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Current Developments in the Regulation of International Banking

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INTRODUCTION

International banking has grown dramatically in the 1970s. Expanded operations by foreign banks in the United States and by U.S. banks abroad have prompted reviews and revisions of federal regulation of this important activity. After briefly describing the growth of international banking, this article examines the three major current developments that are changing or may change U.S. regulation of international banking and shape its evolution in the 1980s. Foremost among these developments is the International Banking Act of 1978 (IBA), which makes many regulation changes, delegates to various government units the authority to make additional changes, and directs the study of still other possible legislative changes. The other two developments that may bring change to U.S. regulation of international banking include the recently extensive foreign efforts to purchase U.S. banks and the New York Clearing House Association proposal to permit special International Banking Facilities in the United States.

Growth of International Banking

International banking is growing in two senses: the volume of banking services that facilitate international trade and investment is growing as international commerce grows, and banks are establishing more offices outside their homelands. Some banking offices are established abroad to serve on-site the foreign affiliates of multinational firms with which banks have domestic relationships. Additionally, banks establish offices abroad to acquire new customers and to diversify bank sources of funds and earnings.

U.S. offices of foreign banks and foreign offices of U.S. banks have increased their numbers and assets dramatically in the 1970s (see charts 1 and 2). In November 1972, when such data were first collected by the Federal Reserve System, 104 offices of foreign banks, including 79 agencies, branches, and investment companies and 25 subsidiary banks, were operating in the United States (see definitions in box A). Together, these offices had total assets of $24 billion. By July 1979, 328 offices were operating with total assets of $137 billion, of which $28 billion was commercial and industrial loans to parties in the United States and $12 billion was commercial and industrial loans to parties in foreign countries. This $40 billion total is more than 15 percent of the $259 billion of commercial and industrial loans of all (domestic and foreign) commercial banks in the United States. Foreign operations of U.S. banks have also grown rapidly. From end-1971 to end-1978, foreign branches of Federal Reserve member banks increased in number from 577 to 761 and assets expanded from $55 billion to $258 billion.

Chart 1 Assets of U.S. Offices of Foreign Banks Reporting to Federal Reserve System

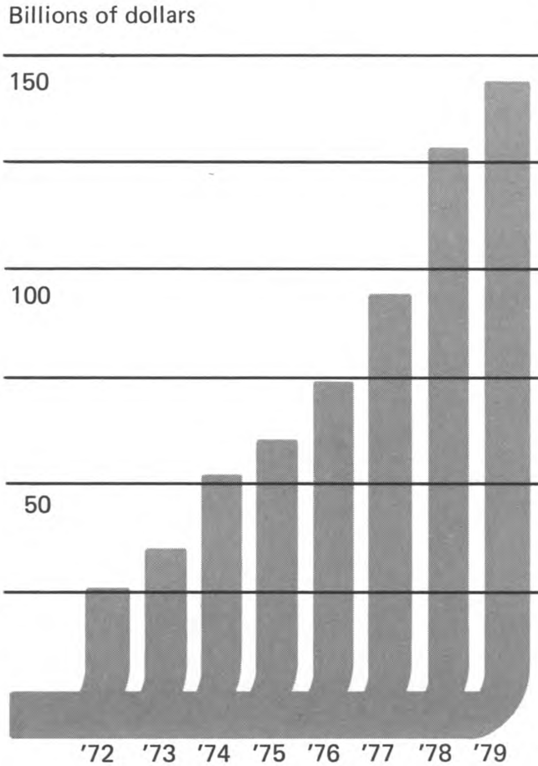
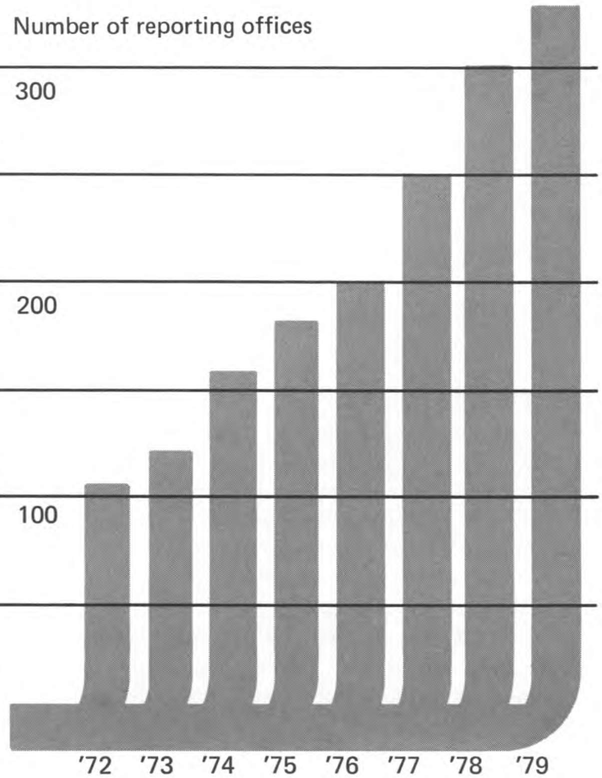


Chart 2 Number of U.S. Offices of Foreign Banks Reporting to Federal Reserve System



NOTE: Except for 1979, data represent year-end figures.

Representative offices (see box A) are another rapidly growing facet of international banking presence. Foreign banks have increased the number of their representative offices in the United States from 126 in 1972 to 238 in 1978. In the same period, U.S. banks enlarged their number of representative offices abroad from 173 to 288.[1]

1. Representative office data are based on surveys by the *American Banker,* reported in the issues of February 28, 1973, July 31, 1973, and March 23, 1979.

The Fourth Federal Reserve District has shared in the growth of international banking and has several international banking facilities. Foreign banks maintain three branches and four representative offices in the District while banks headquartered in the District have fourteen foreign branches, fourteen foreign representative offices, and seven Edge Corporations (see box B).

Regulatory Initiatives

Three facets of this international banking growth have led to three regulatory initiatives. First, the rapidly increasing importance of foreign

Box A Organizational Forms

Foreign banks use several organizational forms for their operations in the United States, with subsidiary banks, branches and agencies as the most important. Other organizational forms are representative offices and New York investment companies. Edge Act Corporations, long used by U.S. banks for international banking, may now be formed in the United States by foreign banks.

A **subsidiary bank** is legally separate from the foreign bank which owns its stock, and the subsidiary bank has its own state or national charter. The foreign parent may create, **de novo**, the subsidiary bank, or may purchase an existing bank. The subsidiary bank has a full range of banking powers, such as accepting deposits and making loans. The maximum loan a subsidiary bank may make to any one customer is subject to regulatory limits based on the bank's own capital.

A **branch** is an integral part of the foreign bank that establishes it, and has full banking powers.[1] The maximum loan a branch can make to any one customer is subject to regulatory limits based on the **parent** bank's capital.

The **agency** form of organization can make commercial and industrial loans and finance international transactions; it can accept credit balances[2] but cannot accept deposits, sell certificates of deposit, or perform trust functions. An agency obtains most of its funds by borrowing in U.S. money markets and from banking affiliates abroad. Agencies are not subject to regulatory limits on the size of a loan to any one borrower.

New York State permits an additional form known as an **investment company** to engage in most banking functions. These may accept credit balances but may not accept deposits.

The **representative office** is the least powerful but the most prevalent organizational form. It acts as a liaison with existing customers of the foreign head office, establishes contact with potential customers, and performs public relations functions, much as a loan production office represents a domestic bank out-of-state.[3] It cannot accept deposits, make loans, or perform trust functions. Because its activities are limited, the representative office is essentially unregulated and is the easiest organizational form to establish. Foreign banks sometimes use a U.S. representative office as a preliminary step to establishing a banking office.

The **Edge Act Corporation** is authorized by the Edge Act, passed in 1919 and named for Senator Edge of New Jersey. The Edge Act permits domestic banks to establish these subsidiaries, which need not be in the same state as the parent bank. The International Banking Act of 1978 permits foreign banks also to establish Edge Act Corporations. Edge Act Corporations are of two types: investment and banking. An investment Edge Corporation functions as a holding company through which its parent bank can make equity investments abroad. A banking Edge Corporation is one that "is ordinarily engaged in the business of accepting deposits in the United States from nonaffiliated"[4] individuals or organizations. A banking Edge Corporation is permitted to engage in a full range of international banking activities, but its transactions with U.S. residents are restricted to those transactions that are closely related to its international business.

1. As explained in the text, the IBA restricts the kinds of deposits that can be accepted at branches outside the "home state."
2. A credit balance is an account to which the proceeds of loans or collections can be credited. Although it can be transferred to third parties by draft, it differs from a demand deposit in that it should not be used for ordinary business transaction purposes.
3. For more information see Gerald H. Anderson, "Loan Production Offices and Representative Offices," *Economic Commentary*, Federal Reserve Bank of Cleveland, October 31, 1977.
4. Federal Reserve Regulation K, Section 211.2 (d).

Box B International Banking Offices—Fourth Federal Reserve District

FOURTH DISTRICT BRANCHES OF FOREIGN BANKS

Parent Bank	Branch Location
Algemene Bank Nederland, Amsterdam	Pittsburgh
Barclays Bank International Ltd., London	Pittsburgh
Lloyds Bank International Ltd., London	Pittsburgh

FOURTH DISTRICT REPRESENTATIVE OFFICES OF FOREIGN BANKS

Parent Bank	Representative Office Location
Bank of Nova Scotia, Toronto	Cleveland
Bayerische Vereinsbank (Union Bank of Bavaria), Munich	Cleveland
Toronto Dominion Bank, Toronto	Pittsburgh
Royal Bank of Canada, Montreal	Pittsburgh

FOREIGN BRANCHES OF FOURTH DISTRICT BANKS

Parent Bank	Foreign Branch Location
AmeriTrust Company (Cleveland)	Nassau, Bahamas
Central National Bank of Cleveland	Nassau, Bahamas
Equibank, N. A. (Pittsburgh)	Nassau, Bahamas
Huntington National Bank of Columbus	Grand Cayman, Cayman Islands
Mellon Bank, N. A. (Pittsburgh)	London, England
	Frankfurt, West Germany
	Tokyo, Japan
	Grand Cayman, Cayman Islands
National City Bank (Cleveland)	Nassau, Bahamas
Pittsburgh National Bank	Nassau, Bahamas
	Paris, France
Society National Bank of Cleveland	Nassau, Bahamas
Union Commerce Bank (Cleveland)	Nassau, Bahamas
Winters National Bank and Trust Co. (Dayton)	Grand Cayman, Cayman Islands

banks' activity in the United States necessitated an updating of federal regulation of that activity; Congress responded to this need with the IBA.

Second, foreign banks have been making recent substantial efforts to purchase control of existing banks in the United States, rather than growing by opening new branches, agencies, or newly chartered subsidiary banks—the past predominant methods of growth. In response, some public officials are urging a review of federal policy toward foreign purchases of U.S. banks.

Third, rapid growth in international banking activity outside the United States has led the New York Clearing House Association to propose changes in Federal Reserve regulations that would enable International Banking Facilities to attract Eurodollar banking business to the United States.

This article examines the three regulatory initiatives that are likely to shape the growth of international banking in the 1980s.

Box B Continued
FOREIGN REPRESENTATIVE OFFICES OF FOURTH DISTRICT BANKS

Parent Bank	Representative Office Location
Central National Bank	Paris, France
	Mexico City, Mexico
Equibank, N. A.	London, England
	Hong Kong
Mellon Bank, N. A.	Mexico City, Mexico
	Manila, Philippines
	Hong Kong
	Melbourne, Australia
	Rio de Janeiro, Brazil
National City Bank	London, England
Pittsburgh National Bank	Sao Paulo, Brazil
	Singapore
	Sidney, Australia
Union Commerce Bank	London, England

EDGE ACT CORPORATIONS OF FOURTH DISTRICT BANKS

Banking Edge Corporations

Central Cleveland International Bank, New York
Mellon Bank International, New York

Investment Edge Corporations

Cleveland Trust International Corporation, Cleveland[1]
Mellon International Finance Corporation, Cleveland
National City Cleveland International Corporation, Cleveland
Pittsburgh International Finance Corporation, Cleveland
Society International Corporation, Cleveland

NOTE: In addition, many Fourth District banks engage in foreign lending, trade financing, and other foreign services from their main offices.

1. Application has been made to change name to AmeriTrust International Corporation.

INTERNATIONAL BANKING ACT OF 1978

Because of the rapid growth and inadequate regulation of foreign banking in the United States, the Board of Governors of the Federal Reserve System has given considerable attention to foreign banking in the United States in the 1970s. The Board began collecting data on foreign bank operations in 1972 and proposed to Congress the Foreign Bank Act of 1974. After considerable debate, a much-revised version of that proposal, which is intended to provide adequate supervision and regulation of foreign-owned banking offices and to remedy some of the inequities of the previous regulatory system, was enacted as the International Banking Act of 1978 (IBA).

Previous Regulation

Previous regulation of foreign bank operations in the United States had been both inadequate and inequitable. A major weakness was that foreign banks were not subject to examination, regulation, or supervision by federal agencies. While a state could regulate and supervise the activities of a banking office within its jurisdiction, no coordinated oversight of a multistate banking organization's entire operation existed. In addition, since most U.S. offices of foreign banks were not required to hold reserves at Federal Reserve Banks, the Federal Reserve's ability to conduct monetary policy was potentially weakened.

Previous regulations also gave several competitive advantages to foreign bank offices in the United States. First, since most U.S. offices of foreign banks were not legally subject to the reserve requirements that the Federal Reserve imposes on its major competitors (the large national and state member banks located in major financial centers), the foreign banks had a significant cost advantage. Second, while U.S. law prevented and still prevents interstate branching by domestic banks, no federal restrictions prevented foreign banks from establishing agencies and branches in more than one state; in fact, at year-end 1978, 65 foreign banks had branches and/or agencies in more than one state. Interstate branching enhances a bank's ability to serve its multistate customers, and U.S. banks were thus at a disadvantage. Third, a foreign bank that had only agencies and branches in the United States could also have equity in a U.S. securities firm; at least 20 foreign banks do. In contrast, securities activities of domestic banks have been limited by the Glass-Steagall Act since 1934. Moreover, foreign banks with only branches and agencies in the United States were not subject to the Bank Holding Company Act. Thus, they could engage in U.S. nonbanking activities forbidden to domestic banks and bank holding companies.

On the other hand, foreign banks faced some restrictions that limited their ability to compete in certain markets. They were not permitted to establish Edge Act subsidiaries (see box A), their branches and agencies could not obtain Federal Deposit Insurance Corporation (FDIC) insurance for deposits and credit balances, nor could they appoint foreigners as directors of national banks.

Underlying Principles

A primary principle underlying the IBA is national treatment, which means that all banks in the United States, or within a state, ought to have the same banking powers and restrictions, regardless of whether the bank is foreign- or domestic-owned. Some people had advocated the principle of reciprocity rather than that of national treatment. Under reciprocity, the United States would have granted to a foreign bank the same banking powers as the foreign government allowed a U.S. bank operating in the foreign country. That would have resulted in different powers for banks from different countries, a situation that would have been difficult to administer. A further underlying principle of the new law is continuation of the dual banking system, in which any bank in the United States, whether domestic or foreign, has a choice of being chartered and regulated by either a state or national authority. Finally, the IBA recognizes the potential inequity of changing the rules after a firm has established its operations and, accordingly, exempts from some provisions of the law those banking offices operating or planned before the bill became law.

Major Provisions

The IBA makes important changes in U.S. banking law in the matters of federal licensing and chartering, multistate banking, regulation and supervision, nonbanking activities, deposit insurance, and Edge Act Corporations. Additionally, the IBA directs the Federal Reserve System and other federal authorities to develop regulations designed to attain specified objectives and to make studies and recommendations relevant to other specified aspects of U.S. banking law.

1. **Federal Licensing and Chartering.** Prior to enactment of the IBA, foreign agencies and branches operating in the United States did so with state licenses and were regulated by state law. The IBA permits these offices to obtain either a state or federal license. Thus, a foreign bank can now establish a federal agency or branch in any state except (1) those in which it operates a state-licensed agency or branch and (2) those states in which laws prohibit foreign banking agencies or

branches. A foreign bank cannot operate both a federal branch and a federal agency in the same state. A foreign bank with a federal agency or federal branch in a state may establish additional agencies or branches in that state, subject to the restrictions on branching that would apply to a national bank in the same location.

A foreign-owned subsidiary bank has always had the choice of obtaining its charter from state or national authorities. The IBA liberalizes this national charter option by permitting the U.S. Comptroller of the Currency to waive the requirement that only U.S. citizens can be directors of a foreign-owned subsidiary bank; now, only the majority of its directors must be U.S. citizens.

2. **Multistate Banking.** A foreign bank with offices in more than one state must designate a home state and may not operate a subsidiary bank outside that home state. Federal agencies and branches, however, may be established outside the home state where expressly permitted by specific states. State agencies and branches may be established outside the home state where approved by the regulatory authority of specific non-home states. However, the deposit-taking powers of federal and state branches outside the home state are limited to accepting only those deposits that an Edge Act Corporation could accept.[2] Agencies, of course, cannot accept any deposits. The restrictions on deposit taking and location of branches, agencies and subsidiary banks do not apply to offices established or for which permission to operate had been sought on or before July 27, 1978.

3. **Regulation and Supervision.** Federal agencies and branches are required by the IBA to maintain reserves with a Federal Reserve Bank. The Federal Reserve Board may subject state agencies and branches to the same requirements as federal agencies and branches after consulting with, and in cooperation with, state bank regulators.

Those branches and agencies that are required to maintain reserves with a Federal Reserve Bank will be eligible to use the Reserve Bank's discount window. Although the IBA does not specifically say so, the U.S. Senate report on the bill makes clear that branches and agencies maintaining reserves are also eligible to use the Reserve Bank's clearing facilities.[3]

The IBA also permits the Federal Reserve Board to examine branches and agencies, although, insofar as possible, the Board must use the examination reports prepared by such other supervisory authorities as the Comptroller of the Currency, FDIC, and state bank supervisors. Thus, the Board's examining authority under IBA now gives the Federal Reserve a tool with which to conduct a consolidated review of a foreign bank's multistate banking network.

4. **Nonbanking Activities.** The IBA makes a foreign bank subject to the Bank Holding Company Act if it has a branch or agency in the United States, thus prohibiting such a foreign bank from engaging in nonbanking activities in the United States. However, some "grandfather" provisions soften this prohibition. Nonbanking activities undertaken by September 17, 1978, the date the IBA was enacted, may be retained until December 31, 1985. After December 31, 1985, those nonbanking activities undertaken by July 26, 1978, may be continued unless the Board of Governors determines that termination of permission for those activities "is necessary to prevent undue concentration of resources, decreased or unfair competition, conflicts of interest, or unsound banking practices" (IBA, Section 8c). If permission is terminated, the company will be allowed two years to divest the nonbanking activity. A foreign bank is not prohibited, however, from owning shares of a foreign company that is principally engaged in business outside the United States.

5. **FDIC Insurance.** The IBA provides that a branch of a foreign bank may obtain deposit insurance from the Federal Deposit Insurance Corporation. A branch that accepts domestic retail deposits (usually, deposits smaller than $100,000) must obtain deposit insurance if it is a federal branch or if it is a state branch in a state that

2. Deposit-taking powers of Edge Corporations are discussed on pp. 8-9.

3. *Report of the Committee on Banking, Housing and Urban Affairs,* U.S. Senate, to accompany HR 10899, August 1978, p. 13.

requires banks to be insured. However, before a branch can become insured, its parent bank must pledge assets or provide a surety bond to FDIC. This requirement is intended to protect the FDIC against the extra risk "entailed in insuring the domestic deposits of a foreign bank whose activities, assets, and personnel are in large part outside the jurisdiction of the United States" (IBA, Section 6c7b).

6. **Edge Act Revisions.** The IBA eliminates the requirement that directors of Edge Corporations be U.S. citizens and permits foreign banks to own a majority interest in Edge Corporations. The IBA removes the requirement that an Edge Corporation's borrowings be no greater than ten times its capital stock and surplus. In addition, the reserve requirement for deposits at Edge Corporations is changed from a minimum of 10 percent to the same reserve requirements that apply to member banks.

Additional Objectives

In several matters, the IBA specifies objectives rather than rules. The objectives are to be achieved through suitable regulations, which the Federal Reserve and other federal regulatory agencies are mandated to develop by certain dates (see box C). Some of the mandates include:

1. **Edge Corporations.** One purpose of the IBA is to permit Edge Corporations to compete effectively with foreign banks in the United States and abroad, to provide a means of financing trade, especially exports, and to stimulate competition throughout the United States in the provision of international banking and financing services. To this end the IBA directed the Federal Reserve Board to revise its regulation concerning Edge Corporations, with the revised regulation effective June 14, 1979.

One feature of the June 14 regulation pertains to Edge Corporation branches. The former regulation permitted a bank to organize Edge Corporations in more than one location, such as in different states, but each office had to be separately incorporated. The new regulation, however, permits a bank to establish one Edge Corporation and then establish branches of that Edge Corporation across state lines. This provides a simpler administrative and organizational structure. In addition, it permits expansion of the lending powers of the various Edge offices by combining their capital. Since an Edge Corporation has a lending limit of 10 percent of capital and surplus to any one customer, the lending limit of an Edge Corporation with branches will be larger than the individual lending limits of several separately incorporated Edge offices. Currently, a few large banks have Edge Corporations in several cities.[4]

The new regulation also increases the permitted leverage on an Edge Corporation's capital, compared to the situation prior to the IBA. The previous regulation required that an Edge Corporation's total liabilities be no greater than ten times its capital stock and surplus. The new regulation requires an Edge Corporation engaged in banking to have capital and surplus of not less than 7 percent of risk assets on a consolidated basis. In effect, this means risk assets could be 14.3 times greater than capital plus surplus, in contrast to the former requirement that total assets be no more than 11 times greater. Since total assets is a broader category than risk assets, the increase in permitted leverage is even greater than these ratios suggest.

The new regulation also gives an Edge Corporation greater latitude for lending. Previously, an Edge Corporation was permitted to provide financing only for shipment and storage of export goods; now, however, an Edge Corporation may also finance the production of export goods.

Another proposal, still under consideration by the Board, would further enhance the powers of an Edge Corporation to serve its customers. The regulation issued on June 14 limits an Edge Corporation to providing financing and related services for only those transactions that are specifically related to international trade. The

4. Citibank of New York currently has the most with six, located in Miami, Chicago, Houston, Los Angeles, San Francisco, and Wilmington, Delaware. The Bank of America has five Edge Corporations, and Continental, First Chicago, Manufacturers Hanover, and Morgan Guaranty each have four Edge Corporations.

proposal would permit an Edge Corporation to provide any kind of banking service, including accepting deposits, to a corporation whose principal business is international commerce. A corporation would be considered to have international commerce as its principal business if two-thirds of its sales or two-thirds of its purchases were international in character. For customers who do not meet this test, the Edge Corporation would still be limited to providing services only for transactions that are specifically related to international commerce. When the Board issued its new regulation for Edge Corporations on June 14, 1979, it deferred action on this proposal and announced that after further study it will publish a revised version of the proposal for further public comment.

Another issue not yet resolved is whether Edge Corporations should be permitted to become members of the Federal Reserve System; this is currently prohibited by federal law. Edge Corporations already must maintain the same required reserves at Federal Reserve Banks as member banks and can obtain the same Federal Reserve services as member banks, except for the privilege of borrowing at the discount window. Thus, availability of the discount window privilege would be the major additional advantage of System membership. As required by the IBA, the Board of Governors sent its recommendations on this matter to Congress on June 13, 1979. The Board expressed no objection to legislation that would permit Edge Corporations engaged in banking from applying for System membership, but it recommended legislation that would grant them access to the discount window without membership.

The new Edge Corporation regulation and future decisions on the services that these corporations can provide and Federal Reserve membership should be of particular interest to foreign banks for two reasons. First, several foreign banks are reported to wish to establish Edge Corporations in the United States; naturally they need to know the potential powers of these corporations. Second, new U.S. branches of foreign banks located outside the "home state" are subject to the same restrictions on sources of deposits as Edge Corporations; they too must know what their powers will be.

2. **Federal Branches and Agencies.** The IBA authorizes the U.S. Comptroller of the Currency to license, regulate, and supervise federal branches and federal agencies. On November 13, 1979, the comptroller issued final rules on these matters. In general, these rules are the same as would apply to a national bank in the same location.

Two aspects of the comptroller's rules may make federal branches more attractive than state branches in some states. First, some states will not license a branch of a foreign bank whose home country does not permit branches of U.S. banks. The comptroller's rules, however, do not require reciprocity by the foreign bank's home government. If a state permits branching by any foreign banks, banks from any foreign nation, including those that do not reciprocate, will be eligible to obtain a license to operate a federal branch in that state. The comptroller reasons that reciprocity requirements are incompatible with the national treatment principle of the International Banking Act.

Second, the comptroller has elected not to impose a maintenance of assets rule at this time, while reserving the right to impose one in the future. Some states require branches of foreign banks to maintain assets in the state that exceed certain liabilities by a specified margin, such as eight percent. While this difference in treatment may give federal branches a competitive edge over state branches, the comptroller believes that the capital equivalency deposits required by the comptroller and the reserves required by the Federal Reserve System provide adequate protection to the banking system without a maintenance of assets rule.

3. **Reserve Requirements and Interest Rate Ceilings.** The Federal Reserve Board proposed on July 23, 1979, to impose reserve requirements and interest rate ceilings on state and federal branches and agencies of foreign banks whose parent banks have worldwide assets of at least $1 billion. The Board also proposed that branches and agencies holding reserves at a Federal Reserve Bank be eligible to borrow at that bank's discount window and obtain Reserve Bank services, including wire transfer, check clearing, securities safekeeping, and currency and coin supply. Having requested comments on its proposals by September 24, 1979, the

Box C Actions Required to Implement the IBA

A. Edge Act Corporations

Board must issue proposed regulations by February 14, 1979.

Board must issue final regulations by June 14, 1979.

Board must recommend to Congress whether Edge Corporations can join Federal Reserve System by June 14, 1979.

B. Federal Branches and Agencies

Comptroller may issue regulations—no deadline.

C. Interstate Banking Operations

Offices operating on or before July 27, 1978, are grandfathered.

D. Insurance of Deposits

Branches requiring insurance must have it by September 17, 1979, or when opened.

E. Authority of Federal Reserve System

Board may specify reserve ratios for federal branches and agencies different from ratios for member banks—no deadline.

Board may impose reserve and other requirements on state branches and agencies. Board must consult with state authorities and report to Congress on these consultations by March 16, 1979. Board may issue regulations—no deadline.

Board must report recommendations to Congress by September 17, 1980, regarding implementation of the IBA.

F. Nonbanking Activities

Nonbanking activities begun between July 26 and September 17, 1978, are grandfathered until December 31, 1985.

Nonbanking activities begun by July 26, 1978, are grandfathered until December 31, 1985, after which the Board may terminate permission for those activities. If permission is terminated, activity must be divested within two years.

G. Foreign Treatment of U.S. Banks

Secretary of the treasury, with Board, comptroller, FDIC, and secretary of state, must begin a study of foreign treatment of U.S. banks by December 16, 1978.

Secretary of the treasury must report his findings and recommendations to Congress by September 17, 1979.

H. Representative Offices

Representative offices must be registered with the secretary of the treasury by March 16, 1979, or when established.

I. McFadden Act

President, in consultation with the Board, comptroller, FDIC, secretary of the treasury, and attorney general, must report to Congress by September 17, 1979, "his recommendations concerning the applicability of the McFadden Act to the present financial, banking, and economic environments."

Board later extended the comment period to November 23, 1979. A date has not yet been set for implementing the final regulations that will come from these proposals. The Board proposed that federal and state branches be subject to the same reserve requirements and interest rate ceilings as member banks, in order to "facilitate the conduct of monetary policy and promote vigorous and fair competition between branches and agencies and member banks by treating branches and agencies like member banks to the fullest extent possible."

Under the proposal, deposits of a banking family, i.e., U.S. branches and agencies of a single foreign parent bank and of its foreign banking subsidiaries, will be aggregated when calculating required reserves. Aggregation will lead to a higher amount of required reserves because reserve requirements are graduated. This is similar to the treatment of a member bank, whose branch deposits are aggregated for reserve purposes. Although its reserve obligation is calculated on an aggregated basis, a family of branches and agencies may maintain one reserve account at each Reserve Bank or branch in whose territory the family operates. This provision is significant because the family can borrow and obtain services from every Federal Reserve office at which it holds reserves.

4. **McFadden Act.** The IBA requires the president of the United States, in consultation with the Federal Reserve Board, the comptroller, the FDIC, the secretary of the treasury, and the attorney general, to report to Congress his recommendations concerning the McFadden Act—a law preventing interstate branching by domestic banks. The president's recommendations, which are expected soon, are to concern "the applicability of the McFadden Act to the present financial, banking and economic environment..." (IBA, Section 14). A major thrust of the IBA is to observe the principle of national treatment by restricting interstate branching by foreign banks because domestic banks face that restriction through the McFadden Act. A review of the McFadden Act must face the question of whether restriction of interstate branching by domestic and foreign banks is in the national interest.

5. **Foreign Treatment of U.S. Banks.** Although the IBA focuses on the regulation of international banking in the United States, the act also mandates a study of foreign regulation of U.S. banks. The IBA requires the secretary of the treasury, the Federal Reserve Board and others to study and report to Congress on the extent to which U.S. banks "are denied, whether by law or practice, national treatment in conducting banking operations in foreign countries..." (IBA, Section 9). The report, submitted to Congress on September 17, 1979, found that "U.S. banks have a substantial degree of access to most financial markets abroad of importance to them...." However, treatment of U.S. banks "ranges from free and open regulatory environments in developed nations, with a few marked exceptions, to quite restrictive conditions in some nations in earlier stages of development. However, a number of developing countries are relatively accessible to foreign banks and a few actively encourage foreign presence." While "only a few countries prohibit foreign bank entry altogether," a large number of nations take a "restrictive approach to foreign acquisition of domestic banks." No discrimination against U.S. banks vis-a-vis other foreign banks was found.[5]

FOREIGN PURCHASES OF U.S. BANKS

Foreign banks are acquiring substantial numbers of U.S. banks. Foreign acquisitions of two large U.S. banks, Union Bank, Los Angeles, and National Bank of North America, New York, were consummated in April 1979. Foreign acquisition of Marine Midland Banks, Buffalo, this nation's twelfth largest bank, was approved by the Federal Reserve Board on March 16, 1979, and is still pending (see table 1). Other U.S. banks have also been acquired recently, and press reports indicate that many more acquisition proposals are being prepared.

Foreign banks currently own at least 42 subsidiary banks in the United States with assets totaling at least \$24 billion.[6] Consummation of

5. Department of the Treasury, ***Report to Congress on Foreign Government Treatment of U.S. Commercial Banking Organizations,*** September 17, 1979, pp. 431-4.
6. ***Federal Reserve Statistical Release*** G.11, September 10, 1979.

Table 1 Three Large U.S. Banks Sought by Foreign Banks

Acquired U.S. bank			Acquiring foreign bank			Acquisition date
Name and location	Assets before acquisition, 12/31/78 ($ bil)	Size rank in United States	Name and location	Assets before acquisition,[a] 12/31/77 ($ bil)	Size rank in world	
Marine Midland Banks, Buffalo, New York	$14.2	12th	Hongkong and Shanghai Banking Corporation, Hong Kong	$14.8	70th	Pending
Union Bank, Los Angeles	5.3	25th	Standard Chartered Bank Limited, London	15.8	66th	April 1979
National Bank of North America, New York	4.4	34th	National Westminster Bank Limited, London	36.8	17th	April 1979

a. Consolidated assets including companies more than 50 percent owned.

the Marine Midland acquisition would bring that assets total to about $38 billion, or almost 6 percent of total assets of large U.S. banks. In addition, foreign nonbanks control 65 U.S. banks with aggregate assets of $13 billion.[7] Some critics are alarmed by the sizes of these foreign holdings and by the prospect that they may continue their rapid growth.

Reasons for Purchases

Several factors make acquisitions of U.S. banks attractive to foreigners. Some foreign banks want to expand their ability to provide worldwide services to their multinational customers and increase their attractiveness to new customers. For this purpose they need banking capability in the United States. Obtaining a bank in the United States also helps diversify a foreign bank's sources of earnings and deposits and can provide a dependable source of dollar funds. In addition, the United States is an attractive place in which to do business and have assets because of its relative political and economic stability.

Foreign banks that wish to enter the large U.S. banking market may find it quicker and cheaper to do so through an acquisition than by establishing a new bank. Acquisition provides a going concern with an established customer base. Moreover, the shares of many U.S. banks are currently selling below book value, making them attractive to purchase.[8] In addition, the depreciation of the U.S. dollar in 1977 and 1978 made U.S. assets cheaper in terms of foreign currencies.

Reviews of Existing Policy

Foreign acquisitions of U.S. banks have prompted reviews of U.S. policy toward such acquisitions. Review is being accomplished in several forums. Muriel Siebert, New York State Superintendent of Banking, wrote a letter on February 16, 1979, to Representative Reuss, Chairman of the House Committee on Banking, Finance, and Urban Affairs, detailing her concerns on the matter and urging a review at the federal level. Obviously, her office takes a close look at these issues in the process of reviewing acquisition applications. Several congressional committees are examining the matter. The Senate Committee on

7. Considerable Increase in Foreign Banking in the United States Since 1972, *Report by the Comptroller General of the United States,* August 1, 1979, p. 20.
8. Robert Metz, "Banks as Lure to Foreign Bids," *New York Times,* April 16, 1979, p.D-4.

Banking, Housing, and Urban Affairs held hearings in July and the House Subcommittee on Commerce, Consumer, and Monetary Affairs held hearings in August. The Chairman of the House Subcommittee on Financial Institutions Supervision, Regulation, and Insurance in March asked the General Accounting Office (GAO) to review the matter and report its findings to the subcommittee. In response, the GAO has made one report, and a second is expected soon. The subcommittee may hold hearings early in 1980. Further, Senator Heinz of Pennsylvania has asked Congress to impose a moratorium on bank acquisitions to allow time to study their ramifications.

Many proposed acquisitions of U.S. banks require prior approval by the Federal Reserve Board of Governors under provisions of the Bank Holding Company Act. The Board recently accomplished a major review of its policies toward foreign bank holding companies and on February 23, 1979, adopted a statement of those policies. Additionally, former Federal Reserve Board Chairman Miller has noted that Congress considered the matter in its deliberations on the IBA.[9] Also, the IBA-mandated presidential review of the McFadden Act is likely to include an examination of the question, discussed below, of whether foreign banks have an unfair advantage over their U.S. competitors in terms of their freedom to acquire other U.S. banks.

Issues Involved

Acquisitions of U.S. banks by healthy well-managed foreign banks hold several advantages for the United States. An infusion of capital from the purchasing bank can make the U.S. institution stronger. Affiliation with a large foreign bank, particularly one with operations in many nations, can enhance a U.S. bank's ability to provide service to its customers. A foreign takeover may even infuse better management and greater efficiency into the acquired bank. Bank competition in the United States may increase, benefiting the banking public. Finally, the possibility of purchase by foreign interests may increase the market value of bank shares, making it easier for U.S. banks to raise new capital.

However, advocates of a review of U.S. policy toward acquisitions raise several criticisms. Some critics view with alarm the growing foreign share of the U.S. banking market. While part of the fear of foreign control may be mere xenophobia, some people argue that some foreign banks' close relationships with their own governments may influence their U.S. banking decisions.

Fairness is another issue. A foreign bank may be able to purchase a U.S. bank that another U.S. bank, a worldwide competitor of the foreign bank, is prevented from buying. If the target bank is in another state, a U.S. bank is prevented from purchasing it by the McFadden Act or the Bank Holding Company Act. If the target bank is in the same state, purchase may be prevented because of anticompetitive considerations.

Some critics note the absence of reciprocity in the current situation. Superintendent Siebert has found on the basis of discussions with her counterparts in other countries that "no developed country other than the U.S. would permit any significant local bank to be acquired by a non-domestic bank."[10] It is argued that the United States should use foreign interest in purchasing U.S. banks as a lever to make possible U.S. bank purchases of foreign banks. If the United States permits the current surge of acquisitions to run its course, our leverage to negotiate reciprocity will be lost.

Finally, it has been argued that it will be difficult for federal or state authorities to adequately supervise a U.S. bank owned by a large

9. Letter from Federal Reserve Board Chairman G. William Miller to U.S. Representative Henry Reuss, March 6, 1979.

10. Letter from Superintendent Muriel Siebert to U.S. Representative Henry Reuss, February 16, 1979. A similar conclusion was reached in a study recently made for Congress. "Although evidence of impediments to foreign (including U.S.) acquisition of very large indigenous banks is largely impressionistic,...informed judgments suggest that, as a general matter, such acquisitions would be discouraged by most governments." Department of the Treasury, ***Report to Congress on Foreign Government Treatment of U.S. Commercial Banking Organizations,*** September 17, 1979, p. 432. Governor Wallich has noted, however, that "U.S. banks have in the past acquired sizable ownership interests in large foreign banks." Statement by Henry C. Wallich, member of Board of Governors of the Federal Reserve System, before the Committee on Banking, Housing, and Urban Affairs, United States Senate, July 16, 1979, p. 13.

foreign bank that perhaps owns many nonbanking businesses abroad. It may be difficult for bank examiners to be certain that the U.S. bank is not influenced by its foreign owners to make loans to related foreign companies. Such loans may seem necessary to the parent but may be unwise from the viewpoint of maintaining soundness of the U.S. bank.

INTERNATIONAL BANKING FACILITY

The New York Clearing House Association has proposed that a new type of International Banking Facility (IBF) be permitted in the United States. Although located in the United States, IBFs would compete in the Eurodollar deposit and lending market. New York State has passed enabling legislation, but the Federal Reserve Board of Governors has not yet decided whether it will make the required regulatory changes.

To be competitive in the Eurodollar market, banks must be able to pay interest on deposits without limitations on minimum maturities or interest rate ceilings; to afford competitive rates, banks need to be free of reserve requirements on deposits. Banking offices in the United States do not have these necessary freedoms from regulation. Consequently, U.S. banks operate in the Eurodollar market through foreign branches, some of which are traditional branches while others are "shells." A shell branch has practically no office or staff, and is typically established on a Caribbean island or in another area where it is free of taxes and unencumbered by U.S. regulations on interest and reserves.[11] With a "shell" branch, Eurodollar operations are conducted from the parent bank office in the United States but are recorded on the books of the shell.

The New York Clearing House Association has proposed that tax laws and banking regulations be changed to facilitate the establishment in the United States of IBFs that could conduct Eurodollar banking. An IBF would be able to accept deposits from and lend funds to only its parent bank, other IBFs, and foreign residents.

11. Income earned by a U.S. bank's branch in some Caribbean nations typically is not taxed by that nation or by U.S. states or cities, but is subject to U.S. federal income tax.

Status of the Proposal

New York State enacted, in June 1978, a law exempting IBFs from state and city taxes, provided favorable federal action on interest and reserve regulations follows. Apparently, no other state has taken similar action, although some are considering it and may act if the proposal is implemented in New York City. The Federal Reserve Board of Governors in December 1978 invited comment on the clearing house's proposal by March 15, 1979, and subsequently extended the comment period to May 18, 1979. On July 16 the Board returned the issue to its staff for further study and decided to reconsider it in about six months.

Issues

The clearing house argues that IBFs would provide substantial benefits to the United States. Employment in the United States will increase to the extent that Eurodollar banking operations are conducted in the United States instead of abroad. The clearing house suggests an additional 5,000 to 6,000 jobs would be created in New York City in IBFs and in service industries that support banking such as law and accounting. Income tax and sales tax receipts would rise as wages are earned and spent, and federal corporate income tax receipts would rise as Eurodollar banking operations pay income tax to the U.S. Treasury instead of foreign tax authorities. In addition, banking might be more efficient if Eurodollar operations can be performed in the United States, close to the parent bank, instead of abroad. Finally, U.S. banks would reduce their foreign country risk if more of their operations were conducted within the United States.

Critics of the proposal generally agree with the clearing house on these points, although some believe that the magnitude of the benefits would be smaller than the clearing house suggests. Some argue that a U.S. bank needs traditional foreign branches to compete for lending and other banking business abroad and if it has foreign branches it would continue deposit-taking and deposit-placing operations at the branches. Shell branches, by contrast, may be closed, but shell employment is small, so the relocation of jobs to the United States would be correspondingly small.

Critics point to problems that IBFs could cause. One difficulty is that a bank outside New York would be put at a competitive disadvantage because the McFadden Act prevents it from establishing a branch in New York to operate an IBF. Instead, it would have to operate an IBF through an Edge Corporation, which would have smaller capitalization and might be viewed by foreign depositors as less secure than the parent bank. This competitive problem could perhaps be resolved by individual state legislation, where necessary, permitting banks to establish IBFs in their home states, or by an amendment to the McFadden Act permitting banks in other states to establish special purpose branches in New York to operate IBFs.

Another possible difficulty of the IBF proposal concerns the effect of IBFs on the Federal Reserve's ability to conduct monetary policy. If some domestic deposits that are reservable were shifted to IBFs where they could not be reservable, a diminution in the Federal Reserve's influence over the money supply could occur. One route for this leakage could be for U.S. corporations to shift deposit funds to their foreign subsidiaries, which, in turn, could place the funds in IBFs to obtain higher yields. In 1975, George W. Mitchell, who was then vice chairman of the Federal Reserve, testified to Congress on a similar proposal and said that preventing such a leakage may require "an extensive and cumbersome system of regulation."[12]

CONCLUSION

It is clear that many changes in law and regulation of international banking have recently been made or proposed, and that others will be forthcoming. These changes are large in number because of the coincidence in time of the passage of the IBA, the attractiveness to foreign banks of acquiring U.S. banks, and the New York Clearing House proposal that regulations be changed so that more Eurodollar banking business can be done in this country. Evolution of financial institutions is a continuing process, in domestic as well as international banking and finance. As financial institutions evolve, regulation of banking must also evolve to assure that the banking system can best serve the public interest.

12. Statement by Vice Chairman George W. Mitchell, Board of Governors of the Federal Reserve System, before the Subcommittee on Financial Institutions Supervision, Regulation, and Insurance, House of Representatives, December 12, 1975. Governor Henry Wallich made the same point in his testimony to the Senate Committee on Banking, Housing, and Urban Affairs on July 16, 1979.

The Local Labor-Market Response to a Plant Shutdown

Michael L. Bagshaw
Robert H. Schnorbus

Although the shutdown of a major manufacturing plant can have a severe and lasting impact on a local economy, labor markets adjust, at least partially, to compensate for the loss of jobs. At the national level a plant shutdown may represent a reallocation of resources that eventually benefits the whole economy. However, the area that has lost the plant is confronted with the need to make often painful adjustments. A plant shutdown immediately reduces the size of the local labor market. While the laid-off workers' adjustments are a reflection of the *direct effects* of a shutdown, the loss is shared by others, both in the local and the adjacent areas, through a wide-ranging set of *indirect effects.*

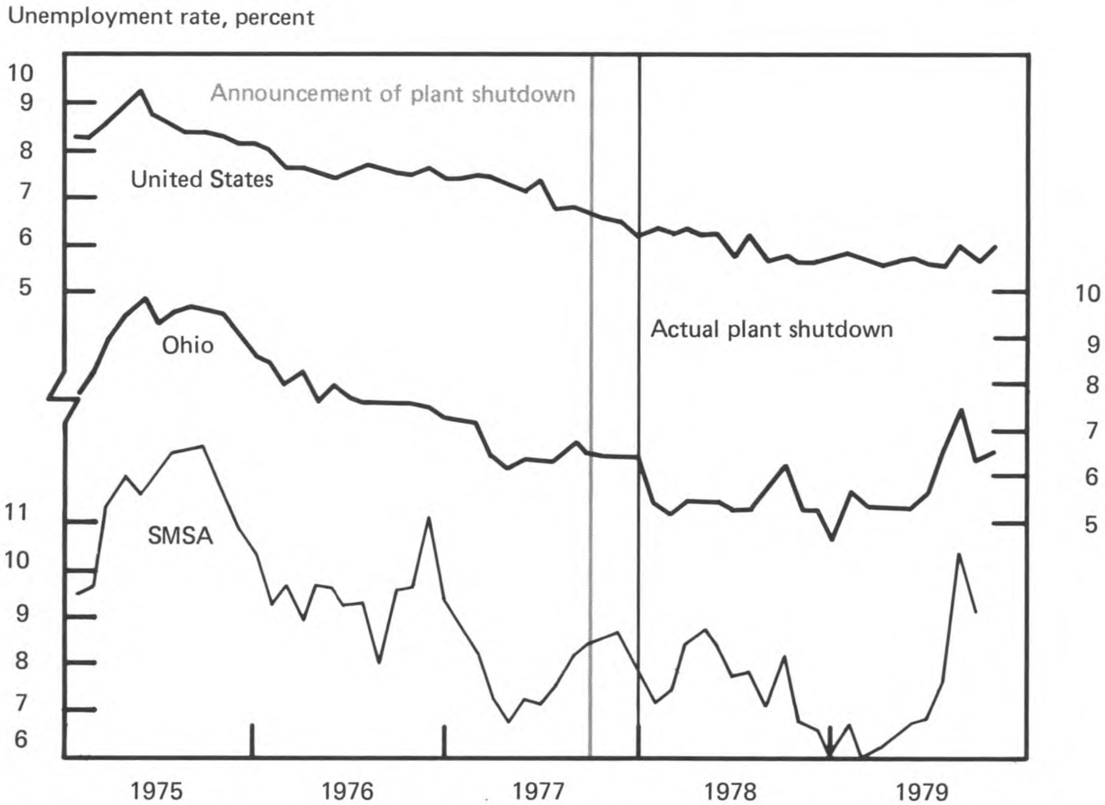
There have been several labor markets in the Fourth Federal Reserve District that have been disrupted by major plant shutdowns in recent years. The Akron SMSA has been losing tire-production facilities for many years. Akron's employment, however, has increased steadily over the last two years. In fact, its rubber-industry employment has increased as the corporate headquarters' work force of Akron's rubber industry has grown. In the spring of 1979, the Dayton SMSA experienced the closing of a Frigidaire plant that employed over 5,000 workers. However, the subsequent pattern of Dayton's employment/unemployment figures was not perceptively different either from most of Ohio's other major SMSAs or from Dayton's pattern prior to the plant closing. One of the most widely publicized plant closings in the Fourth District occurred in the Youngstown-Warren SMSA in 1977 with the shutdown of the Campbell Works of Youngstown Sheet & Tube Co., a subsidiary of LTV Corp.[1] In November 1979 U.S. Steel Corp. announced the permanent closing of its McDonald and Ohio Works in Youngstown, a move that will idle 3,500 workers and managers. Although the impact of the U.S. Steel closings will not be known for some time, the 1977 Campbell works shutdown can illustrate the adjustment mechanism of a local labor market to a plant shutdown.

The shutdown of the Campbell Works plant was initially projected to affect 4,000 to 5,000 jobs, or about 2 percent of the total employment in the Youngstown-Warren SMSA at that time. Yet, over the subsequent two years, the local employment/unemployment figures returned to pre-shutdown levels. Because most of the laid-off Campbell Works employees either found new jobs or accepted early retirement benefits, their being laid off ceased to be a serious unemployment problem to the local economy. Employment in the

1. It is important to distinguish between a temporary layoff, which is subject to recall, and a shutdown, which permanently affects employment. A shutdown can result from the closing of only a section of a plant's facilities as well as from the complete closing of a plant. In the case of Youngstown's Campbell Works, operations that were discontinued included the production of hot rolled sheets and plates, cold rolled sheets, some bar type products, and continuous weld pipe. Continued operations include production of seamless pipe, cold finished bars, and coke to support the Brier Hill Works.

Chart 1 Unemployment Rates

Seasonally adjusted



SOURCES: Bureau of Labor Statistics, *Employment and Earnings* (Washington, D.C.: U.S. Department of Labor); *Ohio Labor Market Information* (Columbus, OH: Bureau of Employment Services).

Youngstown-Warren SMSA surpassed the earlier peak levels within one year of the shutdown. The Youngstown-Warren SMSA unemployment rate, as shown in chart 1, has trended downward since April 1978, paralleling the state and national unemployment rates. Despite the dramatic recovery from the Campbell Works shutdown, the full labor-market effects of the shutdown have been disguised by the adjustment process of the local labor market. This article attempts to differentiate between the direct and indirect effects of the post-shutdown labor-market adjustments in the Youngstown-Warren SMSA.

THE ADJUSTMENT PROCESS OF LOCAL LABOR MARKETS

Labor markets are constantly adjusting to changing economic conditions. Plant shutdowns are only one example, although perhaps the most dramatic, of a whole series of factors that change the demand for labor in a local economy. Seasonal and cyclical fluctuations in demand also affect employment/unemployment levels, without altering the basic structure of the local economy. Although plant shutdowns can occur, especially among marginal firms, they are not usually associated with these types of demand changes.

Plant shutdowns are more typically caused by permanent changes in demand through either the secular decline of an industry or the redistribution of industries to more profitable locations. A plant closedown may have only a temporary effect on the local economy if it is offset by the birth of a new firm or the expansion of an existing firm. Because the Campbell Works shutdown represents the decline of an industry, it is assumed to represent a permanent loss of jobs in the Youngstown-Warren SMSA.

The direct effect of a permanent loss of jobs is the adjustment of the laid-off workers themselves as they choose among new jobs, relocation, retirement, or unemployment. In seeking employment, the laid-off workers compete with the rest of the labor force for a diminished number of jobs in the local economy. The direct adjustments of the laid-off workers lead to indirect adjustments by others in the labor force who would have had jobs if those jobs had not been taken by the laid-off workers. The actual process of these adjustments seldom takes place in a static labor market. Because these changes in demand and job turnovers are constantly occurring, job openings are continually becoming available.

The initial effect of a plant shutdown is to increase directly the level of unemployment. Some laid-off workers leave the labor force, either through retirement or relocation. By leaving the labor force, laid-off workers do not appear in the unemployment figures and, therefore, mitigate the increase in the unemployment level. Relocation would have the same effect on the labor force and unemployment levels in the local economy. However, the locality receiving the relocating worker would then be required to adjust its labor force to either an increase in employment or unemployment.[2]

Many workers seek new employment. Since many of these workers have specific skills, they may find new employment in the remaining establishments of their industry or in closely related industries. If laid-off workers have difficulty finding employment at a comparable skill level, they may settle for a job with lower skill requirements and lower pay. Unlike the laid-off workers who leave the labor force or remain unemployed, the reemployment of the laid-off workers affects others in the local labor force, especially the previously unemployed. Reemployment of laid-off workers must displace other workers holding jobs or unemployed workers who would otherwise have acquired jobs.[3]

POST-SHUTDOWN STATUS OF LAID-OFF WORKERS

The post-shutdown status of workers who were laid off as a direct result of a plant shutdown was obtained via labor-force surveys. In the case of the steel plant in Youngstown, surveys were conducted in July and August 1978 (about one year after the shutdown announcement and six months after the actual shutdown) to determine the labor-market status of the laid-off workers.[4] According to the survey 4,200 union workers were laid off by the Campbell Works shutdown. Six months later about one-third of these workers (1,300 to 1,500) had been reemployed, but not necessarily in comparable or even permanent jobs. Of the remaining workers 400 to 600 relocated to another SMSA, and about 1,000 took early retirement.[5] Approximately 1,200 to 1,500, including those enrolled in retraining programs, were still seeking employment. Therefore, the labor-market

2. If the two labor markets are in the same state, the net effect on the state's labor market would be nullified and thus go unnoticed in the state's labor-force statistics.

3. If a job opening is intended for a skill level beyond that of an unemployed worker, the laid-off worker who does qualify for the job may have prevented a series of promotions that ultimately would have opened a job at a lower skill level for the unemployed worker. Thus, all unemployed workers are, in a sense, competing for any job opening.

4. In this survey 282 steelworkers, from both Brier Hill and Campbell Works, were interviewed in a random sampling. The estimates were based on reports obtained from the Ohio Bureau of Employment, union officials, and other local sources. The number reported did not include an estimate of clerical and other white-collar personnel who may have been affected. The survey results were obtained from a working paper entitled "Developing a Human Services Response to Economic Crisis," Center for Urban Studies, Youngstown State University, October 1978. The Center for Urban Studies is currently conducting follow-up studies on the impact of a plant shutdown.

5. The rather large number of retirees may be the result of the age of the plant facility and the relative maturity of the industry.

Table 1 Distribution and Changes in Employment in the Youngstown-Warren SMSA
Employment levels, 000

Industries	April 1977	April 1978	Net change	Change in SMSA,%	Change in U.S.,%
Total[a]	**182.3**	**189.2**	**6.9**	**3.8**	**9.4**
Manufacturing	**81.3**	**80.0**	**−1.3**	**−1.6**	**7.6**
Durable goods	75.1	74.0	−1.1	−1.5	11.3
Primary metals	42.3	36.3	−6.0	−14.2	3.9
Blast furnace and basic products	26.7	20.9	−5.8	−21.7	1.8
Fabricated metals	8.3	9.2	0.9	10.8	19.4
Machinery (excluding electrical)	6.6	6.6	0	0	16.6
Electrical equipment	3.4	3.3	−0.1	−2.9	7.8
Transportation equipment	9.6	13.7	4.1	42.7	13.6
Nondurable goods	6.2	6.0	−0.2	−3.2	2.3
Nonmanufacturing	**101.0**	**109.2**	**8.2**	**8.1**	**10.2**
Retail trade	37.2	39.1	1.9	5.1	7.9
Services	33.6	36.4	2.8	8.3	8.4

SOURCE: Ohio Bureau of Employment Services.

a. Total employment represents total nonagricultural employment minus government employment.

adjustment of the laid-off workers—the direct effect—was about evenly distributed among those who found employment, those who left the labor force in the Youngstown-Warren SMSA through retirement or relocation, and those who were still unemployed.

Considering the relatively large number of workers involved in this plant shutdown, the Youngstown-Warren labor market was remarkably successful in reabsorbing the laid-off workers. Almost one year from the announcement of the shutdown, only one-third of the laid-off workers were still classified as unemployed. Because most of these unemployed workers were unskilled, they qualified for retraining assistance. Indeed, the most current estimates indicate that about 600 laid-off workers remain unemployed.[6]

Employment opportunities available to the laid-off workers in the Youngstown-Warren SMSA were augmented by the employment expansion in other industries, as shown in table 1. Between

6. Conversations with Donald Curry and Anthony Fortunato of the Ohio Bureau of Employment Services, Youngstown-Warren branch office, Youngstown, Ohio, September 24, 1979, and October 2, 1979, respectively.

April 1977 (prior to the shutdown) and April 1979, the total employment in the Youngstown-Warren SMSA expanded by 6,900, or 3.8 percent. While this increase was less than one-half as rapid as the increase experienced by the nation, the increase locally was equivalent to one and one-half times the number of workers laid off from the Campbell Works. Local employment declined by 1,300 in manufacturing and by 5,800 in steel-related industries—more than can be attributed solely to the plant shutdown.

Although the Youngstown-Warren SMSA experienced relatively strong growth in nonmanufacturing employment, transportation equipment was the only local manufacturing industry to exceed the national rate of increase in employ-

The Application of Intervention Analysis to the Campbell Works Shutdown

The shutdown of a plant can affect total employment/unemployment levels of the local labor market in several ways. Prior to a shutdown, there is no way to predict what type of pattern may result from a shutdown. The impact of a shutdown could cause any of the following:

1. a one-step change in the level of the employment/unemployment series if all adjustments occur instantaneously;
2. a shift in the growth trend of the series if adjustments are made gradually over a period of time;
3. a shift in the seasonal or cyclical pattern of the series due to the new structure of the local economy; or
4. a combination of these three effects.

One of the major problems associated with measuring the effects of the Campbell Works shutdown is to determine the type of pattern caused by the shutdown. This determination is very important, because an assumption of the type of pattern shift leads to the type of analysis performed and thus affects the outcome of the analysis. If, for example, an *a priori* assumption of the type of pattern shift is made and this assumption is incorrect, then incorrect results may be derived from analysis based on this assumption. Consequently, rather than using methods based on *a priori* assumptions, the method of intervention analysis has been used in this study.[1] In this method one of the principal steps is to perform tests on the data to determine what type of pattern shift (if any) occurred rather than using an arbitrary pattern shift.

Intervention analysis, as used in this study, consisted of four basic steps applied separately to the total employment/unemployment series. First, the relationship between the total employment/unemployment levels in the Youngstown-Warren SMSA and the corresponding national series was estimated for the time period between January 1971 and August 1977 (a period before the announcement of the shutdown). Second, this relationship was used to forecast the levels of both SMSA employment and unemployment for the time period from September 1977 through April 1979 (a period that included the plant shutdown), using the actual values of the national series during this period. Third, the differences between these forecasts and the actual values of the SMSA employment and unemployment series over this time period were used to identify a pattern for the impact of the shutdown. Finally, a model was estimated that included this pattern of impact. This procedure provided an estimate of the actual impact of the plant shutdown. This last step also included tests to assure that the pattern of impact chosen in this analysis was correct.

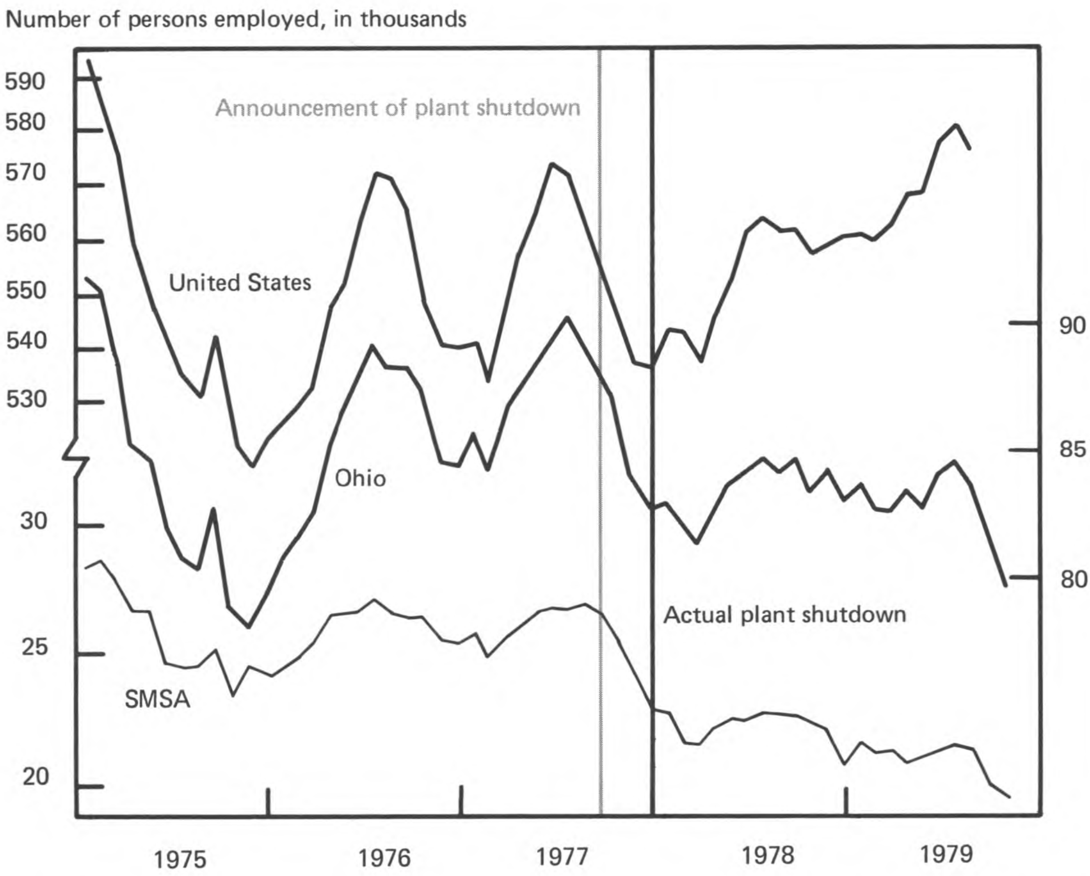
1. For a detailed discussion of this method, see G. E. P. Box and George C. Tiao, "Intervention Analysis with Applications to Environmental Problems," *Journal of the American Statistical Association,* 70 (1975): 70-79.

ment, largely because of an increase in small-car production at the nearby General Motors plant in Lordstown, Ohio. Indeed, this expansion accounted for much of the reemployment of the laid-off Campbell Works employees. Although employment in the fabricated metals industry expanded, the Youngstown-Warren SMSA did not fully share in the increased employment that was generated by national growth in the industry. Some laid-off workers were employed at nearby steel plants, such as the Brier Hill Works; others were temporarily recalled at the Campbell Works. However, the overall decline in steel-related employment limited job opportunities in the steel industry.

TOTAL LABOR-MARKET ADJUSTMENTS

Using data for Ohio and the nation as standards of comparison, the full impact of the Campbell Works shutdown was observed in the changing level of blast-furnace employment in the Youngstown-Warren SMSA (see chart 2). In the cyclical expansion that occurred between 1975

Chart 2 Blast-Furnace Employment
Not seasonally adjusted



SOURCES: Bureau of Labor Statistics, *Employment and Earnings* (Washington, D.C.: U.S. Department of Labor); *Ohio Labor Market Information* (Columbus, OH: Bureau of Employment Services).

and 1979, blast-furnace employment in the nation experienced seasonal swings in employment levels, with peaks occurring in the summer months and troughs occurring in the winter months. Employment in both the state and the SMSA showed a similar seasonal and cyclical pattern. The cyclical trend in the Youngstown-Warren SMSA was clearly disrupted by the plant shutdown at the end of 1977, resulting in a seasonal trough in January 1978 that was much deeper in both the state and the SMSA than in the nation. Assuming that the Campbell Works shutdown was the only employment disruption that occurred in the SMSA since 1975, the drop in the SMSA's blast-furnace employment fully reflects the 4,200 jobs that were permanently lost.

The national level of total employment was taken to be an indicator of how total employment in the Youngstown-Warren SMSA would have performed without the Campbell Works shutdown. The method of analysis that compares the behavioral patterns of total employment/unemployment of a region or SMSA with those of the nation is called intervention analysis. Estimates of the impact of an event can be determined by this method of analysis. (See box on page 20 for a further discussion of intervention analysis as applied to the Campbell Works shutdown.)

Results derived from this technique indicated that a one-time shift in the levels of both total employment and unemployment occurred in the Youngstown-Warren SMSA in December 1977, three months after the announcement of the shutdown. By the end of that year, total employment and unemployment resumed their historical pattern of behavior relative to the corresponding national series. In all, total employment was estimated to have declined by 4,600, and unemployment increased by 3,200 over the last three months of 1977 as a result of the plant shutdown.[7] Since the change in employment/unemployment levels must equal the total change in the labor-force size, it follows that the SMSA's labor force must have declined by 1,400. Chart 3 illustrates employment levels for the SMSA, the state, and the nation; it also includes the SMSA's projected employment level without the impact of the shutdown.

The discrepancy between the 4,200 jobs lost from the Campbell Works shutdown and the estimated 4,600 employment drop may have several explanations. In addition to the 4,200 workers involved in the shutdown, a small number of white-collar support staff were either laid off or transferred to other facilities after the shutdown. Also, a possible "ripple effect," causing other cutbacks by businesses dependent on orders from Campbell Works or on the purchases of the work force, could have contributed to job losses. In any case, the discrepancy was small enough to assume that the 4,600 employment drop was caused solely by the Campbell Works shutdown.

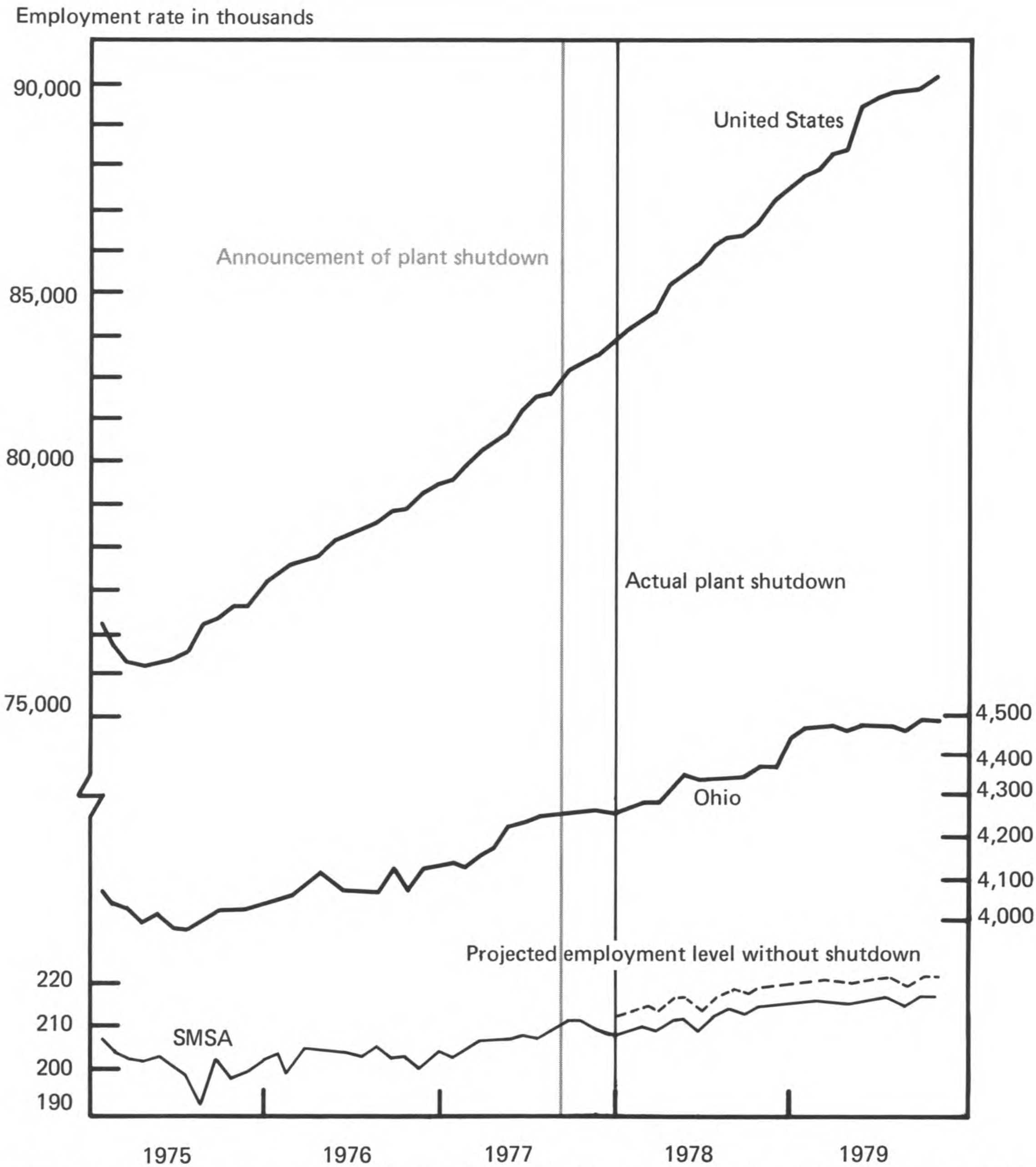
The difference between the adjustments of the laid-off Campbell Works employees and the total labor-market adjustments in the SMSA indicates the extent to which the burden of the plant shutdown was shifted to others in the local labor market—the indirect effect. Within six months after the shutdown, employment among former Campbell Works employees had dropped by approximately 2,850 (or the two-thirds who either left the labor force or remained unemployed), compared to a total estimated loss in employment of 4,600. The loss of unemployment was, of course, concentrated in the steel industry. Most of the decline in the labor force was attributed to Campbell Works employees; but the remaining 1,200 to 1,500 unemployed former Campbell Works employees accounted for less than one-half of the total rise in unemployment. Therefore, those previously unemployed bore the brunt of the plant shutdown as the jobs that they may have obtained were taken by the laid-off workers.

CONCLUSION

The response of the Youngstown-Warren SMSA must be measured not only in the adjustments of the laid-off Campbell Works employees, but also in the adjustments of those indirectly affected by the shutdown. (See table 2 for a summary of the direct and indirect effects of the shutdown.) Although the adustment mechanism

7. The numbers represent the statistical best estimate within a range of significance. For employment measured in thousands, the range at the 0.95-significance level was −7.37 to −1.87 for the value −4.62. Unemployment ranged between −0.47 and 6.91 for the value 3.22.

Chart 3 Nonagricultural Employment
Seasonally adjusted



SOURCES: Bureau of Labor Statistics, ***Employment and Earnings*** (Washington, D.C.: U.S. Department of Labor); ***Ohio Labor Market Information*** (Columbus, OH: Bureau of Employment Services).

Table 2 Summary of the Impact of the Campbell Works Plant Shutdown

	Direct effect[a]	Indirect effect	Total effect
Change in employment	−2,850	−1,750	−4,600
Change in unemployment	1,350	1,850	3,200
Change in the labor force	−1,500	100	−1,400

a. The size of the direct effect is based on the simple mean of the stated range.

works best when local or national employment is growing strongly, the ability of the Youngstown-Warren SMSA to restore its pre-shutdown levels of employment at comparable unemployment rates in as short a time as one year attests to the strength of the local labor market as an adjustment mechanism. The fact that the Youngstown-Warren SMSA has not witnessed a collapse of its economy or chronic unemployment problems should not distract from the serious impact of its declining steel industry. The local economy has shrunk relative to the national economy as a result of the plant shutdown, and workers have relocated to find new employment. Further reductions in employment will undoubtedly occur when the Brier Hill Works of Youngstown Sheet & Tube Co. is phased out and when the McDonald and Ohio Works are closed by U.S. Steel. Unless new sources of industrial growth can be found to replace the jobs lost to permanent shutdowns, the economy of the Youngstown-Warren SMSA will adjust by continuing to fall behind the national economy, both in employment and labor-force growth.