The murky world of network mergers: searching for the opportunities for network competition

BY DAVID A. BALTO*

I. Introduction

One of the most difficult issues faced by antitrust enforcers is how to analyze mergers between networks. Part of the difficulty involves balancing the competitive ledger of network mergers. On the one hand, network consolidation may often provide fairly obvious benefits of increasing economies of scale and scope. On the other hand, networks may become monopolies and the opportunities for network competition may be lost. This may occur because the perception of how networks compete may not be particularly clear. In the past, enforcers and regulators have resolved these issues with a very permissive view and permitted network

* Attorney advisor to Chairman Robert Pitofsky of the Federal Trade Commission.

AUTHOR'S NOTE: *This article does not necessarily represent the views of the Commission, of any individual Commissioner, or of any other member of the staff.*

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To illustrate these issues, this article discusses the evolving views of competition in automated teller machine (ATM) networks. The article begins by describing how views of network competition evolved—from one of network competition in which it was envisioned that numerous competing networks would exist—to one of network monopoly—where consolidation was permitted to achieve economics of ubiquity. The second part of the article describes how ATM network mergers are analyzed. The article concludes that although enforcers in the 1990s began to recognize the elements of network competition, they mistakenly are giving too much weight to the economics of ubiquity, with the result that almost all areas will be served by a single dominant ATM network. The article examines how the monopoly/public utility model appears to have prevailed in the ATM network merger context.

II. The search for payment systems competition: trends in enforcement

Views of payment systems competition have evolved during the past generation. When ATM networks were first created in the 1970s, policy makers 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.

A. *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 played an important role in informing the NCEFT on whether and in what form competition could arise in the newly formed networks.

One important question was whether these networks would be "natural monopolies," because of the substantial processing efficiencies involved. At the time, some commentators argued that ATM networks were natural monopolies because a single network could serve ATMs at lower cost than multiple networks. Based on that conclusion, they argued that the networks should be "open," i.e., compelled to share their facilities with all financial institutions in a given area. Some states incorporated this concept in statutes that required sharing.

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.[1] At the time, some thoughtful economic studies suggested that an individual region could support several competing ATM networks.[2] The NCEFT adopted the Antitrust Division's view. It observed that mandatory sharing "would inevitably result in fewer competitors. . . . Maximum competition usually spells rapid technological improvement and lower prices to consumers."[3] Thus, the Commission expressly rejected any sharing requirement, based on

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[1] *See* DEPARTMENT OF JUSTICE, ANTITRUST DIVISION, POLICY STATEMENT ON SHARING TO THE NATIONAL COMMISSION ON ELECTRONIC FUND TRANSFERS (Jan. 13, 1977).

[2] *See* WILLIAM F. BAXTER, PAUL H. COOTNER & KENNETH E. SCOTT, RETAIL BANKING IN THE ELECTRONIC AGE: THE LAW AND ECONOMICS OF ELECTRONIC FUNDS TRANSFER (1977).

[3] *See* EFT IN THE UNITED STATES, FINAL REPORT OF THE NATIONAL COMMISSION ON ELECTRONIC FUND TRANSFERS 57 (1977).

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ment. In 1977, the Division issued a business review letter[7] refusing to clear a proposed statewide EFT network in Nebraska, primarily because of the proposed venture's all-inclusive nature. At the time of the letter, the proposed network consisted of 66% of the commercial banks in the state, which collectively accounted for 86% of the 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.[8] Because of the Division's action, competing networks were created in Nebraska.

B. The 1980s—"economics of ubiquity" take center stage

In the 1980s, payment systems basically disappeared from the Antitrust Division enforcement radar. The lack of enforcement, especially in the merger area, was based on the recognition that there were efficiencies from the consolidation of ATM networks. Former Antitrust Division Assistant Attorney General Charles Rule 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.[9]

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[7] The Division has a procedure in which it will give advice about whether it will bring an enforcement action, known as a business review.

[8] *See* Letter from Donald I. Baker, Assistant Attorney General, Antitrust Division, to William B. Brandt, Nebraska Bankers Ass'n (March 7, 1977).

[9] *See* Rule, *supra* note 5, at A-142–43.

its assessment that there was potential for the creation of a number of competing networks.[4]

The Antitrust Division continued to advocate its vision of network competition in a number of forums. It actively opposed the adoption of state sharing statutes.[5] 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 after the network succeeded, and share the fruits of its efforts, 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.

In spite of the Division's intervention, many states adopted different 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 suggest 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.[6]

In the 1970s, scores of shared ATM networks were created. Where 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 enforce-

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[4] At the time, because ATM networks were in their infancy, there were no significant barriers to entry.

[5] *See* Antitrust Analysis of Joint Ventures in the Banking Industry: Evaluating Shared ATMs, Remarks by Charles F. Rule, Acting Assistant Attorney General, Antitrust Division, Department of Justice, Before the Federal Bar Ass'n and American Bar Ass'n (May 23, 1985), *reprinted in* DONALD I. BAKER & ROLAND E. BRANDEL, THE LAW OF ELECTRONIC FUND TRANSFER SYSTEMS, appendix F, at A-141, n.5 (2d ed. 1988).

[6] Elizabeth S. Laderman, *The Public Policy Implications of State Laws Pertaining to Automated Teller Machines*, FED. RES. BANK OF SAN FRANCISCO ECON. REV. (Winter 1990).

de facto merger with MPACT,[12] and PULSE might face a *government* antitrust challenge because the network had become too large and the merger eliminated intersystem competition.

Faced with this dilemma, PULSE sought a business review from the Antitrust 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 that 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.[13] The other two alternatives were not addressed because they were not considered ripe for review. Within 6 months after the business review letter was issued, practically every MPACT member joined PULSE. MPACT eliminated its incentive pricing. There was a similar impact on consumers, as several banks increased their consumer fees.

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a joint venture may violate section 1. *See* Northwest Wholesale Stationers, Inc. v. Pacific Stationery & Printing Co., 472 U.S. 284 (1985). For an extensive discussion of access demands and membership issues in payment systems joint ventures, *see* David A. Balto, *Access Demands to Payment Systems Joint Ventures*, 18 HARV. J.L. & PUB. POL'Y 624 (1995).

[12] 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.

[13] *See* Letter from William F. Baxter, Assistant Attorney General, Antitrust Division, to Donald I. Baker (Aug. 3, 1983).

C. 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. Into this enforcement void stepped the state attorneys general. In the late 1980s they challenged the formation of the "Entree" national POS (point of sale) joint venture between VISA and MasterCard.[14] (VISA and MasterCard had informed the Antitrust Division of the formation of Entree, but no enforcement action was taken.) The complaint filed by the New York State Attorney General (on behalf of twelve 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, the associations intended to retard the development of on-line, POS debit, a payment system that 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 agreement that formed the venture that limited its membership to banks that were members of both associations, thereby excluding nonbanks such as Sears/Discover Card and American Express from participating.

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.[15] VISA kept its

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[14] *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).

[15] *See State of New York v. VISA U.S.A., Inc.*, 1990-1 Trade Cas. (CCH) ¶69,016 (S.D.N.Y. 1990).

ownership of Interlink and both card associations were permitted to keep their interests in the national ATM networks.[16]

Although arguments about the "economics of ubiquity" may have been persuasive in other contexts, they did not persuade the states. 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 card holders in a single network may have persuaded merchants to use the new POS network. 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 potential competition between competing POS networks.

The settlement expired in 1997 and it generally 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 networks adopted "antiduality" 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.[17]

Each of the networks has competed vigorously to sign up both banks and merchants. Both networks have adopted different switch and interchange fees,[18] in order to offer more attractive

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[16] *See* Presentation of Lloyd E. Constantine, Before the Charles River Associates, *Antitrust Issues in Regulated Industries* (Dec. 6, 1990).

[17] *See Bankers are Burying the Hatchet to Join Forces for Debit Push*, AM. BANKER, Feb. 8, 1994, at 20; David A. Balto, *Duality in Payment Systems: Antitrust Issues*, 11 REV. OF BANKING & FIN. SERVICES 105 (May 31, 1995).

[18] 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 bank card association.

packages to consumers. The fees charged by the networks, including interchange fees, are far less than those involving credit cards.[19] 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 per 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, showing that antiduality provisions coupled with independent entry and expansion, reduced the costs of POS debit card transactions.

In April 1994, Maestro sought to eliminate its antiduality rule to permit issuer duality. After considering the proposal for over 5 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 antiduality 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 elimination of their antiduality rule would not lead to an enforcement action.[20]

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[19] *See Bank of America is Going to Bat for Maestro*, AM. BANKER, Apr. 5, 1994, at 10; *Debit Card War Faces Tough Choices*, AM. BANKER, Feb. 7, 1994, at 17; *Economics—More Issuers Get Debit Interchange*, POS NEWS, Jan. 1, 1994, at 1 (describing competition in interchange fees).

[20] *See State Antitrust Officials Criticize Mastercard Debit Rule*, AM. BANKER, Dec. 17, 1994, at 1, 17. *See also VISA's Dominance Seems a Debit-Card Liability*, WALL ST. J., June 6, 1996, at B1 (describing how banks play off VISA and MasterCard in the POS market); Testimony of Joseph Opper, New York State Attorney General's Office, Before the

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 effect how regulators and enforcement agencies assessed the opportunities for network competition.

D. The 1990s—renewed attention to network competition

The states' challenge of the Entree joint venture served to renew interest by antitrust enforcers in network competition. The states' focus on the importance of network competition and the potential for the creation of alternative networks provided a new perspective on the dogma of network ubiquity. With a change in political administrations, the federal antitrust enforcers began focusing on the elements of network competition in the 1990s.

1. EXCLUSIVE PROCESSING RULE CHALLENGED—MAC ATM NETWORK SETTLEMENT The reemergence of the Antitrust 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 6 years since the Division took a pass on the Cashstream acquisition, MAC had acquired almost all of its neighboring competing networks, 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.[21] This was the first tying and monopolization case to be brought by the Antitrust Division in well over a decade.

FTC Hearings on Competition 3674–78 (Dec. 1, 1995); David A. Balto, *End of On-line Debit Decree Raises Questions*, AM. BANKER, May 8, 1997, at 15; David A. Balto, *Antitrust Curb Perverted Economics of Off-Line Debit*, AM. BANKER, May 9, 1997, at 9.

[21] 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).

To understand the reason for the action, we set forward the different functions of an ATM network. In its most basic sense an ATM network consists of 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 "drive" or operate their members' ATMs; other networks permit their members to drive their own ATMs or use third parties, such as EDS Corp.

Electronic Payment Services (EPS), which operates the MAC network, is 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% 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 of more than 13,000 ATMs.

Most ATM networks are nonexclusive, i.e., 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 while also participating in MAC. These "exclusivity rules" created an almost impervious barrier to competitive entry, since if a bank wanted to join a competing network it would have to withdraw all of its ATMs from MAC. Any individual bank was unlikely to make that decision unless a sufficient number of other banks made the identical decision to provide a minimum level of ubiquity expected by the bank's cardholders. Faced with that "all or nothing" decision, few banks chose to align with competing networks.[22] The rules assisted MAC in acquiring and maintaining its dominant position in the market.

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[22] As the Department 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. at 24,720 (emphasis added).

The rules against multiple affiliations were formally dropped in 1992 after being challenged in a private antitrust suit.[23]

In this case, the Division's focus was on other rules that barred banks that belonged to its network from using third parties for ATM driving, and restricted the ability of banks to participate in other networks. The Division alleged that a rule that required banks either to obtain ATM driving from MAC or to provide ATM

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[23] *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 provisions that "were and are intended to structure [the owner's] distribution of network services, and to provide a return to [the owner] for developing, maintaining and promoting the [ATM] network and to prevent free riding by competitors on [the owner's] efforts"), *aff'd mem.*, 853 F.2d 921 (3d Cir. 1988). Because MAC had adopted its exclusivity requirements from the outset, the court found the provisions presumptively reasonable and even procompetitive: "The restriction is merely part and parcel of an obviously successful, comprehensive marketing strategy." *Id.* Of course, in 1988, MAC had a far less significant competitive presence.

Perhaps the most problematic aspect of the decision was its assumption that exclusivity was procompetitive because MAC had required it even when it had no market power. The economic error is fairly clear: although exclusivity provisions may be appropriate and even procompetitive when a firm has little or no market power, they may result in more severe anticompetitive effects as time goes on, particularly if there is no competition within the joint venture. The court compounded its economic error by concluding that CashStream's acquisition actually opened up opportunities for The Treasurer. If CashStream had previously been nonexclusive, its members could also participate in The Treasurer network. Now presented with an all-or-nothing choice by an ATM network with significant market share (which is itself independently significant in network industries driven by economies of scope and scale), former CashStream members were forced either to join MAC (which had already secured participation by Mellon) or to continue to compete in a number of smaller networks. Once again, assuming that CashStream was nonexclusive, The Treasurer (which was nonexclusive) could only lose from the sale of CashStream to MAC. Not only would MAC be able to charge consumers higher prices, but it would simultaneously prevent The Treasurer from obtaining the economies of scope and scale necessary to develop a viable competing network.

driving 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 forbid its network members from obtaining ATM driving from any of the several data processing firms, such as EDS and ACS, 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." In addition, by preventing banks from obtaining ATM driving from others, MAC effectively prevented these banks 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."

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 the decree, 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.[24] 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 (i.e., they cannot discriminate among members by different classifications). 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.[25] For example, rather than attempting to collect monopoly profits through a switch fee, MAC can attempt to recover comparable profits through the use of a royalty fee. In addition, as described below, when the Board staff examined the EPS-National City Bank merger, it raised concerns over the sufficiency of the relief.[26]

The results of the decree have been mixed. On the one hand, new third-party processors have entered the market. Three years after the decree was entered, an increasing number of MAC ATMs are driven by third-party processors who were excluded from the market prior to the decree.[27] On the other hand, there has been relatively little entry by competing regional networks and MAC's monopoly position in the "branded regional ATM access" market seems secure.

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[24] 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.

[25] *See* Public Comments on Proposed Final Judgement, *Electronic Payment Services*, 59 Fed. Reg. 44,757 (Aug. 30, 1994).

[26] *See* fn 79 and accompanying text.

[27] *See EPS Shrugs Off the New Competition for the Loyalty of MAC Members*, BANK NETWORK NEWS, May 27, 1997, at 4.

The Division's enforcement action demonstrated that the economics of ubiquity no longer ruled the day. The Division was able to go beyond that theory 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 it 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.

2. 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 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.[28] Consumer wire money transfer systems involve one-way money transfers, typically between two consumers.[29] Wire transfer agents include a wide variety of retail outlets including grocery stores and check cashing outlets.

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[28] First Data Corp., C-3635 (Jan. 16, 1996). 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).

[29] 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 that includes an explanation of how the recipient will

Western Union has been the dominant firm in the market and had been a regulated monopoly until the late 1970s. The Federal Communications Commission had deregulated Western Union based on the expectation that technological advancement had reduced the barriers to entry.[30] Those expectations were overly generous and 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 utilized by Western Union made acquiring a sufficient agent network difficult. To build brand-name recognition a substantial investment would be required over a number of years. Citibank's attempted entry failed after several years of significant losses.[31]

MoneyGram, which was originally owned by American Express, entered the market 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 intro-

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identify himself or herself when seeking to receive the cash. The sender then gives the agent the money to be transferred and pays the transaction fee. The transferring agent inputs the information into the database 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 by demonstrating his or her identification.

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

[30] *See* Graphnet Systems, Inc., 71 F.C.C. 2d 471, 515 (1979) ("We are confident that the public will be served by enabling multiple entry into this market").

[31] *See Citicorp Express and Western Union Escalate War of the Wires*, AM. BANKER, Nov. 18, 1987, at 1.

duced 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. MoneyGram entered by competing aggressively on price; Western Union responded by refraining from price increases and offering special promotions and discounts to customers.[32] In 1994, MoneyGram launched a "frequent user" discount program to increase sales and customer loyalty; Western Union responded with a similar program. Nonprice competition increased, including increased price advertising, the development of a more extensive "will-call" system, and free long-distance telephone calls.

Competition also led to almost a threefold increase in wire transfer agents, which provide consumers with increased convenience when using a money transfer service. The increased number of locations has dramatically improved the convenience of the service for consumers. As both networks competed for agents, agent commissions increased, the networks provided greater amounts of cash at more agent locations, and advertising increased. Competition has indirectly created these consumer benefits 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% market share. According to the complaint, MoneyGram and Western Union were the only two services in the United States consumer money transfer market, and it would be very difficult for new companies to enter this 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

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[32] When MoneyGram entered it priced domestic transfers with a value of $300 or less at $9; at the time Western Union priced these transfers at between $13 to $29. Western Union brought an antitrust suit charging that MoneyGram's pricing was predatory. The suit was unsuccessful. *See* Western Union Financial Services v. First Data Corp., 20 Cal. App. 4th 1530 (1993).

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 consumers, among other things, would be forced to pay higher fees and receive less service, and that 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 would include the MoneyGram or Western Union trade name, contracts with sufficient retail sales agents to have a minimum viable scale network, and other assets necessary to run the business. The settlement also includes various provisions designed to insure 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 FTC's 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 since the FCC decision had shown that ease of entry at the back-office level would not guarantee a competitive market. Rather, the critical elements to new entry were the trade name and the existence of a sufficient agent base.[33] 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

[33] The order in *First Data* requires the divestiture of an agent base of at least 10,000 wire transfer agents. The agent base must be sufficiently dispersed to provide a nationwide network.

name and agent network, which it contended were the most significant barriers to entry.

From a preliminary perspective, the FTC's enforcement action appears to have led to a stronger competitor and lower prices to customers. Following this consent agreement, MoneyGram advertised a promotional price that undercut Western Union's prices by as much as 70%.[34] Moreover, MoneyGram's market share, at least in the short term, increased somewhat. In November 1996, MoneyGram became an independent firm and now competes directly with Western Union.

III. ATM network merger analysis

Antitrust analysis examines the effects of mergers on competition. The purpose of this analysis is to determine if the effect of an acquisition "may be substantially to lessen competition or to tend to create a monopoly."[35] Under the Horizontal Merger Guidelines the enforcement agencies analyze: (1) the relevant product and geographic market, (2) the existence of market power, and (3) the likelihood of entry. If a merger poses a significant threat to competition the agencies also analyze whether the efficiencies from the merger will outweigh the anticipated harm. This section discusses the Merger Guidelines framework and applies it to mergers of ATM networks.

A. 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

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[34] *See* William J. Baer, Director, Bureau of Competition, FTC, The Dollars and Sense of Antitrust Enforcement, Remarks Before the Antitrust Section of the New York State Bar Association 3 (Jan. 25, 1996). It can be found on the Internet at <http://www.ftc.gov/speeches/other/nystate.htm>.

[35] 15 U.S.C. § 18 (1988).

uncertain undertaking. The definition of the relevant market has both product and geographic market components. In both respects, the markets defined in ATM network mergers have become more precise and narrow over time.

1. 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. A number of different approaches have been utilized. 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 Antitrust 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) A "payment systems" market One of the earliest cases, *NaBanco*, involved a challenge to a credit card interchange fee. The district court defined a very 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.[36]

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[36] 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). *See also* William F. Baxter et al., *supra* note 2, at 117 ("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* Dennis W. Carlton & Alan S. Frankel, *The Antitrust Economics of Credit Card Networks*, 63 ANTITRUST L.J. 228 (1995). It, however, was adopted by a district court decision involving ATM network fee setting. *See* Southtrust Corp. v. PLUS System, Inc., 1995-2 Trade Cas. (CCH) ¶71,219 (N.D. Ala. Aug. 10, 1995).

The court acknowledged that none of these were 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.

(b) A "data processing" market In terms of a wholesale market, in early cases fact finders emphasized the data processing functions of bank ATM networks. For example, in *The Treasurer*,[37] the district court adopted a broad definition of the relevant product market. 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 shared, proprietary 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 which have unaffiliated ATM systems and those institutions which do not currently have ATMs but have the capacity to install them and utilize market technology to its fullest."[38] 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."[39] In addition, the Board noted that the market for

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[37] The Treasurer, Inc. v. Philadelphia National Bank, 682 F. Supp. 269 (D.N.J.), *aff'd mem.*, 853 F.2d 921 (3d Cir. 1988).

[38] 682 F. Supp. at 279.

[39] *See, e.g., CB&T Bancshares, Inc.*, 70 FED. RES. BULL. 589 (1984); *Atlantic Bancorporation*, 69 FED. RES. BULL. 639 (1983); *cf. Centerre Bancorporation*, 69 FED. RES. BULL. 643 (1983) ("the provision to unaffiliated financial institutions of data processing services, particularly the operation of an ATM network exchange"); *Interstate Financial Corp.*, 69 FED. RES. BULL. 560 (1983) (same).

In other orders, it defined the markets more narrowly. *See, e.g., Citicorp*, 72 FED. RES. BULL. 583 (1986) ("provision of ATM services");

data processing and related ATM services is "unconcentrated, with many competitors and few barriers to entry."[40]

(c) 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 or the courts in *NaBanco* or *The Treasurer*. Instead, it identified a narrow retail market of "ATM services" on the ground "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."[41]

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."[42]

Sovran Financial Corp., 72 FED. RES. BULL. 347 (1986) (same); *Barclays Bank PLC*, 71 FED. RES. BULL. 113 (1985) ("competition in the provision of ATM or POS services").

[40] *E.g.*, *Sovran Financial Corp.*, 72 FED. RES. BULL. 347, 348 (1986).

[41] *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).

[42] *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 5, at A-144 (assessing ATM networks in terms of wholesale and retail ATM services).

In the *EPS* consent decree, the Antitrust Division took a similar approach, albeit focusing on the wholesale side of the market.[43] 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 "[w]hile 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 . . . ."[44]

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.[45]

(d) "Network access," "network services," and "ATM processing" In its analysis of the EPS-National City Bank merger (hereinafter *Banc One Corp.*), the Federal Reserve Board further refined the DOJ 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).[46]

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[43] United States v. Electronic Payments Services, Inc., No. 94-208 (D. Del. Apr. 21, 1994), 59 Fed. Reg. 24,711 (May 12, 1994).

[44] 59 Fed. Reg. 24,713 (May 12, 1994).

[45] 59 Fed. Reg. 24,712 (May 12, 1994).

[46] *Banc One Corp.*, 81 FED. RES. BULL. 491, 494 (May 1995).

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.

(e) An observation The critical element in the analysis of relevant market is the weight 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 market is one of data processing and that market 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 *EPS*, *First Data*, or *Financial Interchange*.

2. 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 upon the product market selected.

For example, early court opinions that addressed the geographic market applicable to a "payment systems" market sug-

gested that it is national.[47] If the focus of a fact finder is on a product market defined in terms of "data processing for unaffiliated institutions" or "network switching" services, the geographic market should be national, since 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.[48]

The most recent decisions have defined ATM networks as participating in regional markets.[49] In *Banc One Corp.*, the Board observed that most networks were regional in scope, and a study by Board economists found that the markets for network services and ATM processing were at least regional.[50] 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).

In *Banc One Corp.*, the Board also seems to suggest that, where the product market at issue involves ATM processing the geographic market may be national in scope.[51] The Board observed that companies are able to provide ATM processing and

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[47] *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) (alleging nationwide market for credit cards and point of sale debit cards marketed by national joint venture).

[48] *See Financial Interchange*, 55 Trade Reg. Rep. (BNA), No. 1380, at 356 (although the geographic boundaries of the retail market were not directly addressed in this proceeding, the arbitrator observed that retail markets were presumably local since consumers will only use ATMs close to where they live and work).

[49] *See EPS* consent decree, 59 Fed. Reg. 24,711; *Banc One Corp.*, 81 FED. RES. BULL. at 494.

[50] *See* JAMES MCANDREWS & ROBERT KAUFFMAN, NETWORK EXTERNALITIES AND SHARED ELECTRONIC NETWORK ADOPTION (Working Paper No. 93-18, Nov. 1993).

[51] *Banc One Corp.*, 81 FED. RES. BULL. at 494.

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

Generally, markets should be defined narrowly. The appropriate geographic market for most functions of an ATM market should be no larger than a region of the United States.

B. Measuring market power

Once the relevant market is defined, competitive effects are evaluated. The analysis begins by measuring industry concentration and the market shares of the combining firms. A merger resulting in excessive concentration in a market is presumptively illegal and "must be enjoined in the absence of evidence clearly showing that the merger is not likely to have such anticompetitive effects."[52] Market concentration is commonly measured in terms of percentages or "concentration ratios." The methodology set forward in the government's Merger Guidelines[53] and increasingly used by the courts, applies a measure known as the Herfindahl-Hirschman index (HHI).

There is relatively little authority 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 cardholder base.[54]

In *The Treasurer*,[55] the court suggested that market power should be measured by the number of ATMs. It wrote that "the

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[52] United States v. Philadelphia National Bank, 374 U.S. at 363.

[53] *1992 Horizontal Merger Guidelines of the Department of Justice and the Federal Trade Commission*, 4 Trade Reg. Rep. (CCH) ¶ 13,104 (April 2, 1992) (Merger Guidelines).

[54] 55 Trade Reg. Rep. (BNA), No. 1380, at 353, 356.

[55] 682 F. Supp. 269 (D.N.J.), *aff'd mem.*, 853 F.2d 921 (3d Cir. 1988).

principal competitive advantage of any ATM network is the number of ATMs utilized by the system."[56] 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."[57]

Market share is not a determinative factor, but rather one indication of whether market power may exist. 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. Where there is evidence of active participation in multiple networks, historical market share may overstate the market power of a network. Yet because of the difficulty of competing networks to acquire the necessary critical mass, market shares may tend to understate market power. Thus, a fact finder must exercise caution before relying on any individual statistical measure.[58] Critical to the determination of market power is whether entry is possible at the network level.

C. Analysis of entry

Essential to the analysis of market power in payment system cases, is consideration of the existence of entry barriers. The agencies evaluate whether entry would be sufficient either to deter or to counteract the competitive effects of concern and be both timely and likely to occur. The Merger Guidelines observe that market power cannot be created or its exercise facilitated when entry into the market is sufficiently easy.[59] 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 end the

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[56] *Id.* at 271.

[57] *Id.* at 279.

[58] *See* William Blumenthal, *Three Vexing Issues Under the Essential Facilities Doctrine: ATM Networks as Illustration*, 58 ANTITRUST L.J. 855, 864 (1989).

[59] Merger Guidelines at § 3.0.

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.[60]

On the one hand, entry into ATM networks should seem relatively simple. There are no technological barriers and the back-office operations can be acquired from a number of sources. On the other hand, developing a brand name and reputation can be expensive and there will be certain costs of reissuing cards.

In the network environment, analysis of entry becomes more complex because of the critical mass nature of networks. A 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, there must be a sufficient geographic dispersion (of ATMs) to offer cardholders a sufficient level of convenience.[61]

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[60] *Id.* Perhaps the most critical factor is the history of entry, which is particularly probative in assessing the likelihood of future entry. *See* United States v. Baker Hughes, 908 F.2d 981, 988 (D.C. Cir. 1990) (two firms had entered within the past year and were poised for future expansion); United States v. Waste Management, 743 F.2d 976, 982 (2d Cir. 1984) (history of recent entry indicated low entry barriers); United States v. United Tote, 768 F. Supp. 1064, 1076, 1080–82 (D. Del. 1991) (lack of entry supported finding of barriers); Calif. v. American Stores, 697 F. Supp. 1125, 1131–33 (C.D. Cal. 1988), *aff'd in relevant part*, 872 F.2d 837 (9th Cir. 1989), *rev'd on other grounds*, 495 U.S. 271 (1990). No ATM network has entered in over a decade.

[61] For example, there has recently been a great deal of discussion about the development of new ATM networks in response to ATM surcharges, i.e., the practice of many ATM owners of charging consumers an additional per transaction fee. ATM surcharges have a particularly adverse effect on small banks that primarily compete by offering low-cost retail deposit accounts. *See* David A. Balto, *ATM Surcharges: Panacea or Pandora's Box*, 12 REV. BANKING & FINAN. SERVICES 169 (Oct. 9, 1996). In response, groups of small banks have formed "no surcharge" coalitions, which promise to offer ATM access without a surcharge. *See Small Banks Join No-Fee Alliances in Bid to Retain Cus-*

There has been practically no successful entry at the regional ATM network for the past decade. As one commentator has observed:

> There have been relatively few new entries into the branded ATM network market anywhere in the country. It requires a critical mass of cards and ATMs. Participating institutions have a lot of reasons to be concerned about having to switch from one network to another—in part because it involved reissuing cards and re-assigning ATMs, and perhaps more important, re-educating customers.[62]

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 Antitrust 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."[63]

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tomers, AM. BANKER, July 25, 1997, at 1; *Yet Another Surcharge Issue Lands in the Laps of Regional EFT Networks*, DEBIT CARD NEWS, July 17, 1997, at 1. One reason these coalitions have not blossomed into networks is that they lack the geographic dispersion to offer sufficient convenience to consumers. *See* Testimony of Thomas M. Caron, President, Easton Cooperative Bank, Easton, Massachusetts, Before the Senate Banking Committee (July 29, 1997).

62 Donald I. Baker, *Shared ATM Networks, the Antitrust Dimension*, 41 ANTITRUST BULL. 399 (1996).

63 *EPS*, 59 Fed. Reg. at 24,720. Network externalities have been treated as an entry barrier in other merger cases. *Automated Data Processing, Inc.*, FTC D.9282 (proposed consent agreement June 18, 1997) (network externalities created entry barrier in used auto parts network).

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, and 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.[64] 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 to 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.

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[64] *In re Arbitration between First Texas Sav. Ass'n & Financial Interchange, Inc.*, 55 Antitrust & Trade Reg. Rep. (BNA) 340 (Aug. 25, 1988).

One Justice Department economist has made a similar observation. He observes that the

> value to belonging to a network lies in the potential for interchange with other members. A financial institution that is dissatisfied with a regional network's price or service quality may not gain by unilaterally leaving to join another regional network that offers better terms. Doing so could sever interconnection with the institutions with whom the institution typically interchanges, or require more costly or roundabout interchange with them through national networks. A financial institution would prefer to leave as part of a *coalition* that have frequent interchange with one another. . . . But such coordinated action is difficult to accomplish, and the difficulties multiply with the size of the potential coalition.[65]

He concludes that a network may have market power based on the disorganization of its members.

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.

D. Efficiencies

Even where there is evidence that a merger may lead to anticompetitive effects the enforcement agencies may decline to prosecute if there is evidence that there are efficiencies that outweigh these effects. Section 4.0 of the Merger Guidelines recognizes that many mergers create efficiencies and that the Guidelines do not provide an obstacle to the achievement of these efficiencies. The Guidelines do provide a rather stiff evidentiary burden however. The Guidelines note that "the Agency will consider only those

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[65] Alexander Raskovich, Some Antitrust Issues in ATM Network: Network Growth and Operating Rules, Speech Before the ABA Antitrust Section (May 24, 1996).

efficiencies likely to be accomplished with the proposed merger and unlikely to be accomplished in the absence of either the proposed merger or another means having comparable anticompetitive effects."[66]

The courts have rarely accepted efficiencies as a counterweight. 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."[67] Thus, to prevail, the merging parties typically have to show that the efficiency savings would be passed on to consumers,[68] that the efficiencies could *only* be obtained through an anticompetitive acquisition,[69] and

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[66] Merger Guidelines, § 4.0 (revised Apr. 6, 1997).

[67] FTC v. University Health, Inc., 938 F.2d 1206, 1223 (11th Cir. 1991); FTC v. Staples, Inc., 1997-2 Trade Cas. (CCH) ¶71,867 (D.D.C. 1997).

[68] As the Eleventh Circuit observed in *University Health*

> [W]e hold that 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.*

Id. at 1222–23 (emphasis added). *See also United States v. United Tote*, 768 F. Supp. 1064, 1084–85 (D. Del. 1991) (even assuming efficiencies would occur they were rejected because "there are no guarantees that these savings will be passed on to the consuming public"); California v. American Stores, 697 F. Supp. 1125, 1133 (C.D. Cal. 1988) (rejecting claimed efficiencies of over $50 million since efficiencies will not "invariably" be passed on to consumers), *aff'd in part and rev'd on other grounds*, 872 F.2d 837 (9th Cir. 1989), *rev'd on other grounds*, 495 U.S. 271 (1990).

[69] *See University Health*, 938 F.2d at 1222 n.30 ("it might be proper to require proof that the efficiencies to be gained by the acquisition cannot be secured by means that inflict less damage to competition. . . ."); United States v. Mercy Health Services, 902 F. Supp. 968, 987 (N.D. Iowa 1995) ("it is generally accepted that if the efficiencies may be obtained through a method which would not limit competition, then they may not be used as a valid defense"). As the court in United States v.

that the efficiency savings would outweigh the anticompetitive costs of the acquisition.[70]

IV. Recent ATM merger decisions—repaving the road to regional monopoly

Since the mid-1980s there has been tremendous consolidation among ATM networks. The number of regional ATM networks has been reduced substantially, and in relatively few areas is there head-to-head competition between networks. Some commentators have predicted there may be as few as ten regional networks by the end of the century.[71]

Rockford Mem. Corp., 717 F. Supp. 1251 (N.D. Ill. 1989), *aff'd*, 898 F.2d 1278 (7th Cir.), *cert. denied*, 498 U.S. 920 (1990) articulated

> [B]ecause *competition, not competitors*, is protected under § 7 savings relevant for determining pro-competitive efficiencies must be made only through the merger and in no other manner. . . . Efficiencies benefitting the merged entity, but obtainable by means independent of merger, are not relevant for § 7 purposes.

717 F. Supp. at 1289.

[70] *See id.* at 1289–91.

A merger between ATM networks also must receive approval from the Federal Reserve Board under section § 4(c)(8) of the Bank Holding Company Act. That statute applies an arguably stricter standard to demonstrate efficiencies. It requires the applicants to demonstrate the existence of efficiencies regardless of the level of anticompetitive effects. In order to receive approval from the Board, it is not enough for a bank holding company to show an absence of potential adverse effects. Rather, "the burden is on the holding company to affirmatively show that public benefits from the transaction could reasonably be expected, and would outweigh the possible adverse effects." Money Station, Inc. v. Board of Governors of the Fed. Resv. Sys., 81 F.3d 1128 (D.C. Cir. 1996), *rehearing en banc granted*, 93 F.3d 658 (1996). *See* Citicorp v. Board of Governors, 589 F.2d 1182, 1190 (2d Cir.) ("legislative history indicates the burden is on the applicant affirmatively to establish the net public benefit of its proposal"), *cert. denied*, 442 U.S. 929 (1979). As described *infra*, the Board has applied a relatively lighthanded approach to efficiencies.

[71] *See* THE BANKERS ROUNDTABLE, BANKING'S ROLE IN TOMORROW'S PAYMENTS SYSTEM 47 (Furash & Co. 1994).

In three decisions from 1994–1996, the Federal Reserve Board grappled with issues of network competition. Prior to that time network competition received little or no attention as mergers were approved without extensive analysis. The outcome however, was not completely salutary.

A. Yankee 24/NYCE

In the fall of 1994 the Board and the Division approved the merger of NYCE and Yankee 24.[72] NYCE was the third largest network in the U.S. with ninety-five million transactions monthly and over 13,000 ATMs and had a dominant position in New York. Yankee 24 was the ninth largest network with twenty-three million transactions and over 4000 ATMs, and competed throughout New England.

Even though there was direct competition between the two networks, it received minimal attention in the Board's decision. There was significant competition especially in Massachusetts, Rhode Island, and Connecticut, where NYCE had substantially increased its market presence in the early 1990s. Moreover, the two networks competed for bank members and NYCE had recently entered into exclusive arrangements with former Yankee 24 members, such as Fleet Bank. Arguably those exclusivity arrangements may have driven Yankee 24 below minimum viable scale.

The Board did not address the nature of the head-to-head competition between the networks or its significance. Nor did it analyze the potential for the merged network to exercise market power. 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."[73] In particular, the Board observed that other providers of EFT services would remain in the market, including third-party

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[72] *Bank of New York Co.*, 80 FED. RES. BULL. 1107 (1994).

[73] *Id.*

processors, and other regional and national ATM and POS networks.

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 architecture" structure and the existence of potential efficiencies and how these two factors justified the loss of competition.

1. 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 nonequity 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.[74] In addition, although this factor was not identified by the Board, NYCE also promised not to assess a royalty fee for any transactions that "bypass" the network.

The first and second of these rules provide member banks with possible alternatives to the network services, including processing and ATM-operating services from major third-party sources, 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 is the card-issuer routing rule.[75] Where both the card and ATM belong to multiple networks the

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[74] The parties also agreed that if a bank chose to bypass the network, it would not have to pay a royalty or bypass fee. *See* Application of Infinet Payment Services, Inc., June 6, 1994, at 29.

[75] For a discussion of the importance of card-issuer routing rules, *see* Karen L. Grimm & David A. Balto, *Consumer Pricing for ATM Services: Antitrust Constraints and Legislative Alternatives*, 9 GA. ST. L. REV. 839 (1993).

bank that controls routing will choose which network to "send" or "route" the transaction on. In an ATM network the card-issuer pays the fees of every transaction (an interchange and switch fee). In most ATM networks the ATM owner determines routing. The card-issuer will seek the network with the lowest fees; the ATM owner will seek the network with the highest fees.

A card-issuer routing rule gives the card-issuing bank the ability to search for lower cost alternatives. If the network attempts to exercise its market power by increasing its fees, a card-issuer routing rule will permit the card-issuing bank to choose a lower cost network (if one is available). Absent a card-issuer routing rule a bank may have little alternative to pay the higher fees.

2. EFFICIENCIES The Board also found that the merger would result in "public benefits" that outweighed any loss of competition, including: (1) increased transaction volume, which would reduce costs due to economies of scale (primarily in transaction processing); (2) increased ability to offer POS services to retailers; and (3) increased consumer convenience. NYCE owns its own switch and switches its own transactions. Yankee 24 purchased switching services from a third-party processor. Thus, the merger would enable NYCE to spread the costs of the switch over two networks. The second efficiency came from increased economies of scope by extending the geographic range of each network's POS operations.

B. 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, which was approved by the Board, in a 5–1 vote, in March 1995.[76]

Compared to a merger with a neighboring network, this may appear to be a preferable (and less expensive) method of expand-

[76] *Banc One Corp.*, 81 FED. RES. BULL. 491, 494 (May 1995) (Vice Chairman Blinder dissenting).

ing 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. In other words, the net result could be the same as a merger.

National City (NCB) sought to join EPS as a 20% 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).[77] NCB was one of the largest members of Money Station, a neighboring joint venture network in Ohio. The merger would have increased EPS's market share from 31% to 45% of all ATMs in Ohio. Money Station filed a protest before the Board; the Board staff considered the application for several months, received several pleadings from the parties and conducted an informal hearing.[78]

1. 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. By acquiring NCB's share of Money Station, EPS would have a substantial share of ATMs in several

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[77] The transaction as originally proposed would have had Mellon Bank acquiring a 16.67% interest in EPS. However, due to the lengthy regulatory proceeding in approving the merger, Mellon eventually withdrew as a potential owner. *See Mellon Ditches Plan to Buy into MAC*, AM. BANKER, Jan. 30, 1995, at 1.

[78] Although Money Station did not prevail in any of the legal challenges, its challenge did have one important effect—the regulatory delay led Mellon to withdraw as a potential owner of EPS. In July 1997 Mellon joined Money Station as a 20% equity owner. Mellon's new ownership role in Money Station is credited with reviving competition between Money Station and EPS. By joining Money Station, Mellon gave the network coverage of about 90% of the ATMs in Western Pennsylvania. Soon after Mellon joined Money Station, the network cut its switch and interchange fees. *See A Network Price War Looms in the Midwest*, BANK NETWORK NEWS, August 11, 1997, at 1.

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 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. Thus, NCB and its cardholders could be viewed as an essential input into the network.

The Board focused its analysis on MAC's Mideast region (western Pennsylvania, Ohio, Indiana, Kentucky, and West Virginia). The Board rejected the argument that anticompetitive effects would result, 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. NCB's network—Money Center—was not in direct competition with EPS's MAC network, nor was it a potential future competitor. Of particular importance was the fact that in 1992 NCB had abandoned its attempts to form a new regional ATM network with other large banking organizations, 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. Further, according to the Board, the consolidation of the Money Center's network services with the MAC network would not significantly increase barriers to the entry of other ATM service providers, nor would it create an undue concentration of resources.

In addition, although the merger appeared to expand the scope of the MAC monopoly, the Board observed that 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.

2. OPERATING RULES The Board relied heavily on the role the DOJ consent decree would play in assuring 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. The Board did not provide any detail as to whether these rules had led to an increase in competition.

Money Station contended that various MAC rules permitted the network to thwart any procompetitive effects achieved under the DOJ consent decree. The Board staff investigated the effects of four rules: (1) MAC's prohibition on subswitching between members; (2) MAC's rights under the consent decree to charge a royalty fee if subswitching were to be permitted; (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 the competitive effect would be of changing these rules.[79] Without securing any evidence, the Board concluded that modification of these rules was not necessary (although Vice Chairman Blinder would have required the changes).

Ultimately, the Board held that modification of the MAC operating rules was unnecessary because "the Consent Decree recently became effective, and that its terms are designed to achieve procompetitive effects over time during the ten-year duration of the decree."[80]

3. 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

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[79] Letter from Stephen A. Rhoades, Assistant Director, Division of Research and Statistics, to Allen Raiken et al. (Feb. 15, 1995).

[80] 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.

innovative electronic banking products and services sooner, insure the quality of the products being offered, and allow it to provide these products to a broad customer base.

4. 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:

> [I]t seems undeniable that allowing National City's ATM network to be merged into the MAC network would result in some adverse effect on competition. Therefore, to approve this transaction, the Board must find that there are sufficient public benefits to outweigh the loss of competition. The application, per se, demonstrates no such benefits to the public in my view.[81]

The vice chairman would have required modification of MAC's operating rules, as apparently suggested by the staff, in order to meet the public benefits test.

5. APPEAL The case was appealed to the D.C. Circuit which vacated the Board's decision in a 2–1 vote.[82] Although the reversal was based on the fact that the Board had violated the Administrative Procedures Act by failing to hold a hearing on the public benefits of the acquisition, the decision includes a number of important observations about the Board's analysis of ATM mergers.

6. ASSUMING THE INEVITABILITY OF MONOPOLY The court noted that rather than grapple with the competitive effects of the acquisition and evaluating "MAC's size and dominant market position, the Board basically assumed away the issue by focusing narrowly on the marginal effects of this transaction rather than on the entire competitive situation in the ATM market."[83] Basically, the court characterized the Board's position as concluding "bigger is better" without much analysis. The court said: "[w]hile this approach

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[81] *Banc One Corp.*, 81 FED. RES. BULL. at 501.

[82] Money Station, Inc. v. Board of Governors of the Fed. Resv. Sys., 81 F.3d 1128 (D.C. Cir. 1996), *rehearing en banc granted*, 94 F.3d 658 (July 31, 1996).

[83] *Id.* at 1133.

conveniently allowed the Board to dismiss any concerns about monopoly concentration, it certainly cannot be deemed a conclusion that no adverse effects would arise from this transaction."[84]

In particular, the court was troubled with the implication of the Board's position "that through a slow process of accretion, a network like MAC can establish a large and potentially harmful monopoly position, provided that none of the company's individual acquisitions standing by itself is too large. To treat a company's size and market position before a proposed transaction as irrelevant in determining whether there are potential adverse effects from a transaction is scarcely consistent with the Act's goals of 'increasing competition' and preventing an 'undue concentration of resources,' nor does it appear consistent with the Board's own precedents of looking at the degree of monopolization of markets in analyzing transactions."[85]

The court held that there was some evidence of anticompetitive effects, thus it was the Board's burden to demonstrate "some reasonable expectation of public benefits" that outweighed the competitive harm. Here too the Board's analysis was deficient.

7. PUBLIC BENEFITS The court found that the Board's public benefits findings were too speculative, and were not based on substantial evidence in the record. In particular, the court criticized the Board's argument that cash infusions from the merger would provide capital infusions that would enable EPS to continue and to expand its research and development efforts, and offer innovative products (such as at-home banking or stored value cards). This argument was deficient for two reasons. First, the parties had acknowledged in their application that the cash infusion would be used to reduce debt, not to engage in new research and development. Second, and more determinative, the Board had failed to analyze whether there were less restrictive means of attaining these efficiencies. Analysis of whether there are less restrictive alternatives is required by the courts and the Merger Guidelines.[86]

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84 *Id.*

85 *Id.* at 1133–34.

86 *Id.* at 1135–36.

There was no discussion or evidence of why EPS could not get the capital to develop these products in the absence of this transaction. Nor was there any evidence that these products could not be developed absent the transaction.

Judge Harry Edwards dissented, arguing there were no conceivable anticompetitive effects and that a hearing was unnecessary. The panel opinion was vacated when the Circuit ordered rehearing en banc. The case was settled by the parties.

C. Honor/Most/Alert merger

The largest ATM merger to date was the merger between three adjoining networks in the southeast United States—Honor, Most, and Alert.[87] The Board approved the merger, but their analysis was slightly different than that of previous cases. All three networks were in the Southeast United States and the merger created a single network from Virginia to Alabama. Prior to the merger, Most was the fifth largest network, Honor was the fourth largest network, and Alert was the twenty-third largest network.

1. COMPETITIVE EFFECTS As in *Banc One* the Board reaffirmed that the economic and structural features of the market are likely to lead to a single dominant network in a multistate region. The Board noted that "the competitive advantage produced by economics of scale, and the desire to undertake" R&D and enhance product offerings were factors that led to network consolidation.

Perhaps because of the criticism of the D.C. Circuit, the Board provided the most extensive discussion of competitive effects of any recent decision. The focus of its analysis was on "network access" since that was the only market in which all three firms participated. Unlike the earlier decisions, it was willing to acknowledge that the merging networks had competed with each other. Both Most and Honor had a significant presence in many states in each other's region. Honor had a significant presence in Alabama.

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[87] *See Barnett Banks, Inc.*, 83 FED. RES. BULL. 131 (Dec. 9, 1996).

The Board's recognition that the regional networks compete is a step forward. But they were unwilling to venture too far. Apparently unwilling to explore the implications of that overlap, the Board attributed it to the fact that two large interstate banks were members of both networks. The Board did not analyze whether the merging networks had some kind of competitive impact in each other's region. For example, a neighboring network can be an important competitive alternative for banks seeking alternatives to their "home" network. A South Carolina bank is far more likely to turn to a network in Virginia or Alabama as alternatives than one in Chicago. The lack of analysis is all the more surprising since the Board explicitly relied on the potential for competition from much more distant networks—MAC and NYCE—as competitive constraints to the proposed network.

As in earlier decisions, the Board also relied on alternative networks such as smaller networks, third-party processors, and national networks as competitive constraints. Of course, the degree that these could truly provide a competitive constraint would depend upon the number of ATMs connected to a competitive alternative. In this regard it is worth observing that although national ATM networks have almost universal coverage, the Justice Department excluded them as a competitive alternative in their *EPS* consent. There is no evidence that any banks have chosen to forgo membership in a regional network and rely wholly on membership in national networks.

Like the *Bank of New York* case, the Board relied extensively on operating rules adopted by the network to assure that smaller members had competitive alternatives to the network. In fact these rules seemed to play a critical role. Unlike earlier decisions, the Board conditioned its approval on the network's promise to enact these rules. The rules were: (1) banks could participate in the network on a nondiscriminatory basis and could join other networks and co-brand their cards and terminals; (2) members could interconnect to national networks without going through the regional network switch; (3) members could use third-party processors and permit unbranded switching subject only to a royalty

fee.[88] These were the types of rules that the Board's staff investigated in the *Banc One* merger and the parties were probably astute in anticipating the Board's concerns in this area.

However, one significant omission was the lack of a card-issuer routing rule. As discussed above, a card-issuer routing rule is essential for smaller banks to have the opportunity to avoid the exercise of market power. Why the Board stepped back from this important requirement imposed in *Bank of New York* was not explained.

2. ROYALTY FEE Perhaps what might become the most controversial part of the order is the Board's implicit acceptance of the imposition of a royalty fee for transactions outside the network. The ability to "bypass" the network is important. If the network were to charge certain members (e.g., nonowners) supracompetitive fees, bypass would enable the members to seek out lower priced alternatives.

But permitting royalty fees may eviscerate the importance of these forms of bypass. For example, assume the network charged nonowners a 15 cent a transaction switch fee. A national network offers to switch transactions for 5 cents a transaction. The incumbent network could make bypass unprofitable just by assessing a 10-cent royalty fee.

Do these operating rules provide sufficient protection against the exercise of market power? Only time will tell. Without a card-issuer routing rule the remainder of the rules may have little impact. Moreover, royalty fees may just lead to numerous competitive disputes. These disputes can be very complex and contentious.[89]

3. PUBLIC BENEFITS The Board found several public benefits: (1) added availability and convenience to consumers by expanding the geographic scope of the network; (2) the merger would

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[88] Unlike the prior orders, the Board conditioned approval on the network's adoption of these rules and providing appropriate notification.

[89] *See* Grimm & Balto, *supra* note 75.

enable small banks to compete with larger banks; (3) reducing switching costs by providing it internally since Most and Alert purchased more expensive switching from third parties; and (4) increased research and development and product development.

Although the Board is somewhat more creative about the scope of the potential efficiencies their analysis suffers from the infirmities in the earlier cases. Many of these efficiencies can be achieved through less restrictive alternatives. For example, increased geographic scope can be achieved simply by establishing a "gateway" between the merging networks. Many regional networks have achieved these economies of scope through gateway relationships with other regional networks.

D. 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 decline to fully explore how networks compete. Rather they seem to assume that a regional monopoly is foreordained.

1. DEFINING THE RELEVANT MARKET Critical to understanding the analysis of network mergers is disaggregating the different dimensions of the network, and analyzing the impact of mergers on competition for each dimension. A network has several components: a trademark, a computer switch, operating rules, etc. As noted earlier, too often enforcers and regulators have focused on the unconcentrated nature of the back-office operation, and have given too little attention to competition at the brand level.[90] Differentiating between the two is important because there may be relatively few firms capable of competing at the 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.

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[90] *See* Donald I. Baker, *Compulsory Access to Network Joint Ventures Under the Sherman Act: Rules or Roulette?*, 1993 UTAH L. REV. 999 (1993).

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," "network services," and "ATM processing." 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.[91]

Yet the Board's analysis of competitive effects seems deficient for several reasons. First, in *Bank of New York* and *Barnett Banks*, the Board seemed to consider third-party processors as potential competitors in the ATM network access market, even though they only compete at the ATM processing or back-office level. Simply because third-party processors enter the market does not mean that the prices for ATM network access will be competitive. Second, in *Banc One*, the Board arguably failed to consider how competition would be adversely affected by the merger at each level of the market. Although the availability of third-party processors might reduce the opportunity for competitive harm in the ATM processing market, there is no reason to believe that they are a competitive alternative in either the network access or network services markets.

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[91] 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.

2. COMPETITIVE EFFECT ANALYSIS The essential issue in any merger investigation is the determination of the competitive effects of the merger, i.e., what will be the ability of the merged firm to exercise market power after the merger. In both *Bank of New York* and *Banc One Corp.*, the Board appeared to rely on the general structure of the market and the operating rules (discussed below) in concluding that anticompetitive effects were unlikely. Yet in neither case did the Board describe in detail the dimensions nor degree of competition between the merging networks. Particularly in *Bank of New York*, where the two networks had competed directly and aggressively 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. Although the Board had a longer discussion of competitive effects in *Barnett Banks*, these issues went unaddressed.

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," since MAC no longer required exclusivity 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 effect 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.[92] And this sort of analysis, although somewhat speculative, is always necessary.

Ultimately the Board's analysis of competitive effects will not improve until they can describe how ATM networks compete. Until they can articulate a model of network competition, analytical improvements, such as more refined relevant markets, will not make much difference in the ultimate resolution of these mergers.

3. ANALYSIS OF COMPETITIVE ALTERNATIVES One of the most elusive aspects of analysis of competitive effects is the value given to the network mark. On the one hand, ATM networks can be perceived as such groups of telecommunications connections and any entity providing those connections could be perceived as a competitor, as in *The Treasurer*. On the other hand, the regional network mark could be seen as being of supreme value, and thus nonbranded processors and national networks might be inconsequential alternatives. The truth probably lies somewhere between these two alternatives. One might observe, however, that very few banks withdraw their ATMs from regional networks and become unbranded or rely only on national network status.

The Board seems to consider national networks as equal alternatives to the regional monopolies and they seem to believe that unbranded access through third-party processors also may be a viable alternative. There is little evidence from the market that this is the case. Almost all ATMs have access to PLUS and/or CIRRUS, the national ATM networks. But banks perceive national networks as some sort of supplemental coverage, basically for out-of-town travelers. Whether a bank could rely solely on a national network seems questionable. 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 has taken a skeptical posi-

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[92] Department of Justice and Federal Trade Commission, *Statements of Antitrust Enforcement Policy in the Health Care Area*, 4 Trade Reg. Rep. (CCH) ¶ 13,153 (August 1996).

tion about the level of competition offered by national networks. In its Competitive Impact Statement it observed that:

> 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.[93]

Moreover, banks typically have access to regional networks only through the regional network. Thus, the regional network might have the ability to discipline a bank's attempt to bypass its network, by delaying access to the national network or attempting to assess a routing fee.

4. THE IMPORTANCE OF NETWORK OPERATING RULES The Board's approach to the importance of operating rules seems confusing. In *Bank of New York*, the availability of an "open architecture" 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 concern over the potential for exercise of market power.

Yet in *Banc One*, the Board seemed unwilling to follow that precedent. The Board staff appeared concerned that MAC rules that imposed restrictions on subswitching among 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 *Bank of New York*, that would seem the preferable approach.

Finally in *Barnett Banks* the Board took a halfway approach. On the one hand it relied more heavily on the promise of these rules, compelling their enactment as a condition of approval. On the other hand it failed to require the central rule to an open architecture—a card-issuer routing rule. Moreover, permitting the

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[93] 59 Fed. Reg. 24,719 (May 12, 1994). The Federal Reserve Board has taken a similar position. *Banc One Corp.*, 81 FED. RES. BULL. at 494, n.21.

assessment of royalty fees may significantly dampen the attractiveness of bypassing the network since the network can acquire the same monopoly profits through the royalty fee.

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 themself, 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 one 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.[94]) 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.[95]

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

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[94] A "subnetwork" could be an alternative ATM network.

[95] 55 Trade Reg. Rep. (BNA), No. 1380, at 353.

> 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. . . .[96]

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, 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.

Have the operating rules in the DOJ consent decree made a difference? Three years after the decree was entered the evidence on its effects is mixed, and it also depends which market you consider. In the ATM processing market, several third-party processors have entered and approximately 5% of the transaction processing is now being performed by these processors. This, in turn, has led MAC to reduce its transaction processing fees.[97] In the regional ATM network access market, MAC remains dominant in the mid-Atlantic region, and there has been no significant entry by competing networks. Even if the consent created an open architecture structure, there are several reasons why that structure might not assure that a network—especially a dominant network—cannot exercise market power.

Even with an open architecture a network might attempt to impose de facto exclusivity through other types of rules or fees (e.g., royalty fees) that raise the costs of entering into alternative arrangements. These fees seem to be expressly permitted in *Barnett Banks*. In addition, other incentives such as ownership in the network, may discourage the use of alternative arrangements.

Perhaps a preferable approach would be to rely on an open architecture only where the parties were able to demonstrate that

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[96] *Id.*

[97] *See EPS Hires Dealmaker to Oversee Aggressive Expansion Strategy*, AM. BANKER, Aug. 8, 1995, at 1.

banks were currently able to bypass the network and were engaging in bypass. Such an approach is suggested in the enforcement agency's analysis of exclusivity in health care joint ventures. In the Health Care Policy Statements the agencies say that simply saying that a network is nonexclusive is not enough. Rather, the agencies analyze whether "physicians in the network actually individually participate in, or contract with, other networks or managed care plans, or there is other evidence of their willingness and incentive to do so."[98]

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 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.[99]

The Board's failure to address the operating rules in *Banc One Corp.* or their failure to require card-issuer routing in *Barnett Banks*, send 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.

Finally, there is a greater public policy issue raised by relying on operating rules. Approving mergers based on operating rules could set an unwise precedent. When these rules become an issue of dispute the parties will bring those disputes to the Board. This in turn will place the Board in the position of increasingly regulat-

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98 4 Trade Reg. Rep. (CCH) at 20,815.

99 *See* Grimm & Balto, *supra* note 75.

ing these networks and eventually arbitrating the intranetwork disputes. Whether the Board should adopt such a regulatory role is open to question. Yet if it fails to do so, what assurance is there that the rules will be effective?

5. 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 fact that the value of a network to a consumer depends upon the number of users and the identities of other 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.[100]

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

> [A]s 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.[101]

Some commentators have suggested that the existence of network externalities may counsel for a more laissez faire approach

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[100] *See* John M. Stevens, *Antitrust Law and Open Access to the NREN*, 38 VILL. L. REV. 571, 597–98 (1993); Michael L. Katz & Carl Shapiro, *Network Externalities, Competition and Compatibility*, 75 AM. ECON. REV. 424 (1985).

[101] *Banc One Corp.*, 81 FED. RES. BULL. at 494, n.20.

in analyzing payment systems mergers.[102] 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.[103] First, many of those efficiencies could be achieved by less restrictive alternatives. In the ATM context, for example, a gateway arrangement (between the two networks) may permit the networks to achieve a level of ubiquity, 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 in order to encourage the creation of competing networks rather than one large network.[104]

The Board's overall analysis of efficiencies in these cases seems lighthanded and superficial. It is particularly problematic

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[102] *See* Margaret E. Guerin-Calvert, *Key Economic Issues in Network Merger Analysis*, ECONOMISTS INK, Fall 1994.

[103] The agencies have challenged network mergers even where there were network externalities present. For example, in 1989 the Antitrust Division announced that it would challenge the proposed joint venture of the CRS systems of American Airlines and Delta Air Lines, alleging that the proposed joint venture "would violate Section 7 of the Clayton Act and Section 1 of the Sherman Act because it would substantially lessen competition both in the sale of CRS services to travel agents and in the provision of scheduled airline passenger service." It found that there are only five computer reservation systems in the United States and concluded that the elimination of one of the five competitors "could result in higher charges to travel agents for using CRS services." Department of Justice Press Release, 89–191 (June 22, 1989). *See also Automated Data Processing, Inc.*, Docket No. 9282 (June 17, 1997) (settlement of merger between two firms which provided transaction network for automobile replacement parts firms).

[104] *See* Baxter, Cootner & Scott, *supra* note 2.

because efficiencies were used to approve mergers to monopoly, a position no court has ever adopted.[105] The approach taken by the FTC and the Antitrust Division 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.[106] 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 R&D efforts would not pass this test, since there are a number of alternative sources of revenue to fund such research. Similarly, the processing economies of scale recognized in *Bank of New York* or *Barnett Banks* could have been achieved through a more limited merger of the two networks' back-office operations, while preserving competition between the networks—similar to the FTC approach in *First Data*.

6. 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 a dark 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

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[105] *See* FTC v. Alliant Techsystems Inc., 808 F. Supp. 9, 23 (D.D.C. 1992) (where merger would create firm with market power, efficiency claims are "insufficient to override the public's clear and fundamental interest in promoting competition"); *FTC v. Imo Indus.*, 1992-2 Trade Cas. (CCH) ¶69,943, at 68,560 (D.D.C. 1989); United States v. United Tote, 768 F. Supp. 1064, 1084–85 (D. Del. 1991); *see also* Department of Justice and Federal Trade Commission, *Horizontal Merger Guidelines* § 4.0 (1997) ("Efficiencies almost never justify a merger to monopoly or near-monopoly").

[106] *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").

> 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.[107]

The Board appears to view the road to regional monopoly as being foreordained and dictated by the economics of networks. Is that vision correct? The panel decision of the D.C. Circuit seemed particularly troubled by that conclusion. 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 the per se legal category. Although its decision in *Banc One Corp.* appears to advance the analysis of mergers, the Board's conclusion appears to be that competition is not worth the candle. If the Board prevails, the road to regional monopoly may turn into a superhighway.

V. Conclusion

Network mergers are particularly complex, because they require careful distinctions among 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 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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[107] *Banc One Corp.*, 81 FED. RES. BULL. at 497.

Essentially, we have come full circle, with a reliance on vague arguments of network ubiquity to support monopoly networks. While network externalities suggest that networks become more efficient as they grow larger, they also enhance (or make more durable) the market power of dominant networks. Thus, courts and antitrust enforcers need to recognize that regional networks monopolies, freed from facing competition in the market may become inefficient or decline to pass on efficiencies to consumers. Courts and antitrust enforcers must also recognize the different species of competition among networks—branding, access, and processing. Only when these elements are carefully distinguished, will fact finders arrive at a more accurate assessment of anticompetitive effects and efficiencies. And they will realize that some forms of regulatory relief granted in the past, are insufficient to remedy the underlying threat of competitive harm. The task is not a simple one, but it is crucial if the opportunity for network competition will be recognized.