



FEDERAL RESERVE BANK of ATLANTA

Economic Research

Federal Reserve Bank of Atlanta
EconSouth

In This Issue

STAFF

Pierce Nelson
Editorial Director

Lynn Foley
Managing Editor

Jean Tate
Lee Underwood
Staff Writers

Carole Starkey
Kristin Shelton
Designers

EDITORIAL COMMITTEE

Bobbie H. McCrackin
*Vice President and
Public Affairs Officer*

B. Frank King
*Vice President and
Associate Director
of Research*

Thomas J. Cunningham
*Vice President
Research Department
Regional Section*

Free subscriptions
and additional copies are
available upon request to

**Public Affairs Department
Federal Reserve Bank of Atlanta
104 Marietta St., N.W.
Atlanta, GA 30303-2713**

Volume 1, Number 3, Third Quarter 1999

CURRENT ISSUE

[Some Benefits of Credit Scoring
Begin to Surface](#)



COVER STORY

[Downtown Revitalization:
Cities Search for Solutions](#)

During the past three decades, numerous Southeastern cities have implemented downtown revitalization projects. While these projects have experienced mixed success, cities throughout the region continue to use both public and private funds as they pursue successful solutions to rejuvenate their downtown districts.

or by calling **404/498-8020**

Change of address notices, along with a current mailing label, should be sent to the Public Affairs Department.



The views expressed in *EconSouth* are not necessarily those of the Federal Reserve Bank of Atlanta or the Federal Reserve System.

Reprinting or abstracting material from this publication is permitted provided that *EconSouth* is credited and a copy of the publication containing the reprinted material is sent to the Public Affairs Department.

ISSN 0899-6571

Photography for the cover, "Downtown Revitalization" and the first page of "The Score on Credit Scoring" by Ron Sherman

FEATURES

[The Score on Credit Scoring In Small Business Lending](#)

As credit scoring has been applied to small business lending during the 1990s, some groups claim that the scoring process discriminates against certain segments of the population seeking those loans. A recent study by three Atlanta Fed researchers, however, found that, among other things, credit scoring might actually help small business owners in low- and moderate-income areas get loans.



Is the International Economic Crisis Over?

Two years ago, Asian economies began to feel the impact of a full-blown financial crisis sparked by a currency and financial crisis in Thailand. That crisis soon spread to other emerging economies in Russia and Latin America. In this issue of EconSouth, the Atlanta Fed's Latin America Research Group looks at how these economies have managed during the crisis and whether the international economic crisis is in fact over.

DEPARTMENTS

[Research Notes](#)

[Dollar Index](#)

[The State of the States](#)

[Southeastern Economic Indicators](#)

[Southeastern Manufacturing
Survey](#)

[Disclaimer & Terms of Use](#) : [Privacy Policy](#) : [Contact Us](#) : [Site Map](#) : [Home](#)

Federal Reserve Bank of Atlanta, 1000 Peachtree Street NE, Atlanta, GA 30309-4470 Tel. (404) 498-8500



Economic Research

CURRENT ISSUE

Some Benefits of Credit Scoring Begin to Surface



s banks have adopted automated customer services and faced more intense competition over the past decade, some banks, for better or worse, have lost many personal touches. Today, banks steer customers to ATMs or a Web site, employers directly deposit pay, and individuals and businesses apply for loans electronically.

Customers are becoming accustomed to these developments, and while some customers like them, others are bothered. Credit scoring is a development of recent decades that has separated bank customers and banks' credit decision makers. Credit scoring was initially applied to credit cards and then mortgage lending, but more and more banks have begun to credit score loan applications by small businesses during the 1990s. The scoring process uses borrower information and a computer model to evaluate a borrower's prospects of repaying a loan.

Small business credit scoring and its advantages and disadvantages for various groups are topics that have been debated in recent years by the banking industry, consumer and small business advocacy groups, and those in the political arena. Three researchers at the Federal Reserve Bank of Atlanta recently shed some light on the impact of credit scoring when they evaluated small business lending in low- and moderate-income (LMI) areas in Southeastern metropolitan areas. A summary of their research is presented in this issue of EconSouth.

Dispelling credit scoring myths

Contrary to beliefs that credit scoring might bias lending decisions against small businesses in LMI areas, the Atlanta Fed's research findings show that it might help small business owners seeking loans. The research indicates that small business owners in the Southeast who apply for loans at big banks may have a better chance of getting a loan from a credit-scoring institution than from a nonscoring institution. If each bank has a branch in the neighborhood, the credit scoring impact is small. If neither bank has a neighborhood branch, the scoring bank is much more likely to make a larger loan.

Are the findings a surprise?

While this research represents the first systematic approach to examining the bias claims against credit scoring in small business lending, I must admit that I am not surprised by the researchers' findings. In fact, the findings help to confirm what I have believed for some time: credit scoring can provide a more even playing field for small business owners in LMI areas since the practice eliminates much of the subjectivity and guesswork long associated with lending to small businesses.

During this decade, many banks have realized that credit scoring can be a less costly and more consistent way to evaluate small business loans. And if research like this recent work from the Atlanta Fed can be borne out in a national context, it might help to convince banks that don't credit score of the potential lending opportunities they are missing in LMI areas. It may also help show consumer and small business advocates that credit scoring is not the evil that some of them have assumed.



But there are other questions raised by credit scoring's application to small business lending. What effect does credit scoring have on borrowers with less than perfect credit? How accurate are the models? Will their use allow active secondary markets for these loans to develop? Will the cost savings credit scoring brings to the lending process be passed on to borrowers? Clearly, more research is needed to fully explore the use of small business credit scoring in the United States. However, based on these initial results, it appears that the negative effects of credit scoring that many have claimed cannot be substantiated.

By B. Frank King, vice president and associate director of research of the Federal Reserve Bank of Atlanta

[Return to Index](#) | [Next](#)

[Disclaimer & Terms of Use](#) : [Privacy Policy](#) : [Contact Us](#) : [Site Map](#) : [Home](#)

Federal Reserve Bank of Atlanta, 1000 Peachtree Street NE, Atlanta, GA 30309-4470 Tel. (404) 498-8500



DOWNTOWN REVITALIZATION:
Cities Search for Solutions

A popular song from the '60s claims that "You can forget all your troubles, forget all your cares and go downtown." But worries and cares seem to have taken up residence in many cities' downtown areas, and Southeastern cities are no exception.

The 1940s and '50s were seemingly the heydays for downtowns, with living, working, entertainment and shopping existing in a general state of equilibrium. But for a variety of reasons beginning in the 1960s, the allure of downtowns began to wane, and many residents and businesses began to leave cities for the perceived safer, newer and cleaner world of suburbia with its large homes, sprawling yards and shopping malls. Downtown districts became synonymous with boarded-up storefronts, high crime rates, homelessness and dwindling numbers of full-time residents.

To rejuvenate their downtown districts, many communities throughout the nation beginning in the 1960s began to embark on downtown revitalization projects. Some cities' projects included more planning and foresight and were more comprehensive than others, but in each case the general intent was the same — to create an environment where residents, businesses and, in some cases, tourists could support each other to achieve an attractive, livable and workable environment.

Revitalization efforts

In the Southeast, a number of cities have undertaken revitalization efforts. Some have turned to entertainment complexes and attractions. Others, more recently, have worked to include housing in their downtown districts, believing that it is difficult for a city to have a successful downtown area without full-time residents.

But revitalization projects are complex, with no easy answers or guaranteed results for cities. In the Southeast, revitalization efforts have achieved mixed success.

Life's a beach in Miami

From the 1940s through the 1960s, Miami Beach was one of the top tourist destinations in the United States. But the area began to decline in the '70s, and by the '80s Miami Beach, particularly the South Beach art deco district that dates to the 1920s, was near rock bottom, featuring one of Florida's oldest populations with among the lowest per capita income rates in the state.

THROUGH RECENT REVITALIZATION EFFORTS, INCLUDING THE TENNESSEE AQUARIUM SHOWN BELOW, CHATTANOOGA HAS BEEN TRANSFORMED FROM WHAT WAS CONSIDERED TO BE ONE OF THE DIRTIEST CITIES IN THE UNITED STATES TO A REGIONAL TOURIST DESTINATION.



Ironically, it was the near destruction of the art deco buildings the area is famous for that launched the first revitalization efforts in the mid-1970s. The art deco district was named to the National Register of Historic Places in 1979, but it wasn't until local laws were passed several years later that the art deco buildings were fully protected. These developments were important because they helped the area retain its history and character that provided a solid base for revitalization.

In an article in the Miami Herald in 1987, the mayor of Miami Beach at that time described the South Beach area revitalization efforts that were just beginning to gain some momentum. "This isn't the land of milk and honey, but it is a land of opportunity. We are looking for new people who are willing to leave the suburban comfort zone and take a chance on the city. We have some great deals here, deals that wouldn't exist if things were perfect."

Eventually, people and businesses did move into the area, but not without the combined work of the city, the private nonprofit Miami Beach Development Corp., a host of developers and citizen groups. Through these efforts, South Beach has been transformed into one of the most trendy and popular destinations in the Southeast. But the revitalization of South Beach was not quick or easy, and there are some areas of South Beach that are still in need of improvement. However, with more time and funding, the area appears well on its way to regaining much of its 1920s splendor.

A river runs through it

Chattanooga, Tenn., began the process of revitalizing parts of its downtown and environs in the 1980s. The turnaround for Chattanooga took a long time, but the city had a long way to go. In fact, Chattanooga in the late 1960s was known as one of the dirtiest cities in the United States. The Tennessee River running through the city was anything but scenic and was bordered by buildings abandoned by industries that had left town.

Through a process called Vision 2000, a 20-week series of community meetings that sought citizens' input on the city's future, Chattanooga began its comprehensive revitalization plan. The ambitious strategic effort involved more than 800 Chattanooga citizens. Over time the group considered hundreds of potential revitalization programs, but they eventually narrowed their emphasis to projects centered on the Tennessee River.

The city contributed the seed money, including road improvements and an overhaul of sewers. The private sector, which has provided much of the funding for the city's revitalization, helped to transform riverfront wastelands into parklands. Other

investments in the city by both public and private interests included the \$45 million Tennessee Aquarium, the refurbishing of the Walnut Street Bridge and the development of shopping areas housed in old factory space, such as a downtown outlet mall featuring designer shops.

Through these cooperative efforts, Chattanooga can now offer its residents and businesses a more livable and workable downtown district. The city also provides tourists a venue that is appealing as a regional destination and not simply interstate exits they pass on the way to somewhere else. As proof of Chattanooga's appeal to travelers, in Hamilton County, where the city is located, tourists spent \$466 million in 1997, compared to \$335 million in 1990 — an increase of 36 percent — according to the Travel Industry Association.

A tale of two projects

Atlanta has seen both the ups and the downs in two of its revitalization efforts during the past decade. The city's downtown received a major boost from the revitalization in preparation for the 1996 Summer Olympic Games, but the city has also been disappointed by another reclamation effort, Underground Atlanta.

Revitalization projects are complex, with no easy answers or guaranteed results for cities.

One of the oldest sections of downtown, the area that came to be called Underground Atlanta had been home to a variety of businesses after Atlanta was rebuilt following the Civil War. During the 1920s, the construction of a system of viaducts in that area raised street traffic to the second-floor level and left the "underground" first-floor level for service and storage. In the late 1960s, Underground Atlanta was designated a historical area by the city and was converted into an entertainment center. After an early success, Underground closed in 1980, facing a variety of financial and security problems.

A major effort aimed at revitalizing the Underground district gained momentum in the mid-1980s. Underground's champions stated that their goal was to "make Underground Atlanta the town center for the metropolitan area." These supporters also envisioned that the area would be a linchpin for downtown Atlanta, linking the government section of town with the CNN Center, the Georgia World Congress Center and the business and hotel district — ambitious goals for what was then one of the most neglected areas in the downtown district.

Using approximately \$142 million of combined public and private financing, including \$85 million in city revenue bonds, Underground opened in 1989 as an entertainment center. It featured restaurants, bars, fast-food establishments and small to medium-sized retail stores, similar to centers in other southeastern cities like New Orleans and Augusta, Ga. The development was heralded as a success story in public-private redevelopment — but somewhere along the line Underground veered off course.

A variety of reasons for Underground's less than successful performance have been cited, including poor design, low attendance and spending from Atlanta's population, a perceived lack of security at the complex, interference from city government and claims that Underground's management did not operate like a real business. Whatever the reasons, Underground has not lived up to the initial projections for success. Although Underground has brought some new development into an area of the city that was in great need of help, it has also struggled to repay the debt amassed for its redevelopment.

Currently, Underground Atlanta is in the process of its third makeover within 30 years. Whether this latest installment can be financially successful is unclear. But another Atlanta effort to renew its downtown has been more successful — the revitalization that began in preparation for the 1996 Summer Olympics.

An Olympic effort pays off

While the revitalization of its downtown was not the motivating force that made Atlanta seek to host the Olympics, downtown's renewal was a by-product of the city's work to put its best foot forward for the 1996 Summer Games.

When the International Olympic Committee announced in 1990 that Atlanta would host the 1996 Games, residents in the

**"ULTIMATELY,
THE SUCCESS OR
FAILURE OF AN
ENTIRE
REVITALIZATION
EFFORT CAN
DEPEND ON THE
STRUCTURE OF
ITS FUNDING
PACKAGE."**

city, while ecstatic, were probably as surprised as anyone in the world. That's because much of downtown Atlanta's infrastructure had been somewhat neglected for decades. Bridges and viaducts were crumbling, sidewalks were in disrepair, the city's water and sewer capacity was inadequate, parks were unkempt, and, along with its office towers and hotels, the downtown area contained a mishmash of empty, dilapidated buildings. With the Olympics on its horizon, the city had to address these problems.

A variety of different city, state and private groups, which came to be known by their acronyms, like ACOG, CODA, COPA and MAOGA, were involved in planning, developing and carrying out the preparations to get Atlanta ready for the Olympics. While the Games generally were privately funded through entities like corporations and television networks, significant city, state and federal public funds were required to prepare the city and then to put on the Olympics.

As a result of these combined efforts, the 1996 Summer Games left a legacy on which the city can continue to build into the next century. Among the downtown improvements for the Games was a new park, called Centennial Olympic Park, around which new development is currently taking place. The park replaced a section of old buildings and warehouses, many of which were abandoned. The park provides an attractive public space for residents and tourists and a transition area for conventioners between the hotels near Peachtree Street and the Georgia World Congress Center.

Other improvements throughout the city included a new baseball stadium, physical improvements in several inner city neighborhoods, new downtown dorms for two local universities, renovation of the city's airport, and new signage, sidewalks and lighting in the downtown area.

Community Improvement Districts Hold Promise for Revitalization Projects

Over the past 15 to 20 years communities across the country have turned increasingly to community improvement districts (CIDs) as a source of funding for augmenting existing city services and enhancing infrastructure. CIDs provide additional funding where local government taxes are insufficient.

A CID is a geographically defined district in which commercial property owners choose to tax themselves to achieve a specific purpose or purposes. CID funds can be spent on a variety of projects. Georgia's constitution, for instance, allows for these projects to include street and road construction and maintenance, sidewalks and streetlights, parking facilities, water and sewage systems, terminal and dock facilities, public transportation, and park facilities and recreational areas.

Businesses find CIDs an attractive funding mechanism because commercial property owners vote on the self-imposed tax, and the cost is proportionately distributed across the district.

In Atlanta, the Midtown Alliance, a nonprofit, community-based group, is currently in the process of establishing a CID for the midtown area. Susan Mendheim, president and CEO of the group, explained why the CID is so valuable to the community. "CIDs augment what city or county governments are able to

Another initiative that has helped the city is the development of the Atlanta Downtown Improvement District, a nonprofit organization formed just before the Olympics. This organization implemented the Ambassador Force, a team of approximately 50 people who walk beats throughout the 120-block downtown district, providing directions and information for visitors, workers and residents. The presence of the Ambassador Force, combined with initiatives of Atlanta's police force, has contributed to the drop in crime in downtown Atlanta for three straight years.

Since the Olympics, a number of loft apartments, town homes and condominiums are being developed in downtown Atlanta. Georgia State University, located downtown, also recently began constructing and refurbishing classroom and arts-related buildings.

Whether or not this development will continue remains to be seen. But given the Atlanta area's problems in meeting clean air standards, the prospects appear good that more and more people will move downtown. While the city still has a long way to go in revitalizing its downtown area, progress since the Olympic Games may mean that the best is yet to come for downtown Atlanta.

Getting funding

While developing and implementing a revitalization plan is full of challenges, funding the plan can also be, literally, a taxing process.

Funding for revitalization is available from many sources. For instance, cities can apply for state or local money through a variety of programs; they can also obtain local

do," she said. "They also allow communities to decide where the additional tax money is most needed. Unlike impact fees or property taxes, the CID funds are controlled by a private, nonprofit board of property owners who have a vested interest in the area and its development."

or state funding and then apply for matching funds from the federal government. Sometimes local funding comes from an additional tax on certain types of expenditures or from the sale of bonds. Additionally, cities can seek private or corporate funding to help support projects for public use (see the sidebar).

But structuring funding is a complex process; some funds may not be appropriate for all revitalization projects since there may be restrictions on how the funds can be used. The key to developing a successful financial package for a revitalization project is to determine what type of funding works for each project, not just at the outset but for the life of the entire project. Ultimately, the success or failure of an entire revitalization effort can depend on the structure of its funding package.

One size doesn't fit all

Many people argue that the economic health of an entire region depends on the economic performance of the central city's downtown area. Others, however, argue that a downtown area is not in the least important to the overall economic health of a metropolitan area. Whichever view one supports, there is no argument that cities continue to place importance on their downtowns, striving to find ways, either through refined processes or shotgun approaches, to improve those areas.

Proving the popularity of this mindset, southeastern cities like Columbus, Ga., Orlando, Fla., Jacksonville, Fla., and Montgomery, Ala., have all tried their hands, with mixed success, at downtown revitalization in one form or another during the past three decades.

While some lessons can be learned from other cities' efforts, the revitalization process is an individualized process by its very nature. Just as there are no two cities that are alike, there also is no secret formula for achieving success that can be applied to each and every city. The path to success varies from project to project and city to city, and finding the right solution can be a hit-or-miss proposition.

In spite of the potential pitfalls, large and small revitalization projects that use public and private funds have more recently been launched in several cities, including Macon, Ga., Nashville, Tenn., and Birmingham, Ala. These initiatives and other evidence from throughout the Southeast show that revivalists are likely to keep trying until they get it right and are able to return their downtown areas to some of their former glory.

[Return to Index](#) | [Next](#)

[Disclaimer & Terms of Use](#) : [Privacy Policy](#) : [Contact Us](#) : [Site Map](#) : [Home](#)

Federal Reserve Bank of Atlanta, 1000 Peachtree Street NE, Atlanta, GA 30309-4470 Tel. (404) 498-8500



FEDERAL RESERVE BANK of ATLANTA

Economic Research



REGIONAL FOCUS

The Score on Credit Scoring In Small Business Lending

DESPITE OPINIONS TO THE CONTRARY, CREDIT SCORING MAY ACTUALLY BENEFIT SMALL BUSINESSES SEEKING LOANS EVEN IN LOW- AND MODERATE-INCOME AREAS, ACCORDING TO A RECENT FEDERAL RESERVE BANK OF ATLANTA STUDY.



As productivity innovations go, credit scoring has been as important to the banking industry in the 1990s as automated teller machines were in the 1980s. Just as output per bank worker — the most common definition of productivity — surely increased in the banking industry after ATMs began handling routine banking transactions, automated underwriting has allowed banks to write more loans more quickly and at less cost than ever before.

But some critics of the banking industry say that credit scoring leads to discrimination. They charge that the industry's reliance on a nameless, faceless and colorblind set of computer programs allows banks to satisfy the law while still discriminating against borrowers in low- and moderate-income (LMI) neighborhoods.

Recent research by Michael Padhi, Lynn Woosley and Aruna Srinivasan of the Federal Reserve Bank of Atlanta suggests, however, that credit scoring applied to small business lending not only



does not increase discrimination against business in LMI neighborhoods, but it also seems to increase the level of small business funding available in these areas. The research by Padhi, Woosley and Srinivasan may have serious implications for banks as they endeavor to comply with the Community Reinvestment Act (CRA).

The Community Reinvestment Act

Twenty-two years after Wisconsin Senator William Proxmire authored the anti-redlining provision that would become the CRA ([see below](#)), its goal remains to ensure that banks serve LMI areas. In 1999 CRA compliance for large banks — defined as having \$250 million or more in assets or being owned by a holding company with \$1 billion or more in assets — is determined largely by three separate tests. A lending test examines banks' mortgage, small business and community development lending; an investment test examines the availability of grants to and equity participation in community development activities; and a service test examines branch locations and the provision of banking services to low- and moderate-income groups.

While the tests for CRA compliance are notably more specific than they were two decades ago, scoring the tests — assessing the results — remains a somewhat subjective exercise. Bankers argue that regulators use the threat of noncompliance to force them to make loans that don't make economic sense. Bank critics, meanwhile, argue that regulators are too easily swayed by bankers' reliance on credit scoring and other objective lending criteria. Moreover, bank critics argue that as lenders have increased their reliance on credit scoring, lending to low- and moderate-income areas has declined. It's this last charge that the Atlanta Fed researchers address.

Proxmire's Progeny

On June 7, 1977, after two days of debate, the U.S. Senate approved H.R. 6655, the Housing and Community Development Act of 1977, by a margin of 79 to 7. It was a mostly unexceptional bill, reauthorizing the popular Community Development Block Grant program for an additional three years.

But the Senate version of H.R. 6655 included a provision that had not been included in the House-approved version. At the behest of Chairman William Proxmire of Wisconsin, the Senate Banking Committee added Title VIII, an anti-redlining provision that directed banking regulators to consider an institution's record of meeting the credit needs of "its entire community, including low- and moderate-income neighborhoods" when evaluating the institution's application to open a new branch.

The report that accompanied the bill explained that Title VIII had been added because the committee was "aware of amply documented cases of redlining in which local lenders export savings despite sound local lending opportunities." And in arguing against an amendment by North Carolina Senator Robert Morgan to cut Title VIII from the bill, Proxmire said it was needed "to reaffirm that banks and thrift institutions are indeed chartered to serve the convenience and needs of their communities . . . and needs does not just mean drive-in teller windows and Christmas Club accounts. It means loans."

Adding it up

To better understand the results of this research, it's worth considering how credit scoring works and how it's said to discriminate. Credit scoring derives a single quantitative measure — the score — from a vast statistical sampling of past borrowers in order to predict the future payment performance of an individual loan applicant. For banks, credit scoring increases profitability by reducing the labor costs associated with reviewing a loan applicant's credit reports and financial statements. This labor savings not only compresses the approval time of loans, but it also frees personnel to perform other functions, including marketing more new loans.

But while credit scoring has been used for more than a decade to underwrite credit cards, auto loans and home equity loans, its use in small business loan underwriting is a much more recent development. The common factor linking these different types of loans is personal credit history. In the case of the small business owner, her personal loan payment history is a very strong predictor of her business loan payment prospects — especially if the loan is for less than \$100,000 — and her consumer credit scorecard can be adapted with little difficulty.

Charges that credit scoring reduces lending in low- and moderate-income areas arise from concerns that credit scorecards and the databases they're built on can contain bias. These charges may seem ironic. For bankers, one

Ultimately, of course, Title VIII was retained in the legislation signed into law by President Jimmy Carter. But while the bill's main provision — the Community Development Block Grant program — would become a casualty of Washington's 1980s budget wars, Proxmire's anti-redlining provision would continue as the Community Reinvestment Act.

of the real virtues of a credit scorecard is its objectivity: it allows the same lending criteria to be applied to all applicants without regard to their membership in a protected class. Moreover, income, race, gender, length of employment and home rental-ownership are not included in the leading credit scorecard for small business lending produced by Fair, Isaac & Co., a firm at the forefront of developing credit scoring models.

Nevertheless, critics argue that credit scoring models unlawfully discriminate by assessing LMI applicants against a pool of more affluent non-LMI borrowers. Critics also charge that in small business lending and other areas in which the need for business-lender relationships is thought to be important, banks may use credit scorecards as a surrogate for close relationships.

What the Atlanta Fed found

Padhi, Woosley and Srinivasan tested these arguments of credit scoring critics. They examined the small business lending practices of 99 of the 190 largest U.S. banks lending in metropolitan areas in the Federal Reserve Bank of Atlanta's district.

The data for their research was built on a previous study by Srinivasan, Woosley and Scott Frame of the U.S. Treasury Department, which found that 63 percent of banks surveyed used credit scoring to underwrite small business loans. That study found that for loans of less than \$100,000, all of the credit-scoring banks used scorecards; for loans of less than \$250,000, 73 percent of those banks did. In addition, Srinivasan, Woosley and Frame found that just 42 percent of scoring banks used scorecards to automatically approve or reject loans, but 98 percent employed them as part of the loan decision process. Both studies considered banks that used scoring for part or all of the loan decision process to be credit scorers.

What about COMMUNITY BANKS?

As large banks increasingly turn to automation in their dealings with customers, smaller banks may find a lucrative opening for old-fashioned character loans. Last year, in a speech before the Georgia Bankers Association, Federal Reserve Bank of Atlanta President Jack Guynn likened community banks to AAA, the American Automobile Association.

In that speech Guynn said, "You know how AAA works: you're in Hawkinsville, Ga., and you want to drive to Staunton, Va. There are probably a 1,000 ways to get there, but only two or three are any good. AAA will send you a map, highlight the best routes, and note all the trouble spots along the way: construction in Greenville, traffic in Raleigh and so forth.

"The financial system of the 21st century will be as big, as efficient and occasionally as encumbered as our transportation system. It will be a massive, interlocking network of technology and financial resources. And for the average customer, it could be easy to get lost. Small and community banks know their passengers, they know their destination, and they know how to get there. They provide an invaluable service and one that I think will be increasingly in demand."

By comparing the small business lending activities of banks that use credit scoring with banks that do not, Padhi, Woosley and Srinivasan were able to assess the impact of scorecards on small business lending practices inside and outside of low- and moderate-income areas.

They found that while nonscoring banks were likely to lend significantly less in LMI areas than in higher-income areas, the difference in loan levels for scoring banks was not statistically significant. In other words, the dollar value of small business loans made by credit scorers was about the same in LMI areas as in non-LMI areas when neighborhood and bank characteristics were statistically accounted for, whereas nonscorers lent significantly less in LMI communities.

In addition, the researchers found that credit scorers actually originate more loans — number of loans, not dollar value — in low-income tracts than in moderate- or high-income tracts. Nonscoring banks originated significantly fewer total loans in LMI neighborhoods. Finally, the researchers found that among credit scorers, the presence or absence of a bank branch in an LMI area has no significant effect on the level of small business credit available. For nonscoring banks, the location of a branch in the community is a significant positive for small business lending in LMI neighborhoods.

While Padhi, Woosley and Srinivasan have not attempted to assess any underlying causes with their research, their results suggest at the very least that scoring alone does not result

in small business lending discrimination in LMI neighborhoods. Moreover, considering that the presence of a branch in an LMI tract does not have any impact on scorers' small business lending activities, credit scoring may actually serve as prima facie evidence of compliance with the CRA's lending test. As for the role of character or personal loans in small business lending, the Atlanta Fed research suggests that credit scoring might discourage discrimination against protected groups and communities.

What's next?

The Atlanta Fed research is the first such study on an issue with serious social, economic and political repercussions. While much more remains to be done on this issue — especially at the national level — the initial results suggest that the use of credit scoring in small business lending can help ensure fair treatment of small business borrowers.

[Return to Index](#) | [Next](#)

[Disclaimer & Terms of Use](#) : [Privacy Policy](#) : [Contact Us](#) : [Site Map](#) : [Home](#)

Federal Reserve Bank of Atlanta, 1000 Peachtree Street NE, Atlanta, GA 30309-4470 Tel. (404) 498-8500



Economic Research



INTERNATIONAL FOCUS

Is the International Economic Crisis Over?

Although countries in Southeast Asia and Latin America continue to grapple with economic reform measures, the general outlook for these regions appears to have stabilized somewhat. But have these countries turned the corner, and will they return to economic growth?

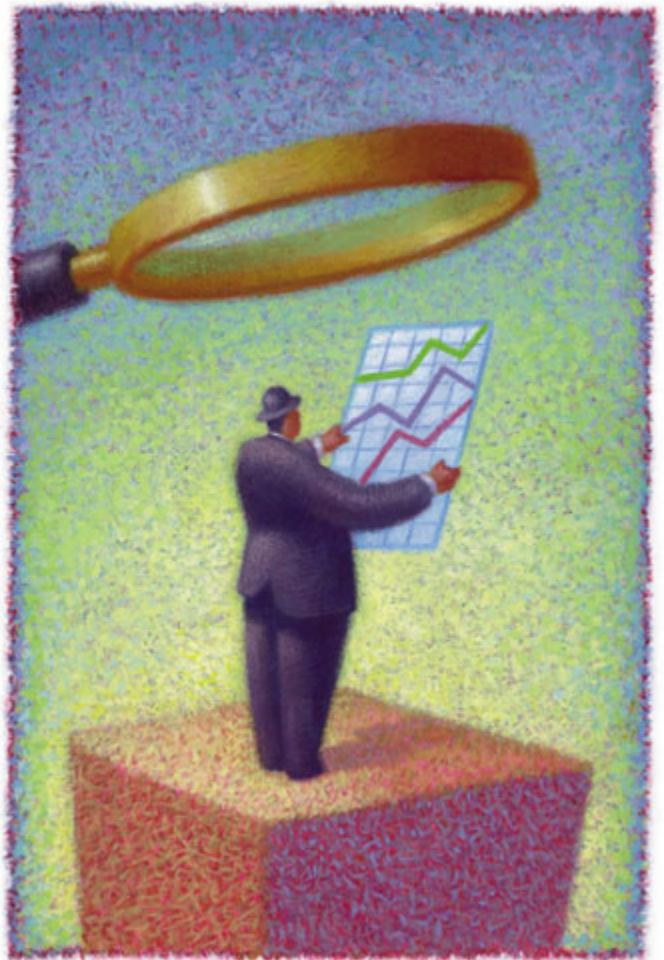
Two years after the onset of the Asian financial crisis in July 1997, some anxiety still looms over the global financial markets. What was first perceived as a localized currency and financial crisis in Thailand soon spread — to Malaysia, Indonesia and the Philippines and eventually much of the rest of Southeast Asia. In 1998 Russia and Latin America were affected by the contagion, and international stock markets plummeted as investor confidence was shaken by the spreading crisis.

While these regions continue to sort through many serious economic and social issues, most of the individual countries have begun to work through their respective economic difficulties and appear to be moving toward a recovery.

Asian economies on the mend

In Asia, there are mounting signs that economic and financial conditions are improving. Economic activity is rebounding in most of the region, and financial markets are recovering from some of the heavy losses experienced over the last two years.

In 1998 analysts speculated about how quickly Asia would recover from the crisis. Forecasters now expect a sharp recovery, at least in 1999. As [Chart 1](#) shows, economic growth in the developing Asian economies appears to be following the distinct V-shaped path of a sharp, short recession instead of an L-shaped track that would indicate a sharp downturn with little or no recovery for some time. The current and projected economic recovery is most impressive in South Korea while Indonesia remains behind the curve. (The forecasts used in this analysis represent a consensus of a number of private economists and are not predictions by the Federal Reserve Bank of Atlanta.)



Four general factors may be contributing to Asia's projected recovery.

First, the economic policies pursued by Asian authorities have contributed greatly to the recovery. Central banks in these countries have significantly eased credit conditions, so interest rates have declined substantially. Lower interest rates have had two positive effects — they have made debt repayments more manageable and reduced borrowing costs. In addition, government spending in these countries has increased.

Second, Asian economies have remained open during this tumultuous period. No government has cut its ties to the global economy, although Malaysia did impose some controls on the flow of money into and out of their country. Open trade and investment strategies allowed Asian economies to rely on exports to propel economic activity during the crisis when domestic conditions were so poor. And when international investors felt that a total economic collapse would not materialize, Asia's open economies allowed funds to return.

The Asian turmoil appeared to reveal a tendency among investors to treat emerging markets as an asset class.

Third, all the affected countries of Asia are moving to restructure their economies. Some are moving more quickly than others, but all are making the necessary adjustments to remedy the kind of structural problems that played a part in igniting the crisis. This process will take time, especially in the area of financial system reform, but these countries currently appear to

be moving in the right direction. Unfortunately, the early signs of rapid recoveries in the Asian economies may tempt policymakers there to curtail their reform efforts in the mistaken belief that with their economies on the mend the need to pursue restructuring has somehow lessened.

Finally, the strength of the U.S. economy has contributed to Asia's recovery. As the Asian countries used exports to earn money for their wounded economies, the United States has been a major customer. This increase in imports of Asian goods into the United States has led to a widening trade deficit here, but recovering Asian economies are now beginning to import more U.S. goods as well.

The worst of the economic and financial crisis in Asia seems to be over. All Asian economies appear to be recovering, some more rapidly than others.

Latin America making progress

In Latin America, while international and global factors are important in driving the economic outlook, domestic political and economic issues are having increasing influence.

When the Asian economic problems started in the summer of 1997, the potential impact on Latin America was uncertain. Some analysts even predicted that the crisis could benefit Latin America in that investment and capital would stop flowing to Asia and be redirected to Latin America. These predictions did not come to pass. In fact, Asia's troubles had serious negative repercussions for Latin America and for much of the rest of the world.

Both trade and financial markets spread the contagion from Asia to Latin America.

Some of the Latin American economies send a significant portion of their exports to Asia. Chile (34 percent in 1997) and Peru (23 percent) are most dependent on Asia for export earnings. Both countries are heavy exporters of minerals, and Asian economies, particularly South Korea and Japan, are significant copper importers. As the Asian countries experienced recessions, they naturally imported less from everywhere, including Chile and Peru.

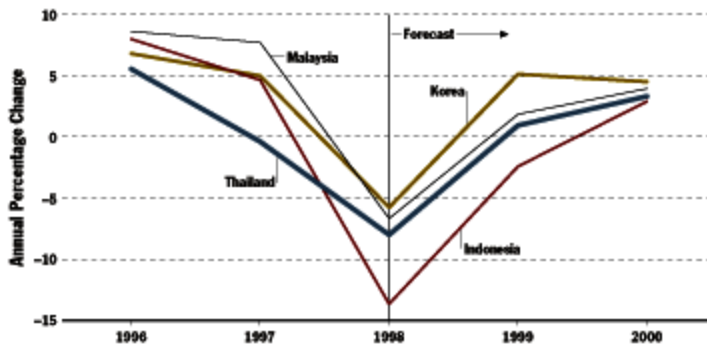
However, other economies in Latin America are less trade-dependent on Asia, sending less than 15 percent of their exports to that region. Overall, Latin America actually depends a good deal more on the United States and Europe as export markets.

In 1998, as the Asian economies were declining, international commodity prices also dropped significantly. This development was related to weaker Asian demand but was also a function of other factors, including weather patterns. Weak commodity prices in 1998 affected virtually all Latin American economies, which depend heavily on primary exports such as oil, copper and agricultural products. For example, oil prices reached an all-time low last year in real terms, with serious repercussions for oil-dependent countries like Ecuador and Venezuela. So diminished Asian demand, in conjunction

ECONOMIC AND FINANCIAL INDICATORS POINT TO AN END TO THE INTERNATIONAL CRISIS IN ASIA AND TO A LESSER EXTENT IN LATIN AMERICA.

with declining commodity prices, contributed to a significant deceleration of economic activity throughout Latin America last year.

CHART 1: Asia Real GDP



Source: JP Morgan, Consensus Forecasts

For better or for worse, the Asian crisis prompted investors to reassess investments in all emerging markets. If any redirecting of financial flows occurred, it was not toward Latin America but rather out of emerging markets and to safer havens such as the United States. The Asian turmoil appeared to reveal a tendency among investors to treat emerging markets as an asset class, whether the markets are in Asia, the former Soviet republics or Latin America.

This lumping together of emerging economies in investors' minds became a point of controversy. Some observers believe that Latin America was unfairly tainted by Asia's troubles while others argue that the crisis in Asia exposed pre-existing economic imbalances in other regions.

Perhaps the first time the Asian crisis started being considered an emerging markets problem rather than a regional situation was when Latin stock markets tumbled in late October 1997 after strong returns during the first 10 months of that year. The contagion in equity markets

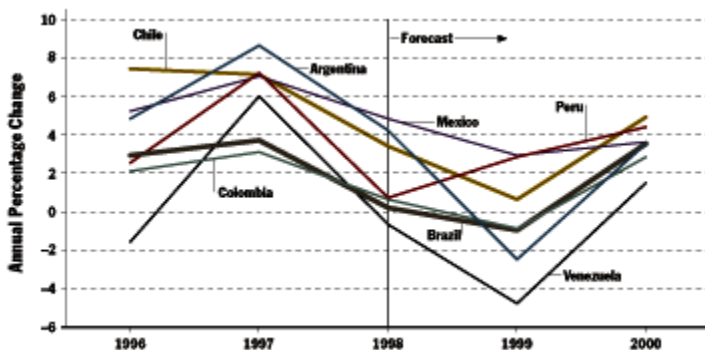
began when it appeared that Hong Kong's currency board regime was coming under pressure, raising concerns over the maintenance of Argentina's currency convertibility regime, which is similar to a currency board. Ultimately, neither country altered its exchange rate system.

Nonetheless, the losses in Latin American stocks continued through the first half of 1998 and were aggravated by the Russian debt default in late summer of 1998. The U.S. equity markets also experienced losses in the fall of 1998. But unlike the U.S. markets, Latin markets did not rebound significantly and showed weak performance throughout 1998.

Other financial markets — not just equities — were also affected by the Asian and Russian crises. Debt issues, sovereign as well as corporate, fell significantly in Latin America during the fourth quarter of 1997 and all of 1998, and credit lines to financial institutions in the region became harder to come by. In addition, higher interest rates throughout the region also curtailed economic activity.

Given all the economic and financial turmoil, how is the region expected to perform in 1999? After growing by about 5 percent in 1997 and 2 percent last year, the region's real gross domestic product (GDP) is expected to contract by 0.5 percent in 1999 (see [Chart 2](#)); available data for the first half of the year are largely in line with expectations.

CHART 2: Latin America Real GDP

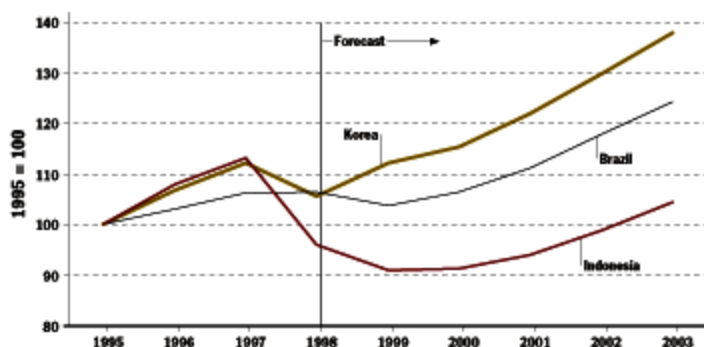


Is much of the region still in recession or decelerating because of a continued drag from Asia? On the surface, the answer is no. The recession in Asia appears to have bottomed out, and the economies there are recovering. So the direct effects of trade and the indirect effects of financial markets are receding.

In a policy sense, though, the Asian crisis is still having an impact in Latin America. When the crisis was in full force in 1997 and 1998 and Latin America began experiencing capital flight, policymakers in the region raised domestic interest rates to try to attract investments and thus help keep capital in their countries. Rates were especially high last year in several countries, like Brazil and Chile. Some countries

Source: InterAmerican Development Bank,
Consensus Forecasts

CHART 3: Real GDP Levels



Source: DRI data and forecasts, indexed by the
Federal Reserve Bank of Atlanta

also implemented severe budget cuts at the time. Since these countries were experiencing hard times, tax collection was down, government revenue was declining, and these countries were getting less for their exports. All these factors compelled policymakers to cut budgets.

Even though rates are starting to decline, the impact of this sustained period of high interest rates has endured into this year. This lingering effect is part of the reason that much of Latin America is entering a recession just as the international outlook is improving. Economic growth in Latin America is expected to follow a V-shaped path similar to Asia's recovery, but lagging behind, with a contraction in 1999 followed by recovery in 2000 and beyond.

While this pattern for Latin America's overall economic recovery seems fairly clear, the particulars of each country's ups and downs continue to evolve. The most recent report from Latin American Consensus Forecasts shows an improvement in Brazil's 1999 outlook but downgrades for many other economies. Brazil's real GDP is now expected to contract by only 0.5 percent

this year compared to the 3.9 percent decline forecast in February and the 2.9 percent decline predicted in April. The outlook in Brazil has improved faster than expected; after the currency devaluation in January 1999, conditions in Brazil stabilized much faster than many people had thought possible, and inflation has been much lower than anticipated.

In contrast, the current-year outlooks for Argentina, Colombia, Ecuador and Venezuela continue to deteriorate as the August Consensus Forecasts predicted deeper-than-expected recessions in these countries. Chile's economic growth forecast was also cut to -0.1 percent in August from 0.6 percent in June and 1.7 percent in April.

The Mexican and Peruvian outlooks were little changed, with forecasters maintaining output expectations in the 3 percent range for these economies.

For the countries whose 1999 GDP forecasts have been downgraded, their current economic difficulties appear to be largely homegrown rather than the result of global crisis. So even if the region as a whole is experiencing a recession that can be at least partially attributed to the aftereffects of the international crisis, this stress is being either augmented or diminished by domestic factors within the individual economies.

Is the crisis over?

In one sense, the international crisis appears to be over because the Asian economies are recovering and are no longer constituting a significant drag on Latin America, at least in terms of trade flows and financial market effects.

But in another sense, the crisis appears to be ongoing in that the Latin American economies still face some serious challenges in the domestic economic and political arena. In a way, however, this fact is somewhat encouraging. Over the last two years, international economic forces that often seemed beyond the region's control have buffeted Latin America. Although serious challenges remain, at least these are challenges that policymakers in the region can address directly.

While the Asian and Latin American economies appear to be on the rebound, there are serious social costs to the international crisis.

The social effects of the crisis

While the Asian and Latin American economies appear to be on the rebound, there are serious social costs to the international crisis that may take longer to work through in these regions.

In each country in these areas, a significant segment of the population is living in poverty — in many cases, extreme poverty. Put simply, the international financial crisis has made some of the rich less rich, has pushed many of the middle class into poverty and has made the poor in these countries poorer. It may take years for this situation to greatly improve. As [Chart 3](#) shows, while Korea and Brazil are expected to recover to their pre-crisis levels of GDP next year, Indonesia is not expected to return to a pre-crisis level for some time. (The chart refers only to the size of the economy and does not account for the uneven income distribution in these countries.)

Going forward

Economic and financial indicators point to an end to the international crisis in Asia and to a lesser extent in Latin America, although in the latter region domestic developments appear to be the source of current weakness in many countries. Social indicators reveal that the effects of the international crisis will be felt for some time. If policymakers in both regions continue to restructure and reform their economies, the longer-term economic, financial and social outlooks should remain positive.

This article was researched and written by analysts in the Atlanta Fed's Latin America Research Group.

[Return to Index](#) | [Next](#)

[Disclaimer & Terms of Use](#) : [Privacy Policy](#) : [Contact Us](#) : [Site Map](#) : [Home](#)

Federal Reserve Bank of Atlanta, 1000 Peachtree Street NE, Atlanta, GA 30309-4470 Tel. (404) 498-8500



Economic Research

Research Notes

Research Notes highlights some of the research recently published by the Federal Reserve Bank of Atlanta. For complete text of these articles or papers on this Web site, see the links below.

Theories may shed light on crises in emerging markets

The world economy is going through a difficult and dangerous period. The recent Brazilian currency meltdown is one more in a series of events that includes the Asian crises of 1997–98 and the Mexican crash in 1994, and there is uncertainty about whether other emerging economies will be infected with the Brazilian virus.

Dealing with crises in emerging economies is, therefore, an urgent matter. But what to do about these crises is a source of heated debate. In a recent article, Roberto Chang argues that much of the confusion arises from the fact that accumulated knowledge about crises in emerging markets has proved inadequate for analyzing recent events. As a consequence, economists have developed new theories intended to shed light on current debates.

Chang classifies the new theories into two main positions. The first, the bad policy view, argues that inappropriate government intervention provided incentives for the private sector to borrow too much and to invest in socially unproductive or excessively risky activities. The second category, the financial panic view, argues that the key issue was a maturity mismatch of assets and liabilities in national financial systems. The article compares the two viewpoints and concludes that the financial panic view has a more solid theoretical foundation and is consistent with a wider range of observations than the bad policy view.

[ECONOMIC REVIEW](#) [SECOND QUARTER 1999](#)

Rising dollar may have triggered Asian crisis

Within a few months in late 1997, a number of East Asian countries were hit by financial and exchange rate crises. Much analysis of this episode has emphasized either internal financial weaknesses or a process of contagion that converted a financial problem in one country into a regionwide crisis.

A recent article explores an alternative possibility: that some external shock common to all these countries triggered the crisis. The Chinese devaluation of 1994 and the prolonged Japanese recession are sometimes cited as factors, but author Joseph Whitt concludes that they were probably only minor contributors. Evidence suggests that the sharp rise in the value of the dollar that began about two years before the crisis itself may have had a major impact.

The rising dollar induced substantial exchange rate appreciation for the crisis countries because, as estimates of basket weights indicate, they were tying their currencies closely to the dollar by giving the dollar heavy weight. The result was significant slowdowns in export growth that probably contributed to the regionwide crisis.

Whitt suggests that for the future these countries might find it advantageous to peg their exchange rates to a diversified basket of currencies that would help ensure that their exports to their three largest developed-country customers — the United States, Japan and the euro area — would not all drop off simultaneously.

[ECONOMIC REVIEW](#) [SECOND QUARTER 1999](#)

Money growth and inflation are still related

Despite the long history and substantial evidence supporting the conclusion that persistent changes in the price level are associated with changes in the money supply, the predicted association remains disputed. Is it debated because the empirical relationship holds over time periods so long that it may be uninformative for practitioners and policymakers, who are more concerned about inflation next month or next year? If the relationship between money growth and inflation takes a generation to become apparent, it would not be surprising that central bankers and practitioners put little weight on recent money growth.

It is not clear, though, that it takes a generation. Gerald P. Dwyer Jr. and R.W. Hafer reconsider, in a recent article, the link between money growth and inflation, using two types of evidence. The first, based on the behavior of five countries' price levels and money stocks over much of the 20th century, provides a perspective over time. The second uses two recent five-year periods for a number of countries for which collecting comparable data covering long periods is not feasible. A positive, proportional relationship between the price level and money relative to real income is evident in data over long periods of time and over shorter periods for many countries. This evidence suggests that money growth should not be ignored when attempting to estimate future inflation.

[ECONOMIC REVIEW](#) [SECOND QUARTER 1999](#)

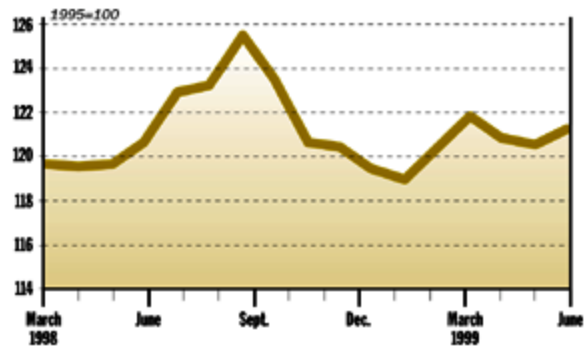
Does decline in unions explain wage-productivity gap?

Although both real wages and productivity have grown at relatively slow rates during the last two decades, some measures indicate that earnings have failed to keep up with productivity growth. The slowdown in real wage growth is important to workers and their families because their purchasing power is not rising if earnings are not increasing faster than prices. The failure of growth in real wages to match productivity gains also has critical implications for workers.

A substantial decline in the unionization rate since the 1960s has been cited as underlying the wage-productivity gap. In a recent article, Madeline Zavodny explores the trends in productivity, pay and the unionization rate, analyzing data over the 1974–94 period. She concludes that the decline in the unionization rate does not explain a significant portion of the rise in the wage-productivity gap in the manufacturing sector.

A resurgence of unions might help workers reap more benefits from productivity gains, Zavodny concludes, but it appears unlikely that an increase in the unionization rate alone would cause compensation increases to fully match productivity gains.

[ECONOMIC REVIEW](#) [SECOND QUARTER 1999](#)



After dipping slightly in April and May, the dollar rose slightly in June versus the 15 major currencies tracked by the Atlanta Fed. Much of this movement was due to changes versus the Americas subindex, which includes Brazil, Canada and Mexico, while the dollar remained strong against the European currencies throughout the three-month period.

Note: For more detailed, monthly updates and historical data on the dollar index, see the Atlanta Fed's World Wide Web site at www.frbatlanta.org/econ_rd/dol_index/dj_index.cfm.



THE STATE OF THE STATES

Recent events and trends from the six states of the Sixth Federal Reserve District

Alabama

- The forestry industry in Alabama remains weak. Demand from pulp and paper producers is still depressed by weak demand from overseas, and foreign supply is becoming more abundant. The relatively robust rate of single-family home construction has helped lessen this problem somewhat.
- The auto industry continues to expand, most notably with the announcement that Honda will be locating a large assembly facility along Interstate 20 near Talladega, between Birmingham and the Georgia border. Construction will begin later this year. Auto component manufacturers located in northern Alabama and throughout the region will benefit as the auto industry in the South continues to expand.
- The state's year-over-year employment growth lags behind both the district's and nation's, with manufacturing and services showing notable relative weakness.



Florida

- Excess capacity is beginning to show up in a number of theme parks in the central part of the state after several years of aggressive expansion in that area. But this condition does not indicate a slowdown in overall tourism.
- The state's employment growth is handily outpacing both the district's and nation's as measured on a year-over-year basis. Most of this strength is found in the central part of the state, with Orlando and Tampa showing the strongest growth rates.
- The cruise industry continues to enjoy high occupancy rates, even with new ships being added — and more on the way. While bookings are available for the distant future, cruises at the beginning of 2000 sold out long ago with very little discounting.



Georgia

- The Atlanta metropolitan area led the nation in the number of new homes constructed last year and is on track to do the same again this year, although the margin may not be as great.
- Employment growth versus a year ago continues above the 3 percent rate, bettering both the district and national rates. The construction sector is still showing most of the growth, although these rates are decreasing. The larger miscellaneous business service sector is accelerating, however, taking up any reduction in momentum from construction.



- Turner Field, home of the Atlanta Braves, has been selected as the site of the 2000 Major League Baseball All-Star game.

Louisiana

- The decline in oil and gas drilling activity has halted as a result of higher oil and gas prices. Industry sources report, however, that even though prices are well above break-even points for expanded drilling, firms are reluctant to restart drilling in a significant way until there is more certainty that the higher market prices will continue.

- Baton Rouge continues to be the strongest metropolitan area in the state, growing faster than both the district and nation. The rest of Louisiana is underperforming both.

Strength in Baton Rouge has come from a variety of industries. While growth in government employment has been important, the performance of the state's service sector and whole-sale trade has also contributed.



Mississippi

- The gambling industry along the Gulf Coast continues to prosper. Despite the recent opening of the largest gambling complex to date, though, an even larger project already is set to begin construction.
- A major obstacle to expansion along the Mississippi Gulf Coast is the very tight labor market conditions in the area, making the staffing of more facilities problematic.
- Despite the continued Gulf Coast expansion, the state's overall employment growth is stagnant. In part, this situation simply reflects the tight labor markets along the Gulf, but what growth has occurred there is being offset by a generally weak manufacturing sector and no net growth in services in the remainder of the state.

Tennessee

- Employment growth in Tennessee is underperforming the district and is even slightly less than the national average as measured on a year-over-year basis. The Knoxville area is notably weak, actually losing jobs compared to year-ago levels.
- Manufacturing in the state has been relatively weak for over a year, but the recent strength in the auto industry, which is concentrated in the middle of the state, has helped to slow Tennessee's overall job losses in manufacturing.
- Knoxville has experienced notable reductions in manufacturing employment compared to the rest of the state, and the city has also suffered losses in the retail trade and transportation/public utilities sectors.



Compiled by the regional section of the Atlanta Fed's research department

Economic Research



Southeastern Economic Indicators

		Alabama	Florida	Georgia	Louisiana	Mississippi	Tennessee	6th District	United States
Total Payroll Employment (thousands)^a	1999Q2	1933.9	6889.9	3847.0	1916.4	1132.7	2665.3	18,385.2	128,243.7
Percent change from	1999Q1	0.3	1.0	0.8	1.1	0.1	1.2	0.7	0.5
Percent change from	1998Q2	1.5	3.7	3.4	0.4	-0.3	0.5	2.6	2.2
Manufacturing Payroll Employment (thousands)^a	1999Q2	370.8	498.2	594.1	190.8	239.8	505.8	2399.5	18,431.7
Percent change from	1999Q1	-0.8	0.1	-0.4	-0.8	-2.1	-2.2	-0.4	-0.6
Percent change from	1998Q2	-2.5	0.4	0.3	-0.3	-0.9	-0.4	-1.0	-2.2
Civilian Unemployment Rate	1999Q2	4.6	4.1	3.7	4.6	4.6	3.7	4.1	4.3
Percent change from	1999Q1	13.1	-3.9	-8.2	-13.8	-4.8	-14.7	-5.6	-0.8
Percent change from	1998Q2	7.8	-5.4	-13.2	-22.6	-14.2	-12.0	-9.5	-3.0
Single-Family Building Permits (units)^b	1999Q2	16,578	102,662	68,830	14,067	9,292	28,181	239,610	1,239,666
Percent change from	1999Q1	3.7	-4.6	-4.4	-0.1	3.8	1.7	-4.5	-2.7
Percent change from	1998Q2	11.5	7.0	7.5	-3.5	-10.9	-6.8	6.2	7.6

Multifamily Building Permits (units)^b	1999Q2	1,944	54,080	19,493	4,069	2,475	6,150	88,211	395,018
Percent change from	1999Q1	-65.1	-20.3	23.5	47.6	-20.7	17.2	-12.0	-15.3
Percent change from	1998Q2	-61.4	23.7	29.1	-11.5	12.2	45.1	17.6	1.9
Personal Income (\$ billions)^b	1999Q1	96.1	401.6	199.9	95.6	53.8	132.7	979.8	7,400.2
Percent change from	1998Q4	0.9	1.7	1.6	1.0	0.8	1.5	1.4	1.2
Percent change from	1998Q1	4.5	6.3	7.0	3.9	5.0	5.7	5.9	5.5
		Atlanta	Birmingham	Jacksonville	Miami	Nashville	New Orleans	Orlando	Tampa
Total Payroll Employment (thousands)^a	1999Q2	2,095.5	482.3	548.2	994.1	658.3	622.9	872.8	1,174.0
Percent change from	1999Q1	0.7	0.2	0.6	0.9	0.1	-1.0	0.8	0.6
Percent change from	1998Q2	3.5	1.3	3.1	2.0	1.5	0.0	4.6	4.9
Civilian Unemployment Rate	1999Q2	3.0	2.9	3.2	6.3	2.4	3.8	2.9	2.8
Percent change from	1999Q1	-9.3	6.2	5.0	-6.1	-14.0	-14.2	-2.9	-4.6
Percent change from	1998Q2	-11.5	8.1	0.1	-3.8	-12.0	-25.8	-4.1	-9.1

^a Seasonally adjusted

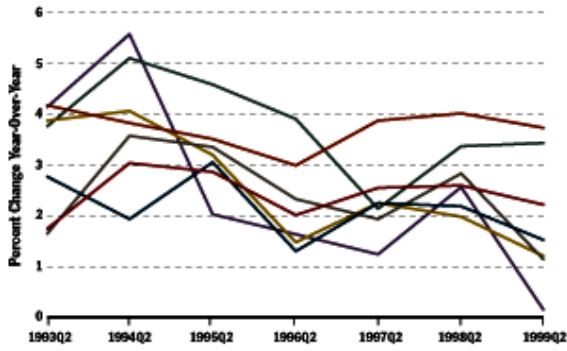
^b Seasonally adjusted annual rate

Sources: Payroll employment and civilian unemployment rate: U.S. Department of Labor, Bureau of Labor Statistics. Initial unemployment claims: U.S. Department of Labor, Employment and Training Administration. Single- and multifamily building permits: U.S. Bureau of the Census, Construction Statistics Division. Personal income: Bureau of Economic Analysis. Quarterly estimates of all construction data reflect annual benchmark revisions. All the data were obtained and seasonally adjusted by Regional Financial Associates. Small differences from previously published data reflect revisions of seasonal factors.

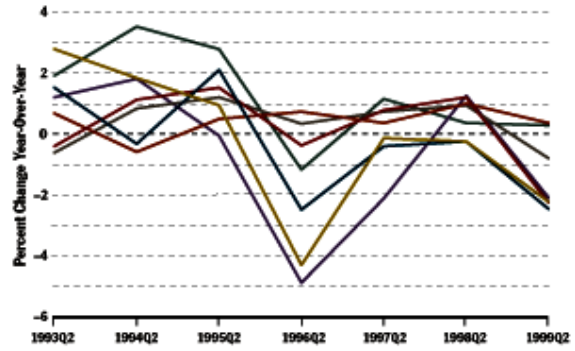
For more extensive information on the data series shown here, see the [Southeastern Economic Indicators](#).

Total Payroll Employment

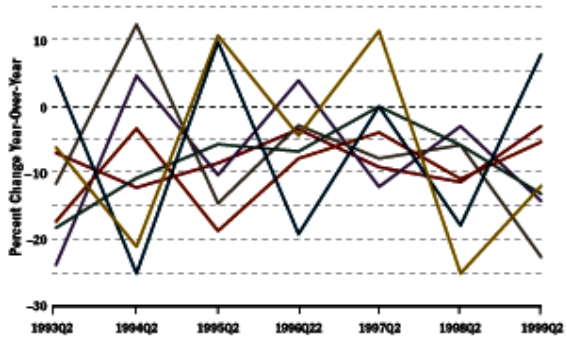
Manufacturing Payroll Employment



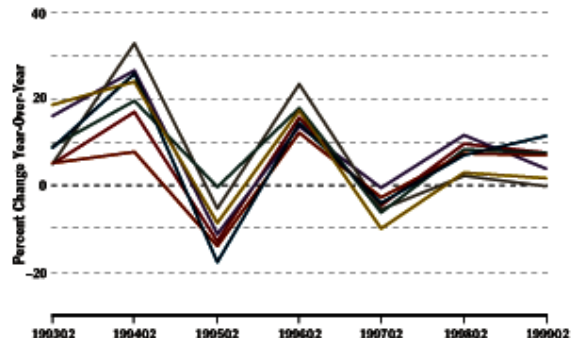
Civilian Unemployment Rate



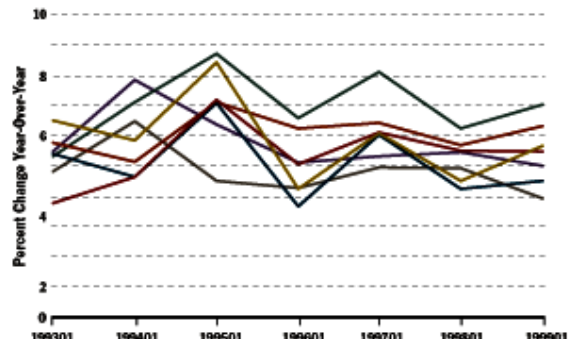
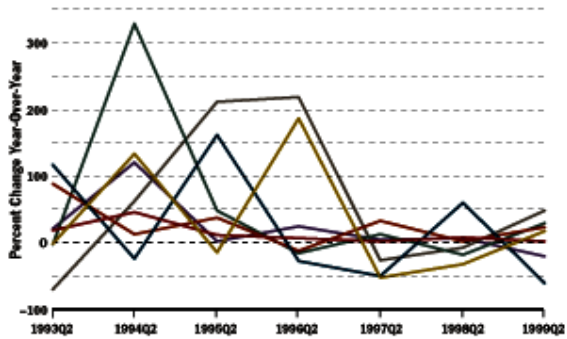
Single-Family Building Permits



Multifamily Building Permits



Personal Income



- Alabama
- Florida
- Georgia
- Louisiana
- Mississippi
- Tennessee
- United States

[Return to Index](#) | [Next](#)



Economic Research

Southeastern Manufacturing Survey

Below are highlights from the monthly survey of southeastern manufacturers conducted by the Federal Reserve Bank of Atlanta in August.

"Current indicators of manufacturing activity in the region changed little in July.

"The current production index rebounded to 19.4 from 15.6 in June.

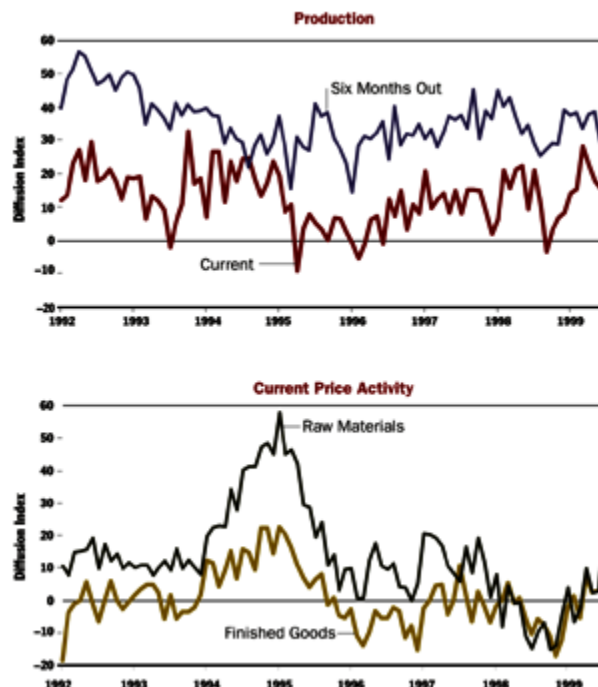
"To some degree, some production gains may have replenished inventories. The finished goods inventories index rebounded moderately, staying at a positive level for the third consecutive month. The new orders index was steady at a moderate level. The backlog orders index fell from improved and relatively high levels in May and June.

"In light of positive outlook indicators, current production and inventory gains appear to be a reflection of manufacturers' sales expectations. On the downside, the index for new export orders fell for the second month in a row.

"Outlook indexes generally posted gains. The outlook indexes for production, shipments, new orders, backlogs, finished goods inventories, the number of employees, the average workweek and new orders for exports were up from June levels.

"Both current and outlook price indexes rose sharply in July. The outlook index for prices paid reached its highest level since mid-1997.

SOUTHEASTERN MANUFACTURING INDICATORS
(through July 1999)



For more complete, monthly information see the [Southeastern Manufacturing Survey index](#).

[Return to Index](#)

[Disclaimer & Terms of Use](#) : [Privacy Policy](#) : [Contact Us](#) : [Site Map](#) : [Home](#)

Federal Reserve Bank of Atlanta, 1000 Peachtree Street NE, Atlanta, GA 30309-4470 Tel. (404) 498-8500