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# Payment Systems and Antitrust: Can the Opportunities For Network Competition Be Recognized?

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Views of payment systems competition have evolved during the past generation. When automated teller machine (ATM) networks were first created in the 1970s, policymakers considered two models for these emerging networks: (1) a monopoly/public utility network model, with open access obligations and (potentially) some form of regulation or (2) a competing network model, with numerous networks competing in a lightly regulated environment. This article describes how these visions of network competition have evolved. Even though the network competition model was chosen in the 1970s, because of a history of nonenforcement by antitrust agencies and regulators, it appears that by the close of this century the monopoly/public utility model may be victorious. This article describes how that change occurred and considers whether it is appropriate.

The first section of the article describes general trends in antitrust enforcement affecting payment systems networks since the 1970s. The next

section examines the framework applied to antitrust analysis of ATM network mergers and is followed by a section applying this analysis to two recent ATM network mergers. The article examines how the monopoly/public utility model appears to have prevailed in the ATM network merger context.

## THE SEARCH FOR PAYMENT SYSTEMS COMPETITION: TRENDS IN ENFORCEMENT

### *The 1970s — Providing the Opportunities for Network Competition in New Markets*

As the technology for automated payment systems arose, Congress perceived the need to address the creation of these systems in a single forum, and created the National Commission on Electronic Funds Transfer (NCEFT). The Antitrust Division of the Department of Justice (the division) played an important role in informing the NCEFT whether and in what form competition could arise in the newly formed networks.

One important question addressed by the NCEFT was whether these networks would be natural monopolies because of the substantial processing efficiencies involved. At the time, some commentators argued that, because a single network could serve all ATMs at lower cost, these networks were natural monopolies. Based on that conclusion, they argued that the networks should be open, that is, compelled to share their facilities with all financial institutions in a given area.

In proceedings before the NCEFT, the antitrust division opposed the concept of mandatory sharing, in particular because it would deter the incentives to create competing networks.<sup>1</sup> The NCEFT adopted the division's view. It observed that mandatory sharing "would inevitably

<sup>1</sup> See U.S. Department of Justice (1977).

result in fewer competitors... . Maximum competition usually spells rapid technological improvement and lower prices to consumers."<sup>2</sup> Thus the commission expressly rejected any sharing requirement, based on its assessment that there was potential for the creation of a number of competing networks.<sup>3</sup>

The division continued to advocate its vision of network competition in a number of forums. It actively opposed the adoption of state sharing statutes.<sup>4</sup> The division argued that mandatory sharing would undermine the incentive to create networks in the first place by creating a free rider problem. That is, if the creator of a network knew it would have to share ownership with others and share the fruits of its efforts after the network succeeded, it might be deterred from creating the network in the first place. Moreover, the division suggested that mandatory sharing would lead to the formation of monopoly networks.

Despite the division's intervention, many states adopted various forms of mandatory sharing. Since these laws require a network to admit any bank as a member, they dampened the opportunity for intersystem competition. More recent economic analysis of these sharing laws suggests that the division was correct in suggesting that mandatory sharing would not serve the interests of consumers. In those states with mandatory sharing laws, output in terms of ATM deployment and card usage is less than in those states that do not require sharing.<sup>5</sup>

In the 1970s, scores of ATM networks were created. When these networks appeared to interfere with the potential for network competition, for example, by being too large or overinclusive, the division raised concerns and threatened enforcement action. In 1977, the division issued a business review letter refusing to clear a proposed statewide electronic funds transfer (EFT) network in Nebraska, primarily because of the proposed venture's all-inclusive nature.<sup>6</sup> At the time of the letter, the proposed network comprised 66 percent of the commercial

banks in the state, which collectively accounted for 86 percent of deposits. The network attempted to justify its size based on the amount of capital required, the degree of risk, and the economies of scale involved in operating an EFT system. The division concluded that these efficiencies did not necessarily justify the all-inclusive nature of the proposed network.<sup>7</sup> Because of the division's action, competing networks were created in Nebraska, and other networks avoided becoming over-inclusive.

## *The 1980s—Economics of Ubiquity Take Center Stage*

In the 1980s, the division basically disappeared from the enforcement radar in payment systems. The lack of enforcement, especially in the merger area, was based on the recognition that there were efficiencies from the consolidation of ATM networks. Charles Rule, former assistant attorney general of the Antitrust Division, discussed this factor in a 1985 speech. Rule stated that the division was focusing more on the economies of ubiquity and the resulting consumer benefits achievable by widespread sharing of ATMs. Rule observed that the consolidation of ATM networks benefits consumers by, among other things, increasing the available ATMs in a single network; similarly, increasing the number of cardholders tends to increase the deployment of ATMs. Thus Rule indicated that the division would not challenge the creation or merger of shared ATM networks based on size alone.<sup>8</sup>

Unsurprisingly, the division did not challenge, or even apparently investigate, any ATM mergers during the 1980s. The Federal Reserve Board approved every ATM merger before it because it viewed the ATM network as primarily a system of computers and consequently focused almost exclusively on the networks' "back office" operations when approving these mergers.<sup>9</sup>

Perhaps the most notable merger was the 1988 acquisition of the Cashstream network by the MAC network in 1988—

<sup>2</sup> See *EFT in the United States* (1977).

<sup>3</sup> At the time, because ATM networks were in their infancy, there were no significant barriers to entry.

<sup>4</sup> See Rule, reprinted in Baker and Brandel (1988).

<sup>5</sup> See Laderman (1990).

<sup>6</sup> The division has a procedure, known as a business review, which it uses to indicate whether it will bring an enforcement action.

<sup>7</sup> See Baker (1977).

<sup>8</sup> See Rule, (1988), pp. 142-43.

<sup>9</sup> See *infra* notes 35-36 and accompanying text. The Board did appear to consider whether a proposed network "may represent so large a proportion of possible ATM terminals in local markets that no other switches could successfully compete." See Barclays Bank PLC (1985); Centre Bancorporation (1983).

two mid-Atlantic networks which competed in Pennsylvania and New Jersey. The division did not challenge the merger. Rather, the merger was the subject of a private antitrust challenge brought by The Treasurer, a competing ATM network. A district court rejected this challenge in *The Treasurer, Inc. v. Philadelphia National Bank*. The court adopted an approach similar to the Board's—that the relevant market included anyone capable of providing computer processing and that market was unconcentrated. MAC continued to acquire almost all of its neighboring networks, ultimately securing a dominant position in Pennsylvania and many adjoining states.

**PULSE business review.** The one matter that forced the division to confront intersystem competition was a business review request submitted by the PULSE ATM network in 1983. At the time there was aggressive competition in Texas between two similar sized networks: PULSE and MPACT. MPACT, in particular, competed through an incentive price program. First Texas Savings and Loan, a member of MPACT, sought to join PULSE, and PULSE declined.

PULSE was faced with a peculiar quandary posed by the antitrust laws. If PULSE refused to admit the bank, First Texas could claim that its exclusion from PULSE constituted an illegal group boycott and it could seek treble damages in a private antitrust suit.<sup>10</sup> If PULSE admitted First Texas, this would create a de facto merger with MPACT, and PULSE might face a government antitrust challenge because the network had become too large and the merger eliminated intersystem competition.<sup>11</sup>

Faced with this dilemma, PULSE sought a business review from the division. PULSE posed three alternatives to the division: (1) admitting First Texas; (2) generally admitting members of competing networks; or (3) implementing an anti-duality rule, that would prohibit membership to members of competing networks.

The division addressed only the first alternative, saying that at the time, admitting First Texas would not pose an antitrust violation. The division noted that the incremental consumer convenience that would result from admitting First Texas appeared to outweigh the loss of rivalry that might occur between the two competing networks.<sup>12</sup> The other two alternatives were not addressed because they were not considered ripe for review. Faced with the lack of support from the division and the potential of a private antitrust suit, PULSE admitted First Texas. The impact on intersystem competition was immediate; within six months of the business review letter, practically every MPACT member joined PULSE. MPACT eliminated its incentive pricing. There was a similar effect on consumers, as several banks increased their consumer fees.

### *The States Intervene—The Entree Case*

Because of the division's inaction, attention to intersystem competition issues seemed dormant and ATM network consolidation seemed uncontroversial. This trend changed in the late 1980s with the challenge by state attorneys general (the states) to the formation of the Entree national point of sale (POS) joint venture between VISA and MasterCard.<sup>13</sup> At the time, POS was in its infancy and was perceived as a competing (and perhaps superior) technology to ATM networks and credit cards. VISA and MasterCard had informed the division of the formation of Entree, but no enforcement action was taken.

The states alleged that VISA and MasterCard violated the antitrust laws through the formation of the Entree POS debit program, their respective acquisitions of interests in PLUS and CIRRUS (the national ATM networks), and VISA's acquisition of Interlink, a California POS network. The states alleged that by forming Entree and acquiring the ATM networks, VISA and MasterCard sought to retard the development of on-line POS

<sup>10</sup> Section 1 of the Sherman Act, 15 U.S.C. § 1 (1988), prohibits certain restraints of trade. Courts have held that the denial of membership in a joint venture may violate Section 1. See *Northwest Wholesale Stationers, Inc. v. Pacific Stationery & Printing Co.*, 472 U.S. 284 (1985).

<sup>11</sup> Up until that time both networks were exclusive. If First Texas was a member of both networks, it would serve as a gateway and could enable any bank in one network to access the ATMs in the other network. Once the exclusivity provisions were bridged, arguably intersystem competition between the two networks would diminish.

<sup>12</sup> See Letter from William F. Baxter, Assistant Attorney General, Antitrust Division, to Donald I. Baker (Aug. 3, 1983).

<sup>13</sup> See *State of New York v. VISA, U.S.A. and MasterCard Int'l*, No. 89-Civ-5043 (S.D.N.Y. filed July 26, 1989).

debit, a payment system they feared would compete with and erode the profitability of credit cards. Entree, the states alleged, was a combination of the five most likely entrants into the POS market. The states further alleged that as part of the joint venture, MasterCard and VISA had agreed not to introduce their own separate systems to compete with Entree. As part of their allegations, the states challenged provisions in the Entree agreement that limited its membership to banks that were members of both associations, thereby excluding nonbanks such as Sears/Discover Card and American Express.

The complaint sought divestiture of CIRRUS (by MasterCard) and PLUS and Interlink (by VISA), as well as an injunction against the implementation of Entree. In 1990, VISA and MasterCard agreed to abandon the Entree joint venture.<sup>14</sup> VISA kept its ownership of Interlink, and both card associations were permitted to keep their interests in the national ATM networks.<sup>15</sup>

Although arguments about the economics of ubiquity may have been persuasive in other contexts, they did not persuade the state attorneys general involved in the Entree case. One could argue that a single national POS network would have offered the opportunity for greater customer convenience by putting all of the POS terminals in a single network. Similarly, aggregating all of the cardholders in a single network may have persuaded merchants to use the new POS network. A single network may have fostered development of the new technology. But these arguments were unavailing. The states recognized that even if a single network might present some of these efficiencies, they were outweighed by the potential loss of competition between competing POS networks.

Five years after the settlement it appears that the states' assessment was correct. After the settlement, VISA and MasterCard created their own independent POS programs (Interlink and Maestro, respectively). In response to the concerns of the states, each of the national POS net-

works adopted anti-duality rules, which prevent any bank member from belonging to a competing network. Competition between the networks, in terms of product promotion, product development, and pricing, has been aggressive and far more significant than that in the credit card market, where duality is permitted.<sup>16</sup>

Each of the networks has competed vigorously to sign up both banks and merchants. Both networks have adopted different switch and interchange fees, to make more attractive packages for consumers.<sup>17</sup> The fees charged by the networks, including interchange fees, are far less than those charged by credit card networks.<sup>18</sup> Interlink charged additional annual card service fees and merchant location fees. When Maestro entered, it did not charge these fees. Of particular significance, Interlink initially charged a transaction service fee of \$0.02 for every transaction conducted by an Interlink cardholder at an Interlink terminal even if the transaction was actually processed through a regional network (in other words, if the bank attempted to bypass the Interlink network). Maestro entered without such a bypass fee, and its entry forced Interlink to eliminate the fee.

In April 1994, Maestro sought to eliminate its anti-duality rule to permit issuer duality. After considering the proposal for several months, the states rejected it in December 1994. The states observed that both networks were competing aggressively and that the networks appeared to be thriving in terms of transaction volumes and merchant participation. Moreover, unlike other payment system markets, competition from nonbanking participants, such as Discover Card or American Express, was unlikely because debit card services are necessarily linked to a financial institution's demand deposit account. Most important was the states' concern that eliminating Maestro's anti-duality rule "would bring to an end the aggressive intersystem competition between the two bankcard associations" in the POS market. Thus the states concluded that they could not assure Maestro that

<sup>14</sup> See *State of New York v. VISA U.S.A., Inc.*, 1990-1 Trade Cas. (CCH) ¶ 69,016 (S.D.N.Y. 1990).

<sup>15</sup> See Constantine (1990).

<sup>16</sup> See "Bankers are Burying the Hatchet" (1994); Balto (1995).

<sup>17</sup> The switch fee is the fee charged by the network for moving a transaction over the network's switch. The interchange fee is a fee paid between the merchant bank and the cardholder's (consumer's) bank for processing a credit card or debit card transaction. Both fees are set by the bankcard association.

<sup>18</sup> See "Bank of America" (1994); "Debit Card War" (1994); "Economics—More Issuers" (1994) for a description of competition in interchange fees.

elimination of their anti-duality rule would not lead to an enforcement action.<sup>19</sup>

For the states, abstract arguments about efficiencies were simply a guise to deter the emergence of intersystem competition. Their enforcement action led to increased intersystem competition and concomitant benefits for consumers. As important, the Entree case began to affect how regulators and enforcement agencies assessed the opportunities for network competition.

### *The 1990s—Renewed Attention to Network Competition*

**Exclusive processing rule challenged—MAC ATM network settlement.** The reemergence of the division in the payment system competition venue occurred in April 1994, when the division challenged the exclusivity rules of the MAC ATM network. In the six years since the division took a pass on the Cashstream acquisition, MAC had acquired almost all of its neighboring competing networks, had a monopoly in several mid-Atlantic states and had become the largest ATM network in the United States. At issue at this point was not a merger, but rather certain exclusivity arrangements that MAC used to enforce its monopoly position. The division challenged these restrictions as illegal tying and monopolization, under sections 1 and 2 of the Sherman Act.<sup>20</sup>

To understand the action, we set forward the different functions of an ATM network. In its most basic sense, an ATM network comprises a trademark, a computer switch, and a set of rules. Some networks have their own computer system that drives the computer switch; other networks contract for that service. Some networks engage in “processing,” that is, they drive (operate) their members’ ATMs; other networks permit their members to drive their own ATMs or use third-party processors, such as EDS Corp. This market for “ATM processing” was the focus of the division’s enforcement action. At the time of the enforcement action, Electronic Payment Services (EPS), which

operates the MAC network, was a joint venture of four bank holding companies: CoreStates Financial Corp., Banc One Corp., PNC Bank Corp., and Society Corp. The MAC network has approximately a 90 percent market share in Pennsylvania and a dominant position in adjacent mid-Atlantic states. The MAC network handles 92 million transactions each month for 27 million depositors at more than 13,000 ATMs.

Most ATM networks are nonexclusive, that is, they permit their members to belong to any of a number of networks. Until 1992, MAC generally did not permit its bank members to participate in rival ATM networks. These exclusivity rules created an almost impervious barrier to competitive entry because if a bank wanted to join a competing network it would have to withdraw all of its ATMs from MAC. Faced with that all-or-nothing decision, few banks chose to align with competing networks.<sup>21</sup> The rules helped MAC acquire and maintain its dominant position in the market. The rule against multiple affiliations was formally dropped in 1992 after being challenged in a private antitrust suit.<sup>22</sup>

In this case, the division’s focus was on other rules which restricted the ability of banks to participate in other networks or use competing third-party processors. The division alleged that a rule that required banks either to obtain ATM processing from MAC or to provide ATM processing in-house (which is prohibitively expensive for many smaller banks, thrifts, and credit unions) effectively made it impossible for these smaller banks to belong to rival networks while belonging to MAC. MAC generally forbade its network members from obtaining ATM driving from any of the several third-party processing firms that provided that service.

The MAC rules and practices, the complaint alleged, “prevent willing buyers and sellers from conducting business at competitively determined prices and terms.” By preventing banks from obtaining ATM processing from others, MAC effectively prevented these banks

<sup>19</sup> See “State Antitrust Officials” (1994).

<sup>20</sup> *United States v. Electronic Payments Services, Inc.*, No. 94-208 (D. Del. Apr. 21, 1994), 59 Fed. Reg. 24,711 (May 12, 1994), 59 Fed. Reg. 44,757 (Oct. 14, 1994).

<sup>21</sup> As the division observed, “The small banks that wish to join another network (which might offer ATM network access at lower prices) will not be able to do so unless the other network has enough of a presence to provide small banks’ depositors with sufficient ubiquity and convenience. The entrant network, of course, cannot achieve the critical mass necessary to attract banks.” *Elec. Payment Servs.*, 59 Fed. Reg. 24,711, 24,720.

<sup>22</sup> See *BuyPass Corp. v. New York Switch Corp.*, No. 93-CV-3201 (E.D. Pa. filed June 15, 1993). The rule had survived a private antitrust challenge, when MAC acquired Cashstream in 1988. See *The Treasurer, Inc. v. Philadelphia National Bank*, 682 F. Supp. 269, 280 (D.N.J.) (upholding exclusivity provisions which “were and are intended to structure [the owner’s] distribution of network services, and to provide a return... for developing, maintaining and promoting the network and to prevent free riding by competitors,” *aff’d mem.*, 853 F.2d 921 (3d Cir. 1988). Of course, in 1988, MAC had a far less significant competitive presence than it did in 1994.

from participating in other ATM networks. In turn, MAC's rules made it substantially more difficult for other networks to enter into MAC's area of dominance, thereby excluding competitors and maintaining MAC's monopoly position.

The division alleged that regional ATM network access and ATM processing were separate products and that MAC's rules and practices effectively forced its customers to purchase ATM processing from MAC. The monopolization claim alleged that MAC "willfully has maintained its monopoly power in the market for regional ATM network access in the affected states through exclusionary practices," including its processing rule.

The consent decree requires MAC to open its network to independent ATM processors on a nondiscriminatory basis. MAC is prohibited from tying the use of its trademark to the purchase of processing services. Under it, MAC must permit its participants to use third-party providers of ATM processing, to display multiple network trademarks on all their ATMs, and to permit multiple branding of ATM cards issued by MAC members in areas where MAC has or could soon have market power.

The objective of the decree is to provide banks with the opportunity to use other networks or third-party processors for their processing services. MAC is also required to sell its network services "at prices that will not vary with the process selected" and to provide a more open environment for third-party processors. In addition, MAC would be limited in the extent to which it can keep banks from displaying symbols of other ATM networks on their ATMs and ATM cards.

The decree permits a wide range of other activities that may raise exclusionary concerns. First, MAC is permitted to charge a royalty fee for transactions processed outside the MAC switch.<sup>23</sup> This royalty fee can be as much as the fee for a transaction processed through the MAC switch. Second, MAC can prohibit its members from bypassing the switch, a practice known as subswitching. Third,

MAC is permitted to provide volume discounts, but these must be provided on a nondiscriminatory basis.

Whether the decree adequately solved the competitive problem is an open question. The consent decree received a tremendous amount of adverse commentary; many competing networks stated that the proposed decree would permit MAC to achieve the same objective through a variety of other types of exclusionary conduct.<sup>24</sup> In addition, as described later, the Board staff raised concerns over the sufficiency of the relief when it examined the EPS-National City Bank merger.<sup>25</sup>

The division's enforcement action demonstrated that the economics of ubiquity no longer rule the day. The division was able to do that by separating ATM services into two separate product markets: ATM processing (or the back office operations) and branded regional ATM access (which reflects the value of membership in the network and the network mark). As the division observed, ATM processing can be provided as a service distinct from branded ATM network access and can be performed in the facilities of the ATM switch, a depository institution's own facilities, or in the facilities of a data processing service organization.

Of course the irony here is that had the division not signed on to the economics of ubiquity bandwagon, and had examined the nature of network competition more carefully, it may have challenged the earlier acquisitions by MAC, and ultimately this enforcement action may have been unnecessary.

**Payment systems merger challenge—consumer money transfer services.** The only enforcement action brought against a payment systems merger was the challenge by the Federal Trade Commission (FTC) to the acquisition of the Western Union consumer money transfer system (owned by First Financial Management Corp.) by First Data Corp., the owner of the MoneyGram system—in *re First Data Corp.* (First Data).<sup>26</sup> Consumer wire money transfer systems involve one-way money transfers,

<sup>23</sup> A royalty fee requires the ATM owner to pay a fee to the network for each transaction it chose to route through an alternative network.

<sup>24</sup> See Public Comments on Proposed Final Judgment, *Electronic Payment Services*, 59 Fed. Reg. 44,757 (Aug. 30, 1994).

<sup>25</sup> See footnotes 67-69 and accompanying text.

<sup>26</sup> *First Data Corp.*, FTC File No. 951-0107 (Sept. 21, 1995). The FTC brought an earlier action against First Data in August 1994, when it intended to bid on the assets of Western Union in a bankruptcy court auction. First Financial was the successful bidder and the FTC's settlement was never made final. *First Data Corp.*, FTC File No. 931-0090 (Aug. 18, 1994).

<sup>27</sup> Consumer money transfer services involve the transfer between two parties of funds through consumer money transfer agents, typically check cashing, private postal, or grocery stores. Customers wishing to transfer money today begin the process by going to a consumer money transfer agent, such as a check casher or grocery store, and completing a transaction form, which includes an explanation of how the recipient will identify himself or herself when receiving the cash. The sender then gives the agent the money to be transferred and

typically between two consumers.<sup>27</sup> Wire transfer agents include a wide variety of retail outlets including grocery stores and check cashing outlets.

Western Union has been the dominant firm in the market and had been a regulated monopoly until the late 1970s. The Federal Communications Commission (FCC) had deregulated Western Union based on the expectation that technological advancement had reduced the barriers to entry.<sup>28</sup> Those expectations were overly generous; entry was neither easy, nor timely.

In the mid-1980s, Citibank attempted to enter the market, but their entry was stifled by two factors: (1) developing a minimum viable scale nationwide network of money transfer agents; and (2) establishing name recognition and customer acceptance of its services through large-scale advertising and promotion. Long-term agent contracts used by Western Union made acquiring a sufficient agent network difficult. To build brand name recognition, substantial investment would be required over several years. Citibank's attempted entry failed after several years of significant losses.<sup>29</sup>

MoneyGram, which was originally owned by American Express, entered in the late 1980s. It was able to overcome these barriers in part because it could rely on the trade name and the agent base of American Express. After several years of losses, MoneyGram overcame the barriers to entry and introduced competition into an environment in which a monopolist had dictated annual price increases.

Competition from MoneyGram led to lower prices, better services, and higher commissions for agents. Prior to MoneyGram's entry, Western Union imposed regular annual price increases of 5 percent to 8 percent. MoneyGram entered by competing aggressively on price; Western Union responded by refraining from price increases and offering special promotions and discounts to customers.<sup>30</sup> In 1994, MoneyGram launched a frequent user discount program to increase sales and customer loyalty; Western Union

responded with a similar program. Non-price competition increased, including increased price advertising, the development of a more extensive will-call system, and free long-distance telephone calls.

Competition between the two networks also led to almost a threefold increase in wire transfer agents, which provided consumers with a dramatic increase of convenience when using money transfer services. As both networks competed for agents, agent commissions increased, the networks provided greater amounts of cash at more agent locations, and the networks increased their advertising. Competition created these consumer benefits indirectly by pushing the companies to pay their transfer agents higher commissions and significant bonuses for increasing customer volume.

At the time of the FTC's action, Western Union had approximately a 90 percent market share. According to the complaint, MoneyGram and Western Union were the only two services in the U.S. consumer money transfer market and it would be difficult for new companies to enter the market. The complaint noted that First Data's acquisition of Western Union would create a monopoly in the market. Further, the FTC contended that entry was unlikely because of the difficulty of gaining brand name recognition and establishing a nationwide network of retail outlets. Thus absent the settlement, the FTC alleged that the acquisition would increase the likelihood that, among other things, consumers would be forced to pay higher fees and receive less service and agents would be forced to accept reduced commissions.

The proposed consent agreement permits First Data to acquire Western Union as long as it divests either the MoneyGram or Western Union consumer money wire transfer business. The divestiture package includes the MoneyGram or Western Union trade name, contracts with a sufficient number of retail sales agents to have a minimum viable scale network, and enough other necessary assets to run the business. The settlement also includes

pays the transaction fee. The transferring agent then inputs the information into the data base by computer (or by calling the service supplier, who inputs the information). This database allows the receiving customer to go to any receiving agent in that service's agent network and obtain the cash with proof of identity.

A large portion of consumer money transfer users do not have banking relationships; they account for 20 percent to 25 percent of U.S. households. For those consumers with limited or nonexistent banking relationships, consumer money transfers offer the only means to transfer money quickly from one person to another.

<sup>28</sup> See *Graphnet Systems, Inc.*, 71 F.C.C. 2d 471, 515 (1979) (FCC observed that, "We are confident that the public will be served by enabling multiple entry into this market.").

<sup>29</sup> See "Citicorp Express" (1987).

<sup>30</sup> When First Data entered, it priced domestic transfers of \$300 or less at \$9; at the time Western Union priced these transfers at between \$13 and \$29. Western Union brought an antitrust suit charging that First Data's pricing was predatory. The suit was unsuccessful. See *Western Union Financial Services v. First Data Corp.*, 20 Cal. App. 4th 1530 (1993).

<sup>31</sup> 15 U.S.C. § 18 (1988).

<sup>32</sup> *National Bancard Corp. ("NaBanco") v. VISA U.S.A., Inc.*, 596 F. Supp. 1231, 1258 (S.D. Fla. 1984), *aff'd*, 779 F.2d 592 (11th Cir.), *cert. denied*, 479 U.S. 923 (1986). Baxter (1977) argued that "no significant degree of market power" will exist in that stratum of communities serviced by only one on-line system because "the preexisting technology," defined to include "currency, checks, off-line credit cards and check guarantee cards subject to floor limits," "will constrain pricing freedom and service quality." The *NaBanco* analysis is criticized in a recent article. See Carlton and Frankel (1995). It, however, was adopted by a recent district court decision involving ATM network fee setting. See *Southtrust Corp. v. PLUS System, Inc.*, No. CV-93-P-2291-S (N.D. Ala. Aug. 10, 1995).

<sup>33</sup> *The Treasurer, Inc. v. Philadelphia National Bank*, 682 F. Supp. 269 (D.N.J.), *aff'd mem.*, 853 F.2d 921 (3d Cir. 1988)

<sup>34</sup> 682 F. Supp. at 279 (emphasis in original).

<sup>35</sup> For example, see, CB&T Bancshares, Inc. (1984); Atlantic Bancorporation (1983); cf. Centerre Bancorporation (1983) The Board observed that the product market was "the provision to unaffiliated financial institutions of data processing services, particularly the operation of an ATM network exchange"; Interstate Financial Corp. (1983) (same).

In other orders, it defined the markets more narrowly. For example, see Citicorp (1986) ("provision of ATM services"); Sovran Financial Corp. (1986)

various provisions designed to ensure that there would be an agent network sufficient to support the divested business. Finally, the settlement expressly permits First Data to provide data processing services to the acquirer of the MoneyGram or the Western Union assets, provided that First Data, among other things, shields any nonpublic information it receives from any First Data employees who are involved in First Data's consumer money wire transfer.

The importance of the *First Data* action was in differentiating between the importance of the back office or systems operation, and the agent network and trade name. Like the FCC, the FTC did not contend that the back office operation posed an entry barrier. However, the years of experience gained since the FCC decision had shown that ease of entry at the back office level would not guarantee a competitive market. Thus the proposed consent order does not require the divestiture of the back office system and in fact permits First Data to provide back office services to the acquirer of the divested assets. Rather, the FTC focused its relief on the trade name and agent network, which it contended were the most significant barriers to entry.

## EVALUATING MARKET POWER IN PAYMENT SYSTEMS CASES

Antitrust analysis examines the effects of mergers on competition. The purpose of this analysis is to determine whether the effect of an acquisition "may be substantially to lessen competition or to tend to create a monopoly."<sup>31</sup> Such analysis involves identifying the relevant product sold by the firms and the geographic scope of markets in which they sell their products. This section discusses the nature of defining markets and assessing market power for payment systems.

### Market Definition Issues

Antitrust analysis of payment system mergers or other competitive activity

depends critically on whether the system has market power. This is typically a difficult question to answer in part because the delineation of relevant markets is itself a complex and uncertain undertaking. The definition of the relevant market has both product and geographic market components. In both respects, the markets defined have become more precise and narrow over time.

**Product market definition.** One of the uncertainties in counseling payment systems is traceable to the difficulties in defining the relevant product market for purposes of measuring market power. Many different approaches have been used. Product market definition has become more precise as regulators have become more sensitive to the competitive problems raised by network competition. In particular, both the division and the Board have begun to differentiate between the back office and trademark aspects of a network in defining the market. Typically fact finders define the product market from the perspective of the cardholder (the retail market) and the card issuing bank (the wholesale market).

*A payment systems market.* One of the earliest cases, *NaBanco*, involved a challenge to a credit card interchange fee. The district court defined a broad retail market consisting of all payment systems, which it defined further as:

*a market consisting of VISA and all payment services used in retail sales. This market includes VISA, MasterCard, T & E cards, merchants' proprietary cards, merchants' open book credit, cash, travelers cheques, ATM cards, personal checks and check guarantee cards.*<sup>32</sup>

The court acknowledged that none of these was a perfect substitute but relied on an examination of cross-elasticities of supply and demand to determine that they

were sufficiently close substitutes for the VISA card.

*A data processing market.* In terms of a wholesale market, in early cases fact finders emphasized the data processing functions of ATM networks. For example, in *The Treasurer*, the district court adopted a broad definition of the relevant product market.<sup>33</sup> That case involved a challenge by The Treasurer ATM network in New Jersey to the acquisition of the Cashstream network by Philadelphia National Bank, the owner and operator of the MAC network. Although he ultimately dismissed the case for lack of antitrust injury, Judge Politan also examined the case on the merits. In so doing, he defined the relevant product market as “electronic data processing to all ATMs plus all of those institutions that have unaffiliated ATM systems and those institutions that do not currently have ATMs but have the capacity to install them and use market technology to its fullest.”<sup>34</sup> In other words, the market included all firms capable of performing the electronic communication function performed by an ATM network.

Similarly, in the 1980s, in orders approving bank holding companies’ acquisitions of voting stock in shared EFT networks, the Federal Reserve Board typically defined the relevant market as “the provision of data processing services to unaffiliated financial institutions.”<sup>35</sup> In addition, the Board noted that the market for data processing and related ATM services is “unconcentrated, with many competitors and few barriers to entry.”<sup>36</sup>

*An ATM services and network switching market.* In more recent decisions and enforcement actions, fact finders have defined more narrow markets, focusing primarily on demand side factors. For example, in the *Financial Interchange* arbitration, which involved ATM network interchange fees, the arbitrator rejected proposed markets of *all payment systems* and *all means of obtaining cash*, similar to the approach taken by the Board and the courts in *NaBanco* or *The Treasurer*.

Instead, it identified a narrow retail market of “ATM services” on the grounds “that there is a significant group of ATM users who value the characteristics of ATMs and for whom other means of obtaining cash are not reasonable substitutes.”<sup>37</sup>

In addition, in *Financial Interchange*, the arbitrator identified a wholesale market for network switching, and concluded that PULSE had market power because “existing subnetworks, regional networks and national networks do not presently provide a reasonable substitute for the [switching] service PULSE provides to its members.”<sup>38</sup>

In the *EPS* consent decree, the antitrust division took a similar approach, albeit focusing on the wholesale side of the market.<sup>39</sup> First, it defined a market for regional ATM service, based on the needs of banks to provide depositors “ubiquitous access to their accounts.” It observed that “while a bank can deploy its own ATMs, the advantage to a shared ATM network is that a bank’s depositors will be able to use ATMs at many more locations than one bank alone could practicably support. The areas a bank seeks to serve through a shared ATM network include the areas in which its depositors live, work and shop, and the broader areas in which they move regularly. A bank’s ability to offer its depositors access to other banks’ ATMs, and thereby to offer its depositors convenient access to their accounts, is in most bankers’ view necessary to attract and retain deposits... . Because no other service constitutes a reasonably close substitute for regional ATM network access, regional ATM networks constitutes a product market.”<sup>40</sup>

Similarly it defined a second market for ATM processing. This market involves *providing the data processing services and telecommunications facilities and services used in providing regional ATM access.*<sup>41</sup>

*Network access, network services, and ATM processing.* In its analysis of the *EPS-National City Bank* merger (hereinafter *Banc One Corp.*), the Federal Reserve

(same); *Barclays Bank PLC* (1985) (“competition in the provision of ATM or POS services”).

<sup>34</sup> For example, *Sovran Financial Corp.* (1986).

<sup>35</sup> *In re Arbitration between First Texas Sav. Ass’n & Financial Interchange, Inc.*, 55 Antitrust & Trade Reg. Rep. (BNA) 340, 356 (Aug. 25, 1988) (*Financial Interchange*) (arbitration decision by Professor Thomas Kauper, former antitrust division assistant attorney general).

<sup>36</sup> *Id.* at 355. Other regional networks were found to be only potential alternatives for Texas ATM owners and substantial barriers (including the national networks’ antiduality membership rules, the preference by banks for local networks, and the fact that PULSE was very efficient and well established) were said to impede competition from the national networks, PLUS and CIRRUS. *Id.* at 353-54. For a similar approach, Rule, *supra* note 4, at A-144 (assessing ATM networks in terms of wholesale and retail ATM services).

<sup>37</sup> *United States v. Electronic Payments Services, Inc.*, No. 94-208 (D. Del. Apr. 21, 1994), 59 Fed. Reg. 24711 (May 12, 1994).

<sup>38</sup> 59 Fed. Reg. 24713 (May 12, 1994).

<sup>39</sup> 59 Fed. Reg. 24712 (May 12, 1994).

Board further refined the division approach by defining three markets: (1) network access (access to an ATM network identified by a common trademark or logo displayed on ATMs and ATM cards); (2) network services (the switching functions for the network); and (3) ATM processing (the data processing and telecommunications facilities used to operate, monitor, and support a bank's ATMs).<sup>42</sup>

According to the Board, *network access* includes: (1) the right to brand ATMs and ATM cards with the trademark or logo of the ATM network; (2) the ability of the ATM cardholder with an account at one member depository institution to initiate withdrawal and other account transactions at an ATM owned by another depository institution that is a member of the same network; and (3) minimum standards for network performance and products offered through the network.

Similarly, the Board defined network services as including the switching functions performed by the ATM switch and gateway services with other networks. Finally, the Board defined ATM processing as including the provision of terminal driving, transaction routing and authorization, and account reconciliation services.

*An observation.* How a fact finder analyzes the relevant product market in cases involving bank networks depends in part on how much weight is accorded to the value of the network trademark. If one looks only to the data processing function of shared ATM networks, it may be plausible to conclude, as did the *Treasurer* court, that the data processing industry is unconcentrated, that there are numerous alternatives available to financial institutions to perform their data processing, and that a network—even a dominant regional network—does not have market power. On the other hand, if the network is viewed not so much as a vendor of undifferentiated data processing services, but rather as the purveyor of a unique branded product marketed under the network logo, the fact finder may reach

a very different conclusion, as in *Banc One Corp.* or *Financial Interchange*.

In this respect, the Board's decision in *Banc One Corp.* is a significant analytical advancement. By identifying a "network access" market which focuses on the "branded product" aspect of the network, the Board's decision provides a mechanism for more careful and precise analysis of market power.

**Geographic market definition.** The geographic market can be defined only with reference to a specific product or service market, and there are uncertainties here as well. Markets have been defined as national, regional, or local depending on the product market selected.

For example, early court opinions that addressed the geographic market applicable to a payment systems market suggested that it is national.<sup>43</sup> If the focus of a fact finder is a product market defined in terms of data processing for unaffiliated institutions or network switching services, the geographic market should be national because those services are generally provided on a national basis. On the other hand, in cases such as *Financial Interchange*, which focused on a retail market, the geographic market was assumed to be local in scope.<sup>44</sup>

The most recent decisions have defined ATM networks as participating in regional markets.<sup>45</sup> In *Banc One Corp.*, the Board observed that most networks were regional in scope (that is, consisting of several states), and a Federal Reserve study found that the markets for ATM network access were at least regional.<sup>46</sup> The Board decided that the appropriate geographic market in which to analyze the competitive effects of the merger was MAC's Mideast Region (western Pennsylvania, Ohio, Indiana, Kentucky, and West Virginia), where National City had a competitive presence.

In *Banc One Corp.*, the Board also seems to suggest that in some cases the geographic market may be national in scope.<sup>47</sup> The Board observed that companies are able to provide ATM processing

<sup>42</sup> *Banc One Corp.* (1995), pp. 491, 494.

<sup>43</sup> See *NaBanco*, 596 F. Supp. at 1259 (where the parties agreed that the market was nationwide); see also Complaint, ¶¶ 77-80 in *New York v. VISA U.S.A., Inc.*, No. 89-Civ-5043 (S.D.N.Y. July 26, 1989) (the states alleged a nationwide market for credit cards and point of sale debit cards marketed by national joint venture).

<sup>44</sup> See *Financial Interchange*, 55 Trade Reg. Rep. (BNA), No. 1380, pp. 356 (although the geographic boundaries of the retail market were not directly addressed in this proceeding, retail markets are presumably local because consumers will use only ATMs close to where they are).

<sup>45</sup> See *EPS consent decree*, 59 Federal Register 24,711; *Banc One Corp.* (1995), pp. 494.

<sup>46</sup> See *McAndrews and Kauffman* (1993).

<sup>47</sup> *Banc One Corp.* (1995), p. 494.

and network services through data processing facilities regardless of geographic proximity and that some firms provide these services on a nationwide basis.

One issue that arises in ATM cases is whether national ATM networks (for example, PLUS and CIRRUS) compete with regional networks. In the *Financial Interchange* arbitration, the arbitrator held that national ATM networks did not provide an adequate alternative to PULSE because neither could duplicate the coverage of the PULSE network. The antitrust division in the EPS consent decree has taken a skeptical position about the level of competition offered by national networks. In its Competitive Impact Statement it observed the following:

*National ATM networks exist, but these are by design networks of last resort, used only where the two banks involved in a transaction do not both belong to any one regional ATM network. National ATM network transactions are typically more expensive, and those networks provide only a subset of the transactions available through regional ATM networks.*<sup>48</sup>

## Measuring Market Power

There is relatively little guidance as to what statistical base should be used as a surrogate for measuring the power of a particular network. In *Financial Interchange*, the arbitrator variously examined the share of all ATM transactions (which “understate[d the venture’s] position in the market”), the share of interprocessor switching transactions, the share of available ATMs, and the cardholder base.<sup>49</sup>

In *The Treasurer, Inc. v. Philadelphia Nat’l Bank*, the court suggested that market power should be measured by the number of ATMs.<sup>50</sup> It wrote that “the principal competitive advantage of any ATM network is the number of ATMs utilized by the system.”<sup>51</sup> The court also examined

financial institution deposits in holding that measurement of the market cannot be confined to network ATMs, but must take account of “the large number of unaffiliated ATMs that are open territory for competition.”<sup>52</sup>

Other possible measures for assessing market power include the number of ATM locations (as distinct from number of ATM machines), the value of ATM transactions (as distinct from number of transactions), the number of member institutions, and the value of retail deposits accessible by ATM. The interpretation of any statistical measure must be tempered by the recognition that ATMs, cardholders, and institutions may have simultaneous access to multiple networks. Ultimately, in the bank network context, statistical market share evidence—at least in terms of a share of ATM transactions—may be an imperfect measure of market power. Because of the availability of alternative networks, historical market share may overstate the market power of a network. Yet because of the difficulty competing networks may have acquiring the necessary critical mass, market shares may tend to understate market power. Similarly, because of the significance of entry barriers in the ATM access market, market shares will also understate market power. Thus a fact finder must exercise caution before relying on any individual statistical measure.<sup>53</sup>

## Analysis of Entry Barriers

Essential to the analysis of market power in payment system cases is consideration of the existence of entry barriers. Where entry is “easy,” it is difficult for a network to raise prices or reduce output since that exercise will lead new firms to enter the market and cease the competitive opportunity. According to the antitrust division and the FTC entry is “easy” only if it would be timely, likely and sufficient in magnitude to counteract the competitive effects of concern.

In the network environment analysis of entry becomes more complex because of the critical mass nature of networks. A

<sup>48</sup> 59 Fed. Reg. 24719 (May 12, 1994). The Federal Reserve Board has taken a similar position. *Banc One Corp.*, p. 494, n.21.

<sup>49</sup> 55 Trade Reg. Rep. (BNA), No. 1380, pp. 353, 356.

<sup>50</sup> 682 F. Supp. 269 (D.N.J.), *aff’d mem.*, 853 F.2d 921 (3d Cir. 1988).

<sup>51</sup> *Id.* p. 279.

<sup>52</sup> *Id.*

<sup>53</sup> See Blumenthal (1989).

network may not be able to effectively enter unless it acquires a sufficient number of participants to offer a viable product. This poses a “chicken and egg” problem; potential members are reluctant to join unless they are assured that a sufficient number of other firms will join to make the network viable.

Moreover, network externalities may also impose significant entry barriers. ATM networks provide an example that illustrates the difficulty a challenger faces in duplicating the network externality of an incumbent firm. ATM networks exhibit a positive externality: large networks yield increased convenience to consumers, thus increasing the network’s value to the consumer. Thus a new network is unlikely to succeed unless it can demonstrate that a substantial number of transactions and cardholders within the market will be available on a long-term basis. Effective entry requires that a new ATM network offer the same (or better) convenience and ubiquity offered by the incumbent network. As the division observed in the EPS competitive impact statement, in order to be competitive, a network must provide “enough of a presence to provide [their] depositors with sufficient ubiquity and convenience.”<sup>54</sup>

As in the analysis of relevant product market, the analysis of entry barriers in the network context has varied significantly. One approach, which focuses on competition at the “back office” level, has been to suggest that entry can be accomplished relatively easily. For example, in *The Treasurer*, the court focused on competition in providing automated data processing services to banks. In this market there were a number of potential entrants including third-party processors, regional and national ATM networks. Of course, *The Treasurer* was decided in 1988, in a context in which there were large numbers of banks that were unaffiliated with any network and in which no network was dominant. Thus, the potential for a new network to arise and compete with MAC was far more significant than it is today.

A more sophisticated approach to

analysis of entry was provided by the arbitrator in the *Financial Interchange* matter. The PULSE network argued that barriers to entry might not be significant. Faced with the exercise of market power, PULSE suggested, individual banks could use other networks or form their own quasi-network by bypassing the PULSE network switch. Although these opportunities for bypass existed, the arbitrator suggested that entry barriers were significant because of both network externality and critical mass factors. Although there was the opportunity for the formation of smaller networks through individual bypass between member banks, this was insufficient to alleviate the concern over market power. Expert testimony established that a new ATM network could not succeed without providing consumers a level of convenience comparable with that of the PULSE network. The arbitrator found that a new network could not support the number of ATMs required to furnish such convenience without achieving “major defections” from PULSE, and that such defections were unlikely. These findings ultimately led the arbitrator to conclude that the PULSE network did have market power, even though the complainants could have bypassed PULSE and created their own local network.

Analysis of entry barriers is essential to determining whether networks have the ability to exercise market power. This analysis should focus on whether potential entrants have the ability to attract a sufficient number of firms to join a new network and whether that network has the ability to deter the exercise of market power. This analysis should focus on competition at the brand or ATM access level, where network externalities and critical mass play an important role.

## ATM NETWORK MERGERS— THE LEGAL FRAMEWORK

Since the mid-1980s tremendous consolidation among ATM networks has occurred. The number of regional ATM networks has been reduced substantially, and in relatively few areas is there head-to-

<sup>54</sup> EPS, 59 Fed. Reg., p. 24,720.

head competition between networks. Some commentators have predicted there may be as few as 10 regional networks by the end of the century.<sup>55</sup> In this section, we discuss the legal framework for analyzing ATM network mergers.

## *The Legal Framework*

Mergers and acquisitions of ATM networks may be challenged under either the Sherman Act or the Clayton Act by the division, state attorneys general, or private parties. To prevail, the plaintiff must demonstrate that the merger or acquisition may have a significant adverse effect on competition, and this, in turn, requires the plaintiff to prove a relevant product and geographic market. In addition, a private party, unlike the government, must also prove that the challenged merger or acquisition will cause it to suffer antitrust injury. Where the private-party plaintiff is a competitor of the merging parties, this will be a difficult burden to satisfy because the plaintiff must demonstrate that it will be injured by higher prices charged by the merging parties.<sup>56</sup>

Mergers and acquisitions between ATM networks may also require regulatory approval. Thus, for example, where the network's shareholders are bank holding companies, the shareholders typically must receive the approval of the Federal Reserve Board (or the relevant Federal Reserve Bank) before acquiring another network.<sup>57</sup> The parties to a network acquisition may also be required to file notification with the FTC and the antitrust division under the Hart-Scott-Rodino Act, although the size of most network acquisitions and the parties making them will usually be below the size thresholds. Other exemptions may also apply under certain circumstances.<sup>58</sup>

To date, there have not been any challenges to ATM network mergers by the division, and the Board has declined to stop any mergers. The only decided case involved a private challenge to a regional ATM network merger. In 1988, The Treasurer network sought a preliminary

injunction to stop the acquisition of the Cashstream network by Philadelphia National Bank, which operated the MAC Network.<sup>59</sup> The court dismissed the suit on the grounds that the plaintiff had suffered no antitrust injury as required under sections 4 and 16 of the Clayton Act and hence lacked standing to sue. After the acquisition, MAC also acquired The Treasurer.

## *Renewed Attention to ATM Network Mergers*

Both the antitrust division and the Federal Reserve Board have given renewed attention to ATM network mergers. Reportedly, both agencies have investigated the NYCE-Yankee 24 and the EPS-National City Bank mergers (discussed later), but neither has taken any enforcement action.<sup>60</sup>

Enforcement officials at the division have provided some guidance about their new interest in ATM network mergers. The division no longer adheres to the catechism of economics of ubiquity and is now subjecting ATM mergers to much greater scrutiny. Robert Litan, the former antitrust division deputy assistant attorney general, said that the division is revisiting the assumption of economics of ubiquity.<sup>61</sup> He suggested that the division is not convinced that ATM networks are natural monopolies. Rather than taking a doctrinal view in favor of ATM mergers, Litan suggested that these mergers will receive greater scrutiny and that the networks would carry a significant burden of proof. He also observed that the procompetitive benefits of mergers might be acquired through less restrictive alternatives: "[i]t is very possible that they can achieve the same economies of scale without going to full-scale mergers."<sup>62</sup>

The EPS consent decree suggests how the division is likely to consider some issues that arise in ATM network mergers. First, defining the product market is the first step in merger analysis. In EPS, the division identified separate markets for ATM processing and Regional ATM access. Thus the division will look at the competi-

<sup>55</sup> See The Bankers Roundtable (1994).

<sup>56</sup> See *Brunswick Corp. v. Pueblo Bowl-O-Mat Inc.*, 429 U.S. 477, 489 (1977); *Cargill, Inc. v. Monfort of Colorado, Inc.*, 479 U.S. 104 (1986).

<sup>57</sup> See 12 U.S.C. 1843 (1988); 12 C.F.R. Parts 225.21-25 (1994).

<sup>58</sup> See 15 U.S.C. 18a (1988); 16 C.F.R. Parts 801-803 (1994).

<sup>59</sup> *The Treasurer, Inc. v. Philadelphia National Bank*, 682 F. Supp. 269 (D.N.J.), *aff'd mem.*, 853 F.2d 921 (3d Cir. 1988).

<sup>60</sup> See *Bank of New York Co.* (1994) approving merger of Yankee 24 and NYCE; *Banc One Corp.* (1995) approving merger of EPS and National City Bank.

<sup>61</sup> See "Bank, ATM Mergers" (1994), p. 2.

<sup>62</sup> *Id.*

tive effects of mergers in both markets. The ATM network access market is likely to raise more competitive issues because some competitors, including third-party processors, do not provide effective alternatives in that market.

Second, apparently the only competitive alternatives in the ATM network access market are regional networks. Thus arguments that other types of networks or processors offer competitive alternatives may not succeed. In particular, national networks, although they offer a degree of coverage comparable to regional networks, are unlikely to be seen as competitive alternatives. The Competitive Impact Statement in the *EPS* case noted that national ATM networks are "by design networks of the last resort."<sup>63</sup>

Finally, exclusivity rules, such as those challenged in the *EPS* case will be an important part of the analysis; these rules may prevent the entry of alternative networks into the market. If many of the available banks are committed to long-term exclusive dealing arrangements with a dominant network, an alternative ATM network may be unable to acquire the critical mass of banks necessary to achieve a minimum viable scale. Where these rules are present, antitrust enforcers should be especially vigilant to ensure that the merger will not prevent the entry of competing networks.

### RECENT ATM MERGER DECISIONS—REPAVING THE ROAD TO REGIONAL MONOPOLY

The remainder of this article addresses the decisions of the Federal Reserve Board in two recent mergers—Yankee 24-NYCE and *EPS*-National City Bank and the implications of those decisions for future network competition.

#### *Yankee 24-NYCE*

A recent network merger that received a great deal of scrutiny by both the Board

and the division was the merger of the NYCE and Yankee 24.<sup>64</sup> NYCE was the third largest network in the United States with 95 million transactions monthly, more than 13,000 ATMs and a dominant position in New York. Yankee 24 was the ninth largest network, with 23 million transactions and more than 4,000 ATMs, and competed throughout New England. Both networks competed in parts of New England, primarily in Massachusetts and Connecticut.

Even though there was direct competition between the two networks, it did not receive a great deal of attention in the Board's decision. The Board did not address the nature of the head-to-head competition between the networks or its significance. In approving the merger, the Board did not appear to believe that the loss of competition between the two networks would be significant. It observed that "a number of factors should mitigate the loss of Yankee 24...as an independent competitor."<sup>65</sup> In particular, the Board observed that other providers of EFT services would remain in the market, including third-party processors and other regional and national ATM and POS networks.

Further analysis of the nature of competition would have been useful. For example, the Board did not discuss or identify the nature of competition between the two networks. Its observations on competitive alternatives also deserved elaboration. Although third-party processors offer competition in the ATM processing market, they do not compete in either the network access or network services markets. The only other regional network in the market, MAC, had a competitive presence only in New Hampshire. The competitive significance of national networks is limited, as noted in the *EPS* decree. Thus the Board's reasons for finding there was no significant loss of competition seem open to question.

The most interesting aspects of the order were not the observations about the level of current competition, but rather what the Board had to say about the merged network's commitment to an *open network* structure, the existence of poten-

<sup>63</sup> 59 Fed. Reg. 24712 (May 12, 1994).

<sup>64</sup> Bank of New York Co. (1994).

<sup>65</sup> *Id.*

tial efficiencies and how these factors justified the loss of competition.

**Operating rules—the importance of an open network structure.** The critical factor from the Board's perspective was the new operating rules offered by the network, which permitted all non-equity members to bypass the network and enter into arrangements with alternative networks or third-party processors. The network's operating rules permit: (1) third-party processors to participate in the network; (2) members to participate in other networks; (3) card issuers to determine routing; and (4) institutions to participate on a nondiscriminatory basis.

The first and second of these rules provide member banks with possible alternatives, including processing from third parties and ATM switching services from other networks. The third and fourth rules provide mechanisms by which small institutions can enhance their ability to obtain competitively priced services from the network. Of particular importance may be the card-issuer routing rule, which would permit banks to choose lower cost networks if the merged network attempted to raise prices.<sup>66</sup>

**Efficiencies.** The Board also found that the merger would result in public benefits that outweighed any loss of competition. These were primarily in economies of scope and reduced costs, including: (1) increased transaction volume, which would increase economies of scale and reduce costs (primarily in transaction processing); (2) increased ability to offer POS services to retailers; and (3) increased consumer convenience.

### *Banc One Corp.—The EPS-National City Bank Merger*

Sometimes networks expand by admitting new financial institutions in adjacent areas as owners. One such merger that received a lot of scrutiny by the Federal Reserve Board was the application to admit National City Bank of Ohio as an owner of

EPS; the Board approved the application in a 5-1 vote in March 1995.<sup>67</sup>

Compared with a merger of a neighboring networks, adding new owners may be a preferable (and less expensive) method of expanding geographically. Antitrust enforcers, however, should treat these transactions as mergers because in many cases they may result in the diminution of competition between the two networks. For example, if the expanding network has some sort of exclusivity arrangement (either *de jure* or *de facto*), the transfer of one institution's ATMs could drive the neighboring network below the minimum efficient scale needed to operate. Once the neighboring network is driven below minimum efficient scale, its competitive significance will cease. In other words, the net result could be the same as a merger.

National City Bank (NCB) sought to join EPS as a 20 percent equity member and in turn, EPS would acquire National City's branded ATM network (Money Center), which operates in Ohio, Indiana, and Kentucky (it has just under 900 ATMs). NCB was a member of Money Station, a neighboring joint venture ATM in Ohio. Money Station filed a protest. The Board staff considered the application for several months, received several pleadings from the parties, and conducted an informal meeting.

**The loss of competition.** Money Station claimed that the acquisition would eliminate actual and potential competition and would increase the barriers to entry or expansion by existing or potential ATM networks. NCB was one of Money Station's largest members. By acquiring Money Station, EPS would have a substantial share of ATMs in several Ohio markets, including Cleveland and Columbus. In Money Station's view, by permitting the acquisition, NCB would be eliminated as an actual or potential competitor because as an equity owner of EPS, it would have no incentive to participate in alternative networks. In addition, the merger would increase the

<sup>66</sup> For a discussion of the importance of card-issuer routing rules, see Grimm and Balto (1993).

<sup>67</sup> *Banc One Corp.* (March 6, 1995) (Vice Chairman Alan Blinder dissenting).

difficulty for existing or potential competing ATM networks to retain or assemble the necessary critical mass of terminals and cardholders required by economic considerations, such as economies of scale and ubiquity, to be effective competitors of MAC.

The Board rejected the argument because the facts of record did not support the view that NCB would be particularly likely to enter the market independently or through another joint venture in competition with MAC if this proposal were denied. Of particular importance was that NCB abandoned its attempts to form a new regional ATM network with other large banking organizations in 1992 and instead became a participating member of the MAC network. NCB also ceased offering ATM processing services to unaffiliated third parties thus the loss of actual competition in network services was minimal. Thus in the Board's view, NCB did not compete in either the ATM access or ATM processing markets. In addition, MAC would remain subject to actual and potential competition from other providers of EFT services. Thus the Board concluded there was no significant loss of competition.

**Operating rules.** The Board relied heavily on the role the division consent decree would play in ensuring that the market remained competitive. In particular, the Board appeared to believe that by opening the MAC network to third-party processors, banks could easily find a competitive alternative to MAC. Moreover, the Board held that these third-party processors could provide a channel for entry by competing regional ATM networks.

Money Station contended that various MAC rules permitted the network to thwart any procompetitive effects achieved under the division consent decree. The Board staff investigated the effects of four rules: (1) MAC's prohibition of sub-switching between members; (2) MAC's rights under the consent decree to charge a royalty fee if subswitching were to be per-

mitted; (3) MAC's requirement that national network transactions be routed through the MAC network; and (4) MAC's holding company rule that generally requires membership of all affiliated banks. The Board staff specifically asked the parties what would be the competitive effect of changing these rules.<sup>68</sup> Without securing any evidence, the Board concluded that modification of these rules was not necessary (although Vice Chairman Alan Blinder would have required the changes). The Board did so because "the consent decree recently became effective, and that its terms are designed to achieve procompetitive effects over time during the 10-year duration of the decree."<sup>69</sup>

**Efficiencies/public benefits.** The Board concluded that there were potential public benefits because NCB would make cash infusions that would enable EPS "to continue and expand its research and development efforts," improving its ability to offer innovative electronic banking products.

**Dissent.** Vice Chairman Blinder dissented. He noted that although the loss of competition was modest, the public benefits did not outweigh this loss of competition. He observed that the application "demonstrates no such benefits to the public, in my view," as required by Sec. 4(c)(8) of the Bank Holding Company Act. The vice chairman would have required modification of MAC's operating rules, apparently as suggested by the staff, to meet the public benefits test.

## Assessment

The Board's approach in these cases is very much a mixed bag. Some aspects of their decision making appear to give credence to the opportunities for network competition, yet ultimately they seem to assume that a regional monopoly is foreordained.

<sup>68</sup> Letter from Stephen A. Rhoades, Assistant Director, Division of Research and Statistics, to Allen Raiken, *et al.* (Feb. 15, 1995).

<sup>69</sup> The Board's understanding of the purpose of consent decrees appears mistaken. The purpose of the decree is to remedy the competitive problem at the time the decree is entered, not during the pendency of the decree.

**Defining the relevant market.** Critical to understanding the analysis of network mergers is disaggregating the different dimensions of the network and analyzing the effect of mergers on competition for each dimension. A network has several components, including a trademark, a computer switch, and operating rules. As noted earlier, too often enforcers and regulators have focused on the unconcentrated nature of back office operations, and have given too little attention to competition at the brand level.<sup>70</sup> Differentiating between the two is important because there may be relatively few firms capable of competing at the brand level. Moreover, the barriers to entry may be dramatically different in the back office or brand level. Similarly, even though there may be efficiencies from consolidation at the systems level, these efficiencies may not outweigh the loss of brand competition.

The most encouraging aspect of the Board's decision in *Banc One Corp.* was their effort to disaggregate the dimensions of competition in their analysis of the relevant product market. As noted earlier, the Board had previously viewed the relevant market as basically the network's back office operations—an unconcentrated market in which entry barriers would be relatively trivial.

In *Banc One Corp.*, the Board recognized the distinction between the back office and brand aspects of competition. As noted earlier, it defined three relevant markets: network access, ATM processing and network services. The last two markets reflect the value of the back office operations and the network switch, respectively. The first market reflects the value of the brand name, reputation, and agreements between the network and its members.<sup>71</sup>

**Competitive effect analysis.** Critical in the analysis of any merger is a determination of the competitive effects of the merger, that is, what will be the ability of the merged firm to exercise market power after the merger. In both *Yankee 24* and *Banc One Corp.*, the Board appeared to rely

on the general structure of the market and the operating rules (discussed later) in concluding that anticompetitive effects were unlikely. In both cases the competitive analysis of the Board was rather limited. Particularly in *Yankee 24*, where the two networks had competed directly in Connecticut and Massachusetts, an analysis of the impact of that competition on both banks and consumers would have been useful. Some relevant issues, similar to those in *First Data*, would have included the impact of network competition on network fees, fees to consumers, output (in terms of ATMs and transactions), advertising, and revenue to bank members.

Another important issue in *Banc One Corp.* was whether NCB's incentives in participating in alternative networks would be altered because of becoming an equity owner of EPS. If NCB's incentives were altered and it dedicated its ATMs exclusively to MAC, Money Station might fall below minimum viable scale and its competitive viability might be in doubt. The Board concluded that this concern was "too speculative at this time to represent a significant potential adverse effect," because MAC no longer required exclusively for its members.

The Board's analysis of the likelihood of *de facto* exclusivity may be deficient by failing to recognize how NCB's ownership interests in EPS would affect its incentives. NCB has no ownership in Money Station. As an owner of EPS, it is in NCB's interest to direct as many transactions as possible through MAC. Thus it seems simple to predict that the likely outcome is that NCB will dedicate its transactions to the network that will enhance its revenue. That a financial interest can create *de facto* exclusivity has been recognized by the division and the FTC in several recent cases in nonbanking markets and in the recently issued *Health Care Policy Statements*.<sup>72</sup>

**The importance of network operating rules.** The Board's approach to the

<sup>70</sup> See Baker (1993).

<sup>71</sup> The Board explained that network access includes: (1) the right to brand ATMs and ATM cards with the trademark or logo of the ATM network; (2) the ability of the ATM cardholder with an account at one member depository institution to initiate withdrawal and other account transactions at an ATM owned by another depository institution that is a member of the same network; and (3) minimum standards for network performance and products offered through the network.

<sup>72</sup> Home Oxygen, FTC File No. 901-0109 (Nov. 2, 1993) and Homecare Oxygen, FTC File No. 901-0020 (Nov. 2, 1993) (healthcare joint ventures were *de facto* exclusive; physician ownership interests deferred incentive to participate in competing ventures); U.S. Department of Justice and Federal Trade Commission, Statements of Enforcement Policy and Analytical Principles Relating to Health Care and Antitrust (Sept. 27, 1994), at 69-70 (describing factors that lead to *de facto* exclusivity).

importance of operating rules seems confusing. In *Yankee 24-NYCE*, the commitment to an open network structure that permitted members to bypass the network and enter into arrangements with alternative networks or third-party processors appeared critical to the Board's conclusion that there was little potential for exercise of market power.

Yet in *Banc One Corp.*, the Board seemed unwilling to follow that precedent. The Board staff appeared concerned that MAC rules that imposed restrictions on subswitching between members would make it difficult for members to bypass the network. Vice Chairman Blinder would have preferred that the Board require that MAC amend these rules. If the Board was correct in *Yankee 24*, that would seem the preferable approach.

Amending network rules may be necessary to resolve concerns over the exercise of market power, but is it sufficient? Should network rules that create an open architecture in and of themselves immunize a merger where the merged firm will have market power? Is the opportunity to form subnetworks between individual network members sufficient to alleviate concerns about market power?

The Board is basically sailing on uncharted waters in this area. The only case to address the issue, the *Financial Interchange* arbitration, did not provide clear guidance on whether open architecture would alleviate the concerns of market power. (In this case, the network (PULSE) permitted its members to route transactions through subnetworks).<sup>73</sup> In determining whether alternative routing would diminish the threat of market power, the arbitrator wrote:

*Because ATM owners control routing of ATM transactions, they could choose in some instances to elect to route transactions within a subnetwork. If, for example, the interchange fee within the subnetwork is higher than that of PULSE, the ATM*

*owner has the incentive to use subnetwork routings if available. The same could be true in reverse if issuers could control routing. This competition within the existing structure could decrease PULSE's revenue... . Interprocessor subnetworks functioning within the PULSE system can provide some limit on PULSE's freedom to establish interchange fees.<sup>74</sup>*

Nonetheless, the arbitrator discounted the significance of this open architecture in part because of the universal access offered by PULSE:

*The very fact that all Texas subnetworks are PULSE members at least suggests that they perceive the need for sharing on a broader basis. The number of cards and ATMs in each of these networks is far smaller than in PULSE. Moreover, single processor capability is limited. Even within local markets such as Dallas or Houston, the access provided by subnetworks falls far short of that of PULSE. Unless cardholders are indifferent to the added access PULSE participation provides, intraprocessor switching is not an adequate substitute; reliance solely on such switching would place financial institutions at a significant disadvantage... . The combination of existing subnetworks might of course provide an alternative to PULSE... but single subnetworks as they now exist are no real substitute.<sup>75</sup>*

Ultimately, individual subnetworks (or third-party processors) were not a viable competitive alternative because they did not offer the level of universal access provided by PULSE. Similarly, in *Banc One*, although individual third-party processors might be capable of entering into the area dominated by MAC, it seems unlikely any of them could provide the level of universal access provided by MAC. As important, third-party processors can

<sup>73</sup> A subnetwork could be an alternative ATM network.

<sup>74</sup> 55 Trade Reg. Rep. (BNA), No. 1380, at 353.

<sup>75</sup> *Id.*

offer competition only at the back office level; they do not provide competition at the network access or network services markets.

Of course, at this stage there is little evidence that the division consent decree with MAC has resulted in significant entry by third-party processors or competing networks. Even if the consent created an open network structure, there are several reasons why that structure might not ensure that a network—especially a dominant network—cannot exercise market power.

First, even with an open architecture, a network might attempt to impose *de facto* exclusivity through other types of rules or fees that raised the costs of entering into alternative arrangements. For example, a network could set a “royalty or bypass fee” that would make using alternative networks financially unfeasible. In addition, other incentives such as ownership in the network, may discourage the use of alternative arrangements.

Ultimately, open architecture may be an illusory solution. If members start to bypass the network to any significant extent, free-rider problems will arise; in turn, members may become increasingly reluctant to invest in the network. The network may respond by closing the network, banning subswitching or imposing a fee for bypassed transactions. For example, a network could impose a fee on transactions routed outside the network. These free-riding/routing disputes are some of the most contentious in the ATM area.<sup>76</sup>

The Board’s failure to address the operating rules in *Banc One Corp.* sends a confusing message to ATM networks. If these rules are important to reducing the likelihood of the exercise of market power, they should be imposed where that threat is present. But even if the Board believes that operating rules can remedy the threat of market power, relying on this factor is at best a second-rate solution. If operating rules are important, a preferable position might be that taken by the states in *Entree*—to prevent the merger and permit

the networks to compete in terms of operating rules. Moreover, approving mergers based on operating rules will place the Board in the position of increasingly regulating these networks and eventually arbitrating the intranetwork disputes over these rules.

**The importance of efficiencies/network externalities.** In merger cases, the enforcement agencies evaluate whether the efficiencies that may arise from a merger may outweigh the potential for competitive harm. Prominent in network merger cases are arguments that efficiencies in terms of network externalities will outweigh any competitive harm. Network externalities reflect the view that the value of a network to a consumer depends on the number of users and the identities of specific users. The larger the network, the greater the number of consumers who will join it, and, conversely, the smaller the network, the fewer the number of consumers who will join it. Network externalities are especially common in electronic networks such as payment systems.<sup>77</sup>

In *Banc One Corp.*, the Board recognized the importance of network externalities. It observed that:

*as an ATM network expands the number of its financial institution members and available ATMs, its value to network cardholders increases due to the greater accessibility of their deposit accounts. Similarly, as the number of cardholders increases, so will the number of transactions and hence the economic return on ATM terminals deployed in the network. This increased economic return provides incentives for banks to establish additional ATMs, thereby further enhancing the network’s value to cardholders. Accordingly, banks tend to place a greater value on membership in a network as its membership expands.*<sup>78</sup>

Some commentators have suggested

<sup>76</sup> See Grimm and Balto (1993).

<sup>77</sup> See Stevens (1993); Katz and Shapiro (1985).

<sup>78</sup> *Banc One Corp.* (1995), p. 494 n. 20.

that the existence of network externalities may counsel for a more laissez-faire approach in analyzing payment systems mergers.<sup>79</sup> Although the existence of network externalities may suggest greater potential for the existence of efficiencies, that does not mean that those potential efficiencies should lead to less antitrust enforcement. First, many of those efficiencies could be achieved by less restrictive alternatives. In the ATM context, for example, a subswitching arrangement (between the two networks) may permit the networks to achieve a level of ubiquity (and consumer convenience) without eliminating competition at the brand level.

Moreover, network externalities are not without limit. William Baxter, the former assistant attorney general in charge of the antitrust division, has observed that although ATM joint ventures can achieve efficiency benefits related to economies of scale, these efficiencies will cease to be significant once a joint venture reaches a certain size. Beyond the point where these efficiencies are significant, Baxter suggests that it is preferable to limit the size of the network to encourage the creation of competing networks rather than one large network.<sup>80</sup>

The Board's overall analysis of efficiencies in these cases seems lighthanded and superficial. The approach taken by the FTC and division and the courts require the parties to demonstrate that there are no less anticompetitive means for achieving the efficiencies and that these benefits will be passed on to consumers.<sup>81</sup> The Board did not consider these factors in either *Yankee 24-NYCE* or *Banc One Corp.* In *Banc One Corp.*, the argument—accepted by the Board—that NCB would make cash infusions that would enable EPS to continue and expand its research and development efforts would not pass this test because there are a number of alternative sources of revenue to fund such research. Similarly, the economies of scale recognized in *Yankee 24-NYCE* could have been achieved through a more limited merger of the two networks' back office operations, while preserving competition

between the networks at the network access level—similar to the FTC approach in *First Data*.

**The vision of the regional network monopoly.** Although the Board's analysis in these areas seems conventional, one aspect of the decision in *Banc One Corp.* poses an "ominous cloud on the horizon." In response to the concerns about the loss of competition, the Board articulated a vision of regional network monopolies apparently fated by economics.

*[T]he significant position of a regional ATM network is not, standing alone, contrary to the public interest. Network externalities, such as the economies of ubiquity, tend to promote consolidation of regional ATM networks. As a result, in various geographic areas, like the Mideast region, dominant ATM networks have been emerging throughout the EFT industry. One recent study indicates that the ten largest regional networks now account for 80 percent of all regional ATM network transactions in the United States. In this light, the Board believes that, as a result of economic and market structure conditions, regions are likely to have one dominant ATM network.<sup>82</sup>*

The Board appears to view the road to regional monopoly as foreordained and dictated by the economics of networks. Is that vision correct? The enforcement actions taken by the states in *Entree* and the FTC in *First Data* suggest that monopoly is not a foregone conclusion, even in settings where there may appear to be significant network externalities. In both cases, the antitrust enforcers were able to spur network competition by focusing on the impediments to entry at the brand level and carefully assessing efficiencies at the systems level.

Ultimately, the Board's view seems to harken back to the day when economics of ubiquity placed ATM network mergers into

<sup>79</sup> See Guerin-Calvert (1994).

<sup>80</sup> See Baxter, Coomer and Scott (1977).

<sup>81</sup> 1992 *Horizontal Merger Guidelines of the Department of Justice and the Federal Trade Commission*, 4 Trade Reg. Rep. (CCH) ¶ 13,104, Section 4.0 (April 2, 1992). This joint statement by the two agencies states that "the Agency will reject claims of efficiencies if equivalent or comparable savings can reasonably be achieved by the parties through other means... [and that the] expected net efficiencies must be greater the more significant are the competitive risks identified...." See *FTC v. University Health, Inc.*, 938 F.2d 1206 (11th Cir. 1991) (a "defendant who seeks to overcome a presumption that a proposed acquisition would substantially lessen competition must demonstrate that the intended acquisition would result in significant economies and that these economies ultimately would benefit competition and, hence, consumers.").

<sup>82</sup> See *Banc One Corp.* (1995), p. 497.

the per se legal category. Although its decision in *Bank One Corp.* appears to advance the analytical model, the Board's conclusion appears to be that competition is not worth the candle. If the Board's view prevails, the road to regional monopoly may turn into a superhighway.

## CONCLUSION

Network mergers are particularly complex because they require careful differentiation of the elements of competition and thoughtful assessment of the potential for efficiencies. Too often, antitrust enforcers have quickly grasped the potential for theoretical efficiencies without giving sufficient attention to the opportunities for network competition. Payment systems networks play an increasingly important role in the today's economy. A monopoly/regulatory model—which may be the result of the Board's recent ATM decisions—may lead to less competition and higher prices.

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