator tied the granting of those privileges to a requirement that the nephrologists use the operator's inpatient services for all their patients. In this way, the firm was able to charge high prices for those inpatient services to collect the profits attributable to its outpatient market power.

Tying Outside the Banking Context and its Pro-competitive Effects

In short, outside the banking context, tying or bundling clearly is not *per* se or absolutely illegal. Whether these kinds of arrangements produce anticompetitive effects depends—on whether the selling firm has market power in the tying product and on other conditions that have been set down by the courts. In all other cases, *the law presumes tying to be perfectly lawful.*

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[18] See Federal Trade Commission Consent Order No. C-3290, In the Matter of Gerald S. Friedman, M.D., et. al., June 18, 1990.

It is common to distinguish between two types of tying or bundling. In the case of *pure bundling*, the firm may require that a customer purchase the tied product in order to obtain the tying product. *Mixed bundling* arises when a firm offers customers the *option* of purchasing two or more separate products or services in a single transaction at a combined price that is more favourable than the sum of the prices of the products offered separately. Mixed bundling is common in telecommunications and other markets, and if allowed in the banking context, probably would be common there, too.

Both pure and mixed bundling may be procompetitive and benefit consumers in several ways: (a) by resulting in cost savings for producers or consumers, (b) by allowing price discrimination to result in an increase in output, and (c) by promoting the entry of new firms and products. Each of these types of benefits can be illustrated by looking to the telecommunications market, in particular, as an example.

Cost Savings from Bundling

By bundling two or more products and services together, a supplier may be able to reduce transactions, marketing, production, and distribution costs (through more efficient coordination, packaging, shipping, and inventory activities). Bundling can also reduce costs that are incurred by consumers. When the desired bundle of goods can be purchased as a unit, consumers obtain the benefit of "one-stop shopping" and need not search out prices and suppliers of individual products. When the bundle constitutes a package of services that are consumed on a recurring basis, consumers benefit from consolidated billing that reduces the time they need to expend in order to audit and pay for the purchased services each billing period.

For example, business consumers frequently purchase telecommunications services and equipment on a bundled basis from either network operators or systems integrators (such as IBM or EDS). These service contracts are tailored to the requirements of the particular business customer but often include extensive bundling, such as a uniform per-minute rate for all domestic calls instead of rates based on distance, geography or time of day.

Telephone carriers have recently engaged in a wide range of mixed bundling. For example, Verizon offers packages that include (a) local and long-distance calls; (b) local, long-distance, and mobile service; (c) local, long-distance, and DSL.[19] Qwest offers similar bundling choices. Worldcom (now MCI) has a bundle consisting of unlimited local and long-distance calls, calling features and voice mail.[20] Firms tout the convenience of one-stop shopping in their marketing of these bundles, and their success in attracting purchasers is indicative of their value to consumers.

Bundling Efficiencies from Price Discrimination

Mixed bundling can increase economic efficiency by enabling the firm to increase its total volume of sales of the products included in a bundle and thereby achieve cost efficiencies from economies of scale and scope. By creating a separate price for the bundle of two goods—a lower price than the sum of the prices of each separately purchased good—the firm is able to price-discriminate between consumers with different intensities of preference for one good, for the second good, or for both goods. In the presence of production economies of scale and/or scope, price discrimination can increase the total volume of sales and result in a lower average unit price than would occur with uniform pricing of each good.[21]

An example is provided by the long-time practice of local telephone carriers offering subscribers the option of adding a variety of calling features (caller-id, 3-way calling, etc.) to their local service, and offering the bundle of features at a lower price than the total of the individual features' prices. The increased volume of sales of telephone features that occurs due to bundling increases the net revenues attributable to local telephone services and arguably supports a lower rate for basic local service than would otherwise be set by regulation.

Bundling to Facilitate Entry

Bundling may facilitate the entry of new firms and products by providing a means of overcoming barriers to entry. For example, in markets in which "network effects" are significant—that is, where the benefits to consumers rise as more consumers are on the network or use the product or service—the bundling of products and services may enable

[19] www22.verizon.com/foryourhome/
[20] http://www.theneighborhood.com/res_local_service
[21] Adams, W.J. and Yellen, J.L., "Commodity Bundling and the Burden of Monopoly", QJE, v. 90 (1976) pp. 475-498.

suppliers to overcome the "chicken or egg" difficulties of achieving the critical mass necessary to successful entry.[22]

In the telecommunications sector, services and equipment are often complements and network effects are common. A consumer's demand for a new service, or for a new telecommunications device, ordinarily depends on the number of other users of the service and device. Basic telephone service and fax service are two prominent examples. Because of such network effects, both consumers and suppliers may benefit from pricing arrangements that encourage consumers to be "early adopters" of the new service or technology.

For example, when first supplied, subscription to mobile (cellular) telephone service was widely encouraged by bundling a handset together with mobile service. Subscribers contracted for a minimum period of service and obtained a handset at a subsidized price from the same service supplier. The value of both the service and the handset depends on the number of service users and both the handset and the service are both necessary to using the service. Thus, both service providers and handset sellers had an interest in seeing low introductory price offers for both products. The bundle was a means for them to essentially jointly offer low introductory prices, which increased the number of early subscribers, in turn stimulated additional consumers to acquire mobile service.

It is likely that providers of broadband wireless mobile service, currently in its infancy, will also use bundling strategies in order to expand the market rapidly. In Australia, Primus Telecom will offer free broadband service for three months (at home) and for six hours (at public hotspots) to consumers who purchase Compaq or HP mobile devices.[23]

Reexamining the Prohibition against Tying of Bank Loans to Non-Bank Products and Services

It stands to reason that if the law tolerates, and indeed encourages, forms of tying or bundling outside the banking industry in the interest of promoting competition and

[22] S. J. Liebowitz and S.E. Margolis, "Network Effects" in Handbook of Telecommunications Economics, vol. 1, Cave, Majumdar and Vogelsang (eds). Elsevier Science, 2002.
[23] www.primus.com.au/news/articles/news_19-03-03.htm.

benefiting consumers, then it ought to be worth the while of policy makers to take a second look at the desirability of maintaining the absolute prohibition against tying of bank loans to other non-banking products and services.

In asserting this proposition, I do not mean to imply that policy makers should reexamine the tying prohibition in all contexts. Instead, the second look is most justified only where one can safely presume that banks do not enjoy market power, and thus the ability to cause the anticompetitive effects associated with tying in non-banking contexts. That condition is most easily met in the case of large corporate customers, over whom banks clearly do not have market power or an informational advantage. These customers not only have a choice among many banks—local, regional and even national banks—but also many of them also raise funds regularly in the commercial paper or long-term debt markets. Moreover, as described earlier, increasingly these customers want to purchase many, if not all, of their financial services from a single, diversified firm, and to obtain cost savings and better convenience by doing so.

Accordingly, there is a compelling case for modifying Section 106 at the very least to exempt large corporate customers from its absolute prohibition of the tying of credit to other products and services.[24] This exemption could be made operational in any number of ways: by specifying a size threshold (measured either in assets or sales), or perhaps even better, by defining a large corporate customer as one who is or being sought as a customer of a bank's investment banking affiliate. Significantly, in 2001, the Association of the Bar of the City of New York offered a similar recommendation to the one advanced here, arguing that the antitrust laws can protect large commercial customers.

There is one respect in which bank lending is special, however, and thus where even an exemption from an absolute bar against the bundling of bank loans with non-banking products must be supplemented by a legal safeguard. Because the deposit liabilities of banks are federally insured (up to $100,000 per account), insured depositors have little or no incentive to monitor the safety and soundness of the banks to whom they

[24] There may be – and indeed almost certainly is -- a case for broadening the exemption to other customers, business and retail, who also have a wide range of providers of credit from whom to choose and where it would be inappropriate to presume that banks have market power. I confine my argument for an exemption

entrust their money. Shareholders also may lack such incentives if, collectively, they have little stake in the enterprise, thus preferring the bank to take "heads I win, tails the FDIC loses" bets with depositors' funds. For these reasons—what economists call the "moral hazard" of deposit insurance—the public has an interest in regulating and supervising banks to ensure their safety and soundness.

In achieving this objective, regulators may therefore legitimately have an interest in ensuring that banks do not extend loans at less than market terms, which could threaten their solvency. Under current law, Section 23B of the Federal Reserve Act requires banks to extend credit to affiliates and their customers, under many circumstances, on arms-length terms. This same requirement should be maintained and indeed strengthened if Section 106 were modified as suggested here. Accordingly, in bundling bank loans and other products at a single price, banks must book as revenue on their loans the same amount(s) that would be realized if the loans were extended separately to other similarly situated customers. Put another way, Section 23B should be amended to make clear that banks must grant credit on arms-length terms to any customers of affiliates who may no longer be covered by the absolute anti-tying prohibition of Section 106 (or as proposed here, larger corporate customers). Fortunately, as a practical matter, the market would generate this result in any event for the vast majority of loans to large customers because these loans are typically syndicated to other purchasers, who would demand that the interest rates charged reflect market conditions.

How could banks make bundled services financially attractive to customers if they are prohibited from discounting their loans? By discounting the *non-bank offerings*. In other words, a bank that wanted to extend credit and sell insurance to a customer, or do the same in connection with mergers and acquisition advice, could lower the fee for the insurance or the advice as a way of enticing the customer to buy the bundled services. The outcome would clearly benefit the purchasers of those services. If the purchasers can ask for such outcomes, why shouldn't banks be allowed to *offer* them? The suggestion here is that banks should be allowed to make such offers at least for large corporate customers over whom it is clear that banks lack market power.

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in this paper, however, only to the clearest case where banks cannot be presumed to have market power in their lending activities: to large corporate customers.

As in the telecommunications sector, one would expect banks belonging to different financial service firms to offer different combinations of services, and thus bring both cost savings and greater convenience to corporate customers. Banks—and financial service firms more broadly—thus would compete under the same rules and with the same incentives as other firms currently throughout the rest of the economy. Moreover, modifying Section 106 in the manner suggested would put domestic corporate customers on the same footing as foreign customers (of any type, business or individual, or any size), who are exempt from the anti-tying prohibition and thus who can now be served on a bundled basis by diversified U.S. banking organizations.

Of course, a change in rules to allow banks to bundle loans with other products and services most likely would trigger objections from competitors not affiliated with banks. But these objections would be no different in character than those voiced by investment banks and insurers, among other firms, to GLBA and earlier efforts to liberalize activity authority of financial institutions. Public policy arguments then were about the threat to the deposit insurance funds and the leakage of any deposit insurance "subsidy" to other enterprises. But regulators and ultimately Congress rejected these contentions in favor of allowing competition to decide what services would be offered by whom and at what price. Protections were retained or added to insulate the deposit insurance system from risk. Similarly, any fear that allowing banks to bundle loans with other products would endanger the deposit insurance system by permitting banks to under-price their loans can likewise be addressed through the combination of the law (Section 23B of the Federal Reserve Act) and the marketplace (through the discipline of the syndication market).

Conclusion

It is time, therefore, that policy makers allow the marketplace to determine what combinations of financial services are offered to corporate customers who do not need to be protected by artificial rules that may once have been useful but certainly are no longer. If corporate customers can demand of banks that they supply credit along with other services at discounted prices, then the law should certainly allow diversified financial institutions to seek business on that basis, subject to legal requirements that bank loans be provided on arms-length terms.

Appendix A

Requirements for a Tying Violation under the Antitrust Laws

The discussion in the text briefly mentioned the four criteria for finding an unlawful tie under the Supreme Court's holding in Jefferson Parish Hospital District No. 2 v. Hyde. This appendix outlines these criteria in greater detail.

Separate Products

The tying and tied products must actually be separate and distinct. This simple requirement essentially eliminates two possible product relationships. First, the products cannot be important substitutes for one another. If they were, then buyers generally would not need to buy both of them since one can be used in place of the other.[25] Second, at the other extreme, the products cannot be perfect complements, or products that are always used in fixed proportions. A common example is shoes and shoe laces. Each pair of laced shoes requires one pair of shoe laces, no more and no less, for all buyers. Economists have shown that for these products, there is generally no anticompetitive incentive to tie because a monopolist in shoes cannot increase its monopoly profits by requiring that buyers also purchase laces from it.[26] Again, but in a different sense, the products are not separate because use in fixed proportions means that buyers view the bundle of shoes and laces as a single product with a single price (the sum of the separate prices) whether they are sold separately or not.[27]

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[25] For example, suppose products A and B are close substitutes, product A is sold only by a monopoly firm, and product B is sold competitively by that firm among many others. Then the monopoly firm cannot impose a gainful tie effectively by requiring, for example, that buyers of the monopolized product A must buy product B from the monopolist. For a very small difference in prices that benefited the monopolist at the expense of buyers, those buyers would quickly switch to purchasing only product B from the other available suppliers.

[26] This is not true for some theories of anticompetitive harm from tying. These exceptions are discussed below.

[27] This assumes that all laces (for each pair of shoes) including those from other potential sources are the same. One way to see the basic insight here is to note that, since consumers only care about the sum of the prices, the monopoly price for the products jointly must be stated in terms of this sum. The composition of that sum is irrelevant to consumers, so charging a competitive price for the tied product with a tying product price that yields the correct monopoly price sum will generate the same profit as any other composition of the same sum. Since that is the composition that prevails without the tie, the monopolist cannot gain by the tie. See Bowman, W.S., "Tying Arrangements and the Leverage Problem," Yale Law Review, 67, November 1967, 19-36 and Dennis W. Carlton and Jeffrey M. Perloff, Modern Industrial Organization, Harper Collins, 1994.

Thus, the range of product relationships at issue in tying cases narrows to those in which the tying and tied product are imperfect complements. This means that the products are used together but not in fixed proportions and their demands are said to be related.[28] Examples include cameras and film, copiers and paper, and computer operating systems and software applications. Tying can potentially become an issue for products related in this way because many or all buyers will wish to purchase both products and will consider the product prices separately since the buyers can alter the proportions in which they use the products.[29]

Conditional Sale

This criterion requires that the tie is in force effectively; the tied bundle cannot be offered as an alternative to buying the tying good separately. There are two basic kinds of tying offers. First, in a package offer, the consumer is offered a package composed of fixed amounts each of the tying and tied good. Second, in a requirements offer, the tying good is offered on condition that the buyer purchase all of its tied good requirements from the tying good supplier. In the case of a package tie, the buyer must not be able to break the package apart after the sale and resell parts of the package to other buyers in an active resale market. In the case of the requirements tie, the buyer must not be able to fulfill some or all of his requirements through purchases from others without being detected by the tying firm.[30]

Market Power

Without market power there is no ability to force a tie.[31] Many or all buyers must have such a strong demand for the tying product that they are still willing to purchase it under the tying conditions because they cannot acquire it, or some substitute sufficiently acceptable, from any other seller. Specifically, buyers must prefer the tying offer

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[28] In some cases, tying can become an issue in cases of products with unrelated demands, neither substitutes or complements, as discussed below.
[29] Economically, if the price of one of two imperfect complement products rises, the quantity purchased of both will fall, but the quantity purchased of the product with the unchanged price will fall less. Thus, after the relative price change, the buyer will use proportionately less of the product with the increased price. See, for example, C.E. Ferguson and J.P. Gould, Microeconomic Theory, Richard D. Irwin, 1975.
[30] Ineffective ties essentially become mixed bundle offerings. See Dennis W. Carlton and Jeffrey M. Perloff, Modern Industrial Organization, Harper Collins, 1994.
[31] See Hyde, 466 U.S. at 13-14.

combination of tying and tied products to any amount of the tied product from other suppliers at prevailing prices without any tying product. This indicates that the power to tie is likely to be strongest when the products are close complements because it is in that case that tied products are likely to be of little value without the complement tying product.

Substantial Competitive Impact

The tying arrangement must entail a substantial adverse impact on competition—that is, an enhancement or extension of the market power already existing. Thus, even if the first three conditions are met, there may be no substantial adverse competitive impact where the tying firm imposed the tie for procompetitive reasons and conditions are such that an anticompetitive effect is not possible. For example, if the products were perfect complements (used in fixed proportions), an anticompetitive effect is generally not possible.