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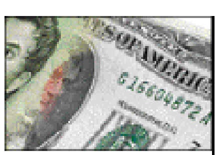
CURRENT ISSUE

COVER STORY

Separating fact and fiction about Y2K is not an easy task — so much information, so many differing opinions and, now, so little time. But, as this article indicates, banking regulators have a consistent message: while there may be some isolated, temporary glitches, the U.S. banking industry will be prepared for the rollover to the Year 2000.

FEATURES

Foreign investors have held a special place in the hearts of Southern policymakers for decades. Why? Because foreign investment, as this article discusses, has brought the South a rich dowry: new industries, jobs and productivity advances as well as an unquantifiable commodity — prestige.



A hot topic in Latin America is dollarization, a policy stance whereby a country makes the U.S. dollar its official currency. Dollarization can bring a country a number of benefits, like a lower-inflation environment. But these benefits come at a price; for instance, a totally dollarized country essentially forfeits control of its monetary policy. This article examines both sides of the dollarization issue.

DEPARTMENTS

Distinguishing Fact From Fiction in Y2K

Sometimes you find yourself in a bad situation and wonder, "How did I get here?" I think many of us may be asking that very question when it comes to Y2K.

Whether we work for a business, government or a nonprofit organization, we routinely grapple with strategies, budgets, finding qualified workers and developing more efficient ways of doing business — or achieving our own career goals. We've found countless ways to use computers to speed up or improve these tasks, but until fairly recently we never gave a thought to whether these computers would read the Year 2000 as 1900. Still, here we are trying to work through a problem that is time-consuming and very expensive to fix.

Without question, the Y2K issue is serious, and if nothing were being done to fix the problem, it would have the potential to severely paralyze critical electrical, communications, transportation and financial services systems. Fortunately, this serious problem is receiving some serious attention from these and other industries worldwide.

The good news

While I can't speak for all industries or all countries, I can tell you that the U.S. banking system, including regulators and individual banks, has devoted a large amount of resources to eradicate the Y2K bug. Because of these comprehensive efforts, I believe the U.S. banking system is in good shape to enter the Year 2000. That's not to say that we won't encounter some temporary problems, but overall I believe the system will be well prepared.

How can I offer this opinion? In my work as chief operating officer of the Federal Reserve Bank of Atlanta, I have been quite involved with the Y2K preparations of our bank, the Federal Reserve System and the U.S. banking industry. Thus, my opinion on the U.S. banking system's Y2K readiness is based on facts, not fiction.

Those facts are that the Federal Reserve is committed to doing all it can to safeguard the nation's financial system and that, through our efforts and those of other banking regulators and individual banks, the U.S. banking system should be well prepared for the century rollover. You can read more about these Y2K initiatives in this issue of *EconSouth*.

We all have a role to play

But beyond the Federal Reserve's and the banking industry's preparations, there is a role for each of us to play in getting ready for Y2K.

If you are a business owner or government official, that role is to let the public know what steps your organization is taking in advance of the roll-over to the Year 2000. I strongly believe that public understanding of Y2K preparations, particularly in the many businesses and industries that have fully developed plans, will help to maintain public confidence, which is a critical element in successfully navigating into the Year 2000.

In addition to making your own Y2K plans, you should also find out what your bank, electrical provider, communications provider and the many other critical businesses you interact with are doing to ready themselves for the Y2K rollover. Remember that being informed is one of the first steps in being prepared.

Keeping perspective

Also, we must all maintain perspective and remember that overreaction to the Year 2000 phenomenon will simply create additional problems.

The United States has worked to meet important challenges in the past, with a lot less lead time. Y2K is simply another challenge that I believe we will meet and pass with flying colors.

By Patrick Barron, first vice president and chief operating officer of the Federal Reserve Bank of Atlanta

Y2K READINESS DISCLOSURE

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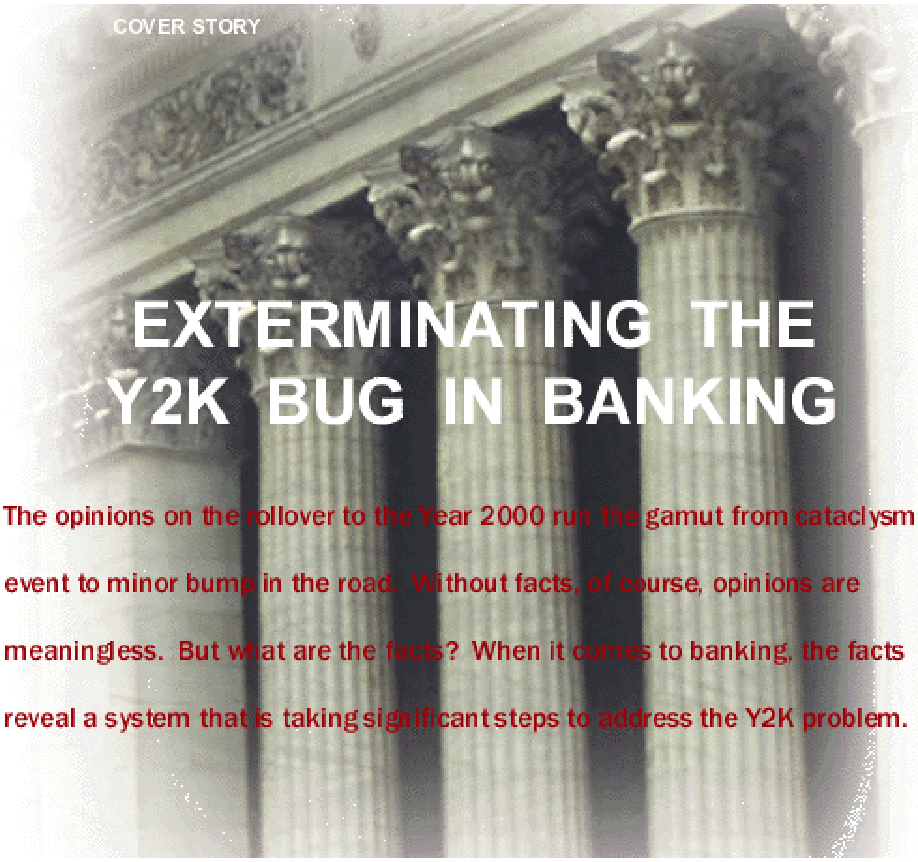


How do you plan to spend Dec. 31, 1999? Not so long ago, many people believed that the eve of the Year 2000 would represent the largest party the world had ever seen. Now, however, some people are thinking about anything but partying.

Why? The answer lies with a once small bug that has grown into a very large pest. This pest, referred to as the Y2K or millennium bug, was given little, if any, thought in the early computer age in the 1950s. Today, however, large and small businesses and governments are spending what some experts have estimated to be as much as $300 billion worldwide to exterminate the bug.

Since virtually all of the world's major power, communications, transportation and banking systems are now controlled by computers, many of which are linked together, the stakes in the race to exterminate the Y2K bug are extremely high. The stakes are so high, in fact, that some people are literally heading for the hills, stockpiling food, fuel and cash.

But are these alarmists basing their Y2K perceptions on hard facts, including the large-scale preparations that are under way to address the problem, or on sensational fiction from magazine racks at the local supermarket's checkout line? To answer this question, it helps to understand the problem, its origin and, more importantly, some of the efforts going into addressing the problem, particularly those of the U.S. banking system, which is a keystone of the U.S. economy.

How did we get here?

Simply put, the Y2K problem is the risk that computers will read the two-digit date code "00" as 1900 instead of 2000. The problem stems from a computer programming convention from the punch-card era that abbreviates dates by their last two numbers.

The reason the two-digit code was created in the first place was to conserve computer memory, which was substantially more expensive back in the dark ages of computer technology. Companies ran programs on enormous, and enormously expensive, mainframe computers that they leased or bought by the byte. According to the Gartner Group, an information technology consulting firm, one megabyte of magnetic disk storage in 1965 cost approximately $750 compared with about 75 cents today.

The code is still around today because computer software has proved to be surprisingly durable. Following the maxim "If it ain't broke, don't fix it," many organizations are still relying on computers and software that have not been replaced or updated to be Y2K compliant, and this hardware and software may not function effectively, or at all, beginning Jan. 1, 2000.

With the ultimate expiration date rapidly approaching, individuals, businesses and governments are working to correct the problem. This process involves identifying where the two-digit year code is found in computer systems and then fixing the code, testing systems and software, and developing contingency plans in case a system does not work temporarily at the rollover.

But fixing the Y2K problem is far more complicated than updating stand-alone computer systems. The linkages between computer systems in today's high-tech world are quite complex, and locating, fixing and testing problems can be difficult, time-consuming and expensive.

Linkages can seem endless

Just consider the computer linkages involved in processing a direct deposit transaction from a company to one of its employees. For example, suppose ABC Co. pays Jane Smith every month by directly depositing funds into her bank account. This transaction would pass through not only ABC Co.'s computer systems but also the systems of ABC's payroll service company and its bank. The bank's computer systems, in turn, might connect with the systems of other organizations, like the Federal Reserve, that would process the payment for deposit into Jane Smith's bank account. To complicate matters, for all these organizations to connect with one another, they must rely on electrical power and telecommunications systems, which also are dependent on computers.

This simple example represents only one of the myriad possible computer system scenarios, but it gives an idea of how interconnected our technology has become and how potentially disruptive the Y2K bug can be.

What could happen?

The stakes in the race toward Y2K become significantly higher when one considers the U.S. and international financial system, in which the U.S. banking system plays a critical role. In this arena, the scenarios for Y2K-related disruptions seem endless, and some sources — not just the tabloid headline seekers — are forecasting severe circumstances.

Edward Yardeni, chief economist and global investment strategist for Deutsche Bank, believes the Y2K bug poses a serious threat to the U.S. economy. He said, "Currently, I believe there is a 70 percent chance of a worldwide recession, which could last 12 months starting in January 2000."

Federal Reserve Governor Edward W. Kelley Jr., who leads the Fed's Y2K efforts, however, takes a more pragmatic view. "A few economists are suggesting that Y2K-related disruptions will induce a deep recession. That is probably a stretch, but it is unlikely that we will escape unaffected," he said. "I anticipate that there will be isolated production problems and disruptions to commerce, and perhaps some public services, that could reduce the pace of economic activity early in 2000. But, just like the shocks to our nation's physical infrastructure that occur periodically, I would expect the Y2K impact to our information and electronic control infrastructure is likely to be short-lived."

Preparing the banking system

The performance of the banking and financial system is critical to ensuring a successful transition to the Year 2000. Banking regulators, including the Federal Deposit Insurance Corp. (FDIC), the Federal Reserve, the Office of the Comptroller of the Currency, the Office of Thrift Supervision and state banking regulators, have been working intensively with domestic and foreign financial institutions operating in the United States for the past several years to help them prepare their systems for Y2K. (See the sidebar on international Y2K issues.)

Y2K experts, including John A. Koskinen, chair of the President's Council on the Year 2000 Conversion, has named the financial industry among the best prepared for the Y2K rollover. The President's Council, formed in early 1998, is responsible for coordinating the federal government's and major industries' efforts to address the Year 2000 problem.

> *A few economists are suggesting that Y2K-related disruptions will induce a deep recession. That is probably a stretch, but it is unlikely that we will escape unaffected.*
>
> — EDWARD W KELLEY JR., GOVERNOR, FEDERAL RESERVE BOARD

As of March 31 of this year, federal regulators had examined each banking organization twice for Y2K compliance. The most recent evaluations showed that, of the 10,000 FDIC-insured banks and thrifts, over 97 percent rated satisfactory, 3 percent rated needs improvement and less than one-half of 1 percent rated unsatisfactory, according to Donna Tanoue, chairman of the FDIC. Federal regulators have taken public enforcement actions against some institutions. But regulators believe that banks understand the reputational importance of the Y2K problem and thus that market pressure will be more effective than regulation in spurring compliance.

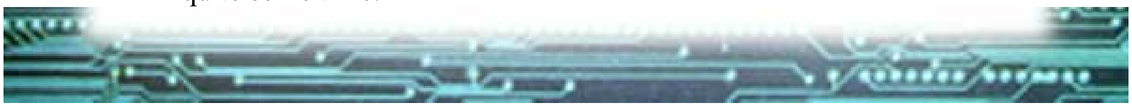
Federal banking regulators are also requiring banks to develop Y2K contingency plans just in case of a temporary disruption in banks' computer systems. Contingency plans are nothing new for banks. In fact, most already have plans in place to deal with disruptions such as power outages or natural disasters. Banking regulators are also developing their own Y2K contingency plans.

Evaluating International Y2K Efforts

There are many unknowns when it comes to determining Y2K preparedness on the international front. Fed Governor Roger Ferguson, who serves as chairman of the Joint Year 2000 Council, has worked with representatives from the international banking community to evaluate and promote Y2K readiness. The Joint Year 2000 Council is made up of central banks, insurance and securities regulators, and banking supervisors from throughout the world.

In a recent speech, Ferguson described the difficulty of getting concrete information on the preparedness of the banking community in some countries. "As you can understand, it is difficult to measure accurately the level of international Year 2000 readiness, and certainly no one can predict with confidence exactly how the century date change will unfold internationally. . . . With that said, I believe that, as with the United States, in most countries the financial sector was probably somewhat ahead of other sectors in recognizing the Year 2000 problem and is probably somewhat more advanced in testing and business continuity planning."

In the absence of concrete information, it seems reasonable to assume that some nations and institutions will not be as well prepared for Y2K as the United States is. However, it is important to note that most internationally active banks have been preparing for Y2K for quite some time.



Such plans will help to ensure that banks continue to function despite any disruptions, which Fed Governor Roger Ferguson said are likely. "Nothing this large and complex can be perfectly faultless. We should remember, however, that there have been serious disruptions to service in daily life before, from storms, temporary power outages, disruptions of telephone service, etc. In general, these prove to be annoying and inconvenient, but nothing more."

The Fed's unique role

In addition to supervising banks' compliance efforts, all of the federal banking regulators have been working for several years to prepare their own internal computer systems for the Year 2000 rollover. While fixing the Y2K problem is important to the functioning of each regulator, this effort is even more important for the Federal Reserve as it provides critical financial services to the federal government and to many depository institutions, including banks, thrifts and credit unions. In fact, the Fed processes more than 80 percent of the total dollar amount of U.S. payments — more than $2 trillion per day — including everything from the settlement of U.S. government securities to private securities, checks, electronic payments and old-fashioned cash.

The Fed recently confirmed that it has fixed the Y2K problem in its most critical systems, including those that interact with banks and with the federal government, to ensure that they will work in the Year 2000. During the remainder of 1999, the Fed will continue to test its systems. A report from the U.S. General Accounting Office recently cited the Federal Reserve as having established effective Y2K management controls for its internal systems.

The Fed has also been working with banks as they test their internal systems with their service providers' and with the Fed's to ensure compatibility. As of April, more than 8,000 depository institutions had already tested their systems with the Fed's — and some of these institutions had tested numerous times.

Cash availability around the Y2K rollover has been a major concern of banks and their customers (see the sidebar on page 6). The Fed, with responsibility for putting cash into circulation in response to public demand, has worked with the U.S. Treasury to ensure that ample supplies of currency will be available around the rollover to the new year.

Federal Reserve Chairman Alan Greenspan discussed the Fed's Y2K cash plans in recent congressional testimony. "As a precautionary measure, the Federal Reserve has acted to increase the currency in inventory by about one-third to approximately $200 billion in late 1999 and has other arrangements available if needed," he said. "While we do not expect currency demand to increase dramatically, the Federal Reserve believes it is important for the public to have confidence in the availability of cash in advance of the rollover." According to Fed officials, the Fed has taken these steps to demonstrate its commitment to protecting the U.S. financial system during Y2K.

As part of this commitment, the Fed also says that it stands ready, if called upon, to perform another of its central bank roles: lender of last resort, providing lending on a collateralized basis to banks and thrifts in need of an infusion of cash. Through its discount window, the Fed extends credit directly to banks and thrifts, which hold reserves with the Federal Reserve. Though the Fed doesn't think that such

Y2K-related loans to banks will be necessary, it has encouraged banking institutions to have their documents regarding collateral in order. The FDIC has also stated that it is prepared to fulfill its deposit insurance obligation on deposits held in FDIC-insured institutions.

On a Personal Note, Leave Your Money in the Bank

Worried that they may lose their life savings in a Y2K computer systems outage, some individuals have announced their plans to take their money out of the bank and put it under their mattresses. Others may take out several weeks' cash in the event that computer systems fail and checks, credit and debit cards are of no use. All of this talk raises the question of whether your money is really safer outside versus inside the bank.

In congressional testimony in February, Fed Chairman Alan Greenspan responded strongly to questions about what people should do with their money that is in the bank. "I would say the most feasible thing is to leave it (money) where it is. That's probably the safest thing. There's almost no conceivable way in which I can envision that computers will break down and records of people's savings accounts will disappear."

To withdraw cash from the bank means that people will lose deposit insurance and would also lose interest income that money might earn. Greenspan also voiced concern about people taking their money out of the bank and then potentially losing it in a fire or a mugging.

Though the Federal Reserve is urging consumers to leave their money in the bank, it is also working to ensure that an ample supply of currency will be available both in its vaults and in circulation at the century rollover in case the public decides to hold additional cash. By year's end the Fed estimates that it will have about $200 billion in its vaults as a cushion to meet any increased demand for currency as the Year 2000 approaches.

The Federal Reserve's message is clear: Your money is safer in the bank.

Reliance on other industries

No matter how comprehensive the banking industry's Y2K preparations have been, the industry doesn't operate in a vacuum. It depends on other industries, including power, telecommunications and transportation, to keep the payments system running. Recent data suggest that these other key industries have also made substantial progress in readying themselves for Y2K.

But Koskinen recently said that key industries, such as power, banking, telecommunications and transportation, have much more work to do during the remainder of 1999 to prepare for the Y2K rollover. He said he is pleased, however, with these key industries' overall efforts, and he thinks that national Y2K failures in these industries are unlikely.

> *Nothing this large and complex can be perfectly faultless. We should remember, however, that there have been serious disruptions to service in daily life before, from storms, temporary power outages, disruptions of telephone service, etc. In general, these prove to be annoying and inconvenient, but nothing more.*
>
> — ROGER FERGUSON, GOVERNOR, FEDERAL RESERVE BOARD

The Year 2000 and beyond

Without question, the Y2K bug is a serious problem. As the Year 2000 approaches, increased attention will be focused on Y2K preparations, and rightfully so, since there are many governments, businesses and entire industries worldwide whose performance is critical to ensuring that business as usual remains the norm and not the exception.

The banking system, including individual banks, central banks, regulators and payments system providers, ranks among the most important in keeping the U.S. and world economies running smoothly. While glitches may occur, such as an isolated automated teller machine outage or a temporary power outage, the banking system is taking the necessary steps to ensure that transactions continue to take place and that funds continue to flow during the Y2K rollover and beyond.

Y2K READINESS DISCLOSURE

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Southern Suitors: Wooing Foreign Investment

Since the mid-1970s, the South has courted foreign companies and become a favorite locale for foreign investment. For southern states and these International investors, the courtship and ongoing relationship appears to be worth the effort.

A match made in heaven — that's the dream of state economic development officials as they woo foreign investors to set up housekeeping in their states. Alabama and American Honda Motor Co. recently culminated a successful courtship as Honda announced that it will begin construction of a $400 million sport utility vehicle assembly plant in Lincoln, Ala., next year.

Foreign investors have held a special place in the hearts of Southern policymakers since at least 1974, when Japanese-owned YKK opened a zipper manufacturing plant in Macon, Ga. Two years later, then-Georgia Gov. George Busbee formed the Japan-Southeast U.S. Association with Norishige Hasegawa, chairman of Sumitomo Chemical.

Since then, competition to win the hand of foreign investors has become increasingly intense among regional policymakers, culminating in the estimated $250 million package of tax abatements and incentives the state of Alabama offered Mercedes-Benz in 1993 to build its plant in Tuscaloosa County, Ala. But while the Mercedes deal can hardly be considered typical, the aggressiveness demonstrated by Alabama policymakers — then and today — certainly is.

> "FOREIGN INVESTMENT HELPED US (GEORGIA) ATTRACT A LOT OF COMPANIES FROM THE NORTHEAST. IT CHANGED THEIR PERCEPTION."
>
> **George Busbee, Former Georgia Governor**

Foreign investment in the South

By the numbers, however, foreign-owned projects make up only a small percentage of development throughout the South. According to Site Selection magazine, from 1991 to 1998 new facility and expansion announcements by non-U.S. entities accounted for slightly over 8 percent of announcements in Georgia, which led Sixth Federal Reserve District states in its percentage of foreign announcements. (See the sidebar on page 11 for more on how announcements are tallied.)

But attracting investments from foreign-owned companies remains a high priority for policymakers throughout the region. Why?

The most obvious reason is that new investments spur job growth. For much of its history, the South has trailed the nation in just about every measure of economic development. In a recent interview with EconSouth, Busbee spoke about the region's economic condition in the '70s: "We didn't have a lot of capital in the Southeast. There was not much incentive for industries in the United States to move from North to South." For elected officials throughout the region, then, foreign companies were simply one more source of desperately needed capital and employment.

But the first wave of foreign investment in the '70s brought something else that had been in short supply in the South: prestige. If a global manufacturer saw fit to locate a facility in the South, the thinking went, then reluctant U.S. investors outside the region ought to as well. "Foreign investment helped us attract a lot of companies from the Northeast," Busbee said. "It changed their perception."

As the region has experienced explosive job growth and massive in-migration during the past two decades, these initial motivations for attracting foreign companies are no longer as urgent. Now states tend to look for foreign investment that will introduce new industries and the productivity advances these industries may bring. For instance, Alabama attracted the Mercedes plant, which paved the way for Honda and dozens of other auto-related employers that, in an earlier time, would scarcely have considered locating in the region.

Doing business in the South

But apart from the existence of an industrial critical mass — or governments' commitment to creating it with incentives — there must be more fundamental reasons for a firm to invest in an area. For most foreign firms, locating a facility in the United States provides marketing and operational advantages. The United States is the world's biggest economy — larger than the world's second- and third-largest economies, Japan and Germany, combined — so it affords a foreign firm vast marketing opportunities. Locating in the United States can also, for some industries, produce operational advantages such as cost savings for production, tariffs and transportation.

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PHOTO COURTESY OF MERCEDES-BENZ U.S. INTERNATIONAL

The South offers a number of marketing advantages. Recent migration patterns in the United States generally have been from the Northeast and Midwest to the Southeast and Southwest, and the Southeast has dominated in housing starts and job creation. This economic boom is giving the South a marketing edge over other regions. For example, newly prosperous Southerners have shown a propensity, despite the near total absence of snow in the region, to snap up the latest sport utility vehicles. So it simply makes good sense, from a marketing standpoint, for Mercedes, BMW and Honda to manufacture SUVs in the South.

It makes sense from an operational standpoint too. For one thing, despite its recent economic growth spurt, the South remains among the nation's least expensive regions for doing business. Unions have a much smaller presence here than in the rest of the country, and labor costs are lower although real wages are good. Also, because much of the South remains rural and agricultural, land costs and taxes — especially property taxes — are lower too. But these lower economic costs have not come at the expense of a degraded physical infrastructure. In fact, trucking and rail services are highly competitive throughout the South, and each of the Sixth Federal Reserve District's six states has at least one inland or coastal port.

Let's make a deal

In those few instances when the South hasn't measured up — economically or otherwise — its policymakers have shown a remarkable willingness to do whatever it takes to get the deal done. Exhibit A is Alabama's $250 million incentive package to Mercedes in 1993. And while the state's offer to Honda didn't match the Mercedes package, it simply didn't have to. The Mercedes deal had already succeeded in bringing more of the automobile industry into Alabama, and that industry presence and infrastructure, as much as the government incentive program, surely played a part in Honda considering a presence there in the first place. So Alabama's lower dollar offer to Honda does not signal a drop-off in interest. Indeed, Southern development officials remain as zealous as ever in their courtship of foreign investment.

Worth the effort

Is foreign investment worth the efforts states are making to attract it? For the South, the answer is "yes." But states seeking foreign investors need to be aware of the potential downside. The so-called winner's curse may still afflict states that have overpaid for jobs and investment, whether foreign or domestic. In addition, the arrival of high-tech foreign employers, coinciding as it has with declining employment in traditional industries like apparel, has made for some very uncomfortable choices for congressional leaders in the area of trade policy. From a trade policy perspective, comparative advantage is an all-or-nothing proposition: one cannot welcome the jobs created by foreign investment and at the same time demand that foreign firms not compete with U.S. firms. But many political and business leaders are still trying to have it both ways.

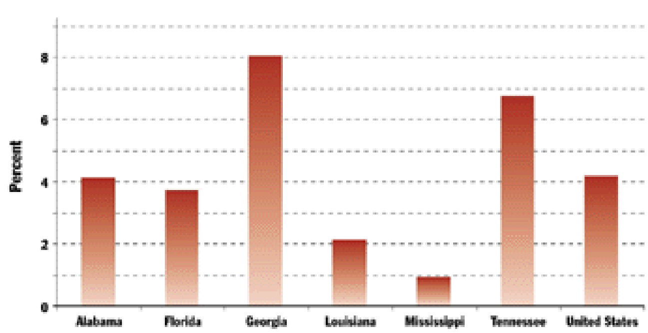
The South offers a number of marketing advantages. Recent migration patterns in the United States generally have been from the Northeast and Midwest to the Southeast and Southwest, and the Southeast has dominated in housing starts and job creation. This economic boom is giving the South a marketing edge over other regions.

Ultimately, despite these potential drawbacks, the case for foreign direct investment is strong, and the attention given it two decades ago by Gov. Busbee and others now appears prescient. Although foreign firms still account for only a small percentage of businesses in the United States, the cumulative impact of foreign development has far exceeded mere numbers. Foreign investment has transformed the South in the eyes of the world and brought new industries into the region.

The Problem of Scorekeeping

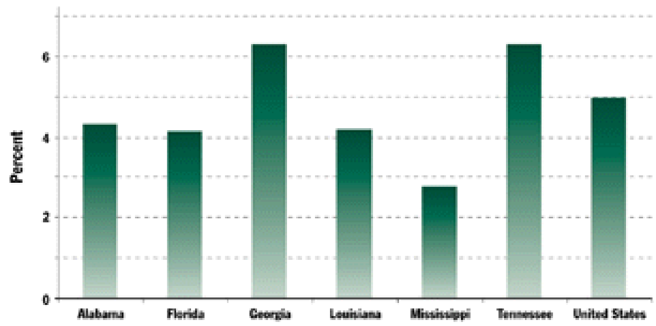
For many Southern economic development officials, attracting foreign investment may seem less like a courtship and more like a contact sport — one that's very difficult to score. State economic development agencies generally count development announcements. While a company is more likely than not to herald a new project or expansion, in some cases plans are not announced, especially if additional real estate investment is required. These unannounced projects, of course, won't be counted, and sometimes even announced projects can be overlooked.

CHART 1
Foreign-Owned Development Annoucements as a Percentage of Total Annoucements, Average 1991–98*



*Include facilities that meet at least one of these criteria: (a) involve a capital investment of at least $1 million, (b) creat at least 50 new jobs or (c) add at least 20,000 square feet of new floor area.
Source: *Site Selection* magazine

CHART 2
Foreign Affiliate Employment as a Percentage of Total Private Industry Employment, Average 1991–96*



*1996 is the last year data were available from the Department of Commerce.
Source: Department of Commerce

In addition, which announcements are tallied can vary from state to state. New manufacturing announcements are supposed to be counted, but manufacturing expansions may not be, nor may new nonmanufacturing announcements. Also, sometimes announcements that have already been counted are not consummated: as conditions within a company or its home country change, so may the feasibility of a project in the United States. State development agencies rarely retract an announcement when a project falls through.

All of these factors make it difficult to determine with precision how successful states have been in recruiting foreign investment. However, Site Selection magazine's annual state-by-state compilation of new corporate facilities and expansions, which breaks out foreign investment separately for analysis purposes, may serve as a general barometer (see Chart 1). The magazine's totals include nonmanufacturing facilities and other investments not traditionally heralded by development authorities, but the consistency of the data among states makes this information useful.

The Department of Commerce's Bureau of Economic Analysis does not publish foreign direct investment data on a state-by-state basis. But the department does publish information on state-by-state employment by foreign affiliates (see Chart 2).

As the charts reveal, the percentage of total private industry employment accounted for by foreign affiliates in the Sixth Federal Reserve District approximately parallels the percentage of foreign investment announcements. Georgia ranked first in the region in both of these measures, followed by Tennessee. Based on the sheer size of its economy, Florida ranked high in the total number of foreign investment announcements and employees but ranked toward the middle of the pack in percentage levels in each category. And while Alabama has lured some high-profile foreign companies in recent years, it still has some ground to make up to overtake Georgia and Tennessee.

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INTERNATIONAL FOCUS

Responding to Global Crises: Dollarization in Latin America

The Latin American region has been the subject of much conversation recently as financial crises spread across the globe. In an effort to provide stability to their economies, several Latin American countries have considered adopting the U.S. dollar as the official currency. While adopting the dollar has its benefits, it also has potential drawbacks.

As economists struggle to explain the development and the spillover potential of financial crises, policymakers and economic advisers search for ways to protect their economies from the devastating effects these crises can cause. A number of proposals have been put forward. These include creating a new international financial architecture, instituting capital controls, applying stricter monetary and fiscal policy regimes, and implementing outright dollarization of an economy. Recently this last proposition has drawn significant attention as a potential scenario in certain Latin American countries. But there is much to consider before a country dollarizes its economy.

What is dollarization?

Dollarization is a process in which a country adopts — in whole or in part — the U.S. dollar as its official currency. In a totally dollarized economy, the U.S. dollar is made the only medium of exchange, store of value and unit of account; that country's national currency ceases to exist. Today, Panama is the only country in Latin America that is totally dollarized; it has been since 1904. A country that has totally dollarized has eliminated the monetary policymaking role of its central bank. Without a national currency to manage, the country's monetary policy is, in effect, put into the hands of the Federal Reserve in the United States.

Dollarization is a process in which a country adopts — in whole or in part — the U.S. dollar as its official currency.

Limited dollarization occurs when U.S. dollars circulate alongside a country's national currency. In this arrangement, the domestic currency continues to serve to some degree as a medium of exchange, store of value and unit of account. Limited dollarization exists in many countries throughout the world, notably in Latin America.

A recent International Monetary Fund study (Occasional Paper 171) estimated that in 1998 dollar deposits were at least 50 percent of domestic money supplies in seven countries around the world, between 30 percent and 50 percent in 12 countries, and between 15 percent and 20 percent in several other countries. Outside of Panama, Bolivia is the most significantly dollarized economy in Latin America, with a ratio of 82 percent; Argentina is next with a 44 percent ratio.

Paths to dollarization

There are two ways a country's economy can become dollarized. A de facto dollarization can occur when citizens lose faith in their national currency and turn away from it toward the dollar. This situation can develop for any number of reasons, including hyperinflation or a significantly negative outlook for inflation and suspicion that economic policies may not safeguard the national currency's value.

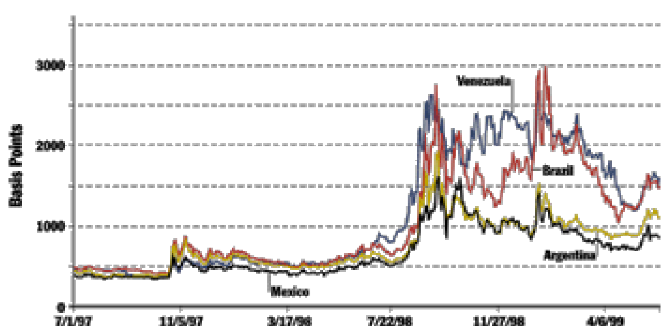
This course has occurred in many Latin American countries. Although most Latin economies are making significant attempts to institute and solidify policy credibility and have made impressive headway in limiting inflation, these initiatives are recent, most having been applied over the past decade. Thus, these beneficial policies simply do not have a long enough track record to wholly convince citizens in these countries that their national currencies' role as a store of value is permanent. In any of these countries, when economic conditions worsen or when the political outlook becomes more clouded, doubts may arise regarding the currency's future value. In other words, the probability of devaluation rises, and more citizens shun the national currency in favor of the historically more stable U.S. dollar.

Another path to dollarization occurs when a foreign government makes a conscious decision to re-place its own currency with the U.S. dollar. In a totally dollarized economy, this replacement affects all transactions. In a country with limited dollarization, this policy shift can take the form of allowing residents to hold dollar-denominated accounts.

The benefits of dollarization

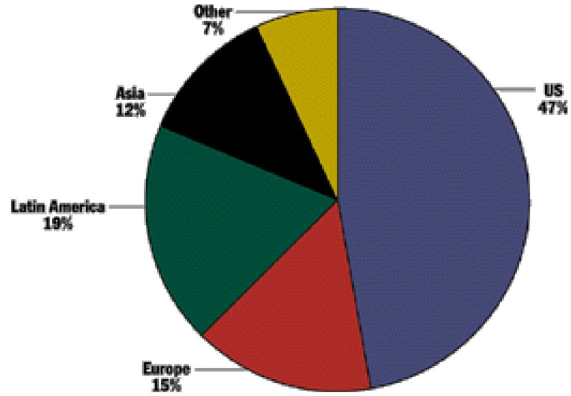
Total dollarization nearly eliminates the possibility of a currency devaluation. The threat of devaluation has been a major concern for many people and businesses holding assets in Latin American currencies in the wake of recent international financial crises in Asia and Russia. The capital flight from many Latin countries in 1998 and early 1999 came about because asset holders there appeared to believe that these international crises threatened economic stability. Many of those with access to international financial markets moved to exchange national currencies for dollars or other foreign currencies.

CHART 1
Spreads Between Brady Discount Bonds and Five-Year U.S. Treasury Notes



Source: BankBoston and Federal Reserve Bank of Atlanta's Latin America Research Group

CHART 2
Latin American Trading Partners*



*Percentages include imports and exports

Another reason for purposely dollarizing an economy is to limit the possibility of high inflation. By dollarizing, a country adopts U.S. monetary policy as its own. As long as U.S. monetary policy is prudently managed, the inflation environment in the dollarized economy should remain subdued.

A history of high inflation and policy volatility are often prevalent in countries that are partially dollarized and are main reasons behind their dollarization in the first place. The high interest rates in such countries reflect inflation expectations and, at the same time, restrain real economic activity. By importing benign U.S. inflation, dollarized economies also import lower interest rates that often closely track U.S. rates.

Chart 1 shows that interest rates in Latin America skyrocketed in the wake of the Asian financial crisis in the fall of 1997, again following the Russian default in August 1998, and again in January 1999 as Brazil devalued its currency. The chart shows the spread between selected Latin American Brady bond yields and comparable yields on U.S. instruments. An increase in the spread indicates that investors allotted an increased risk to holding Latin American debt. Dollarization arguably could reduce this spread to nearly zero because the threat of devaluation and the resulting pressure on international payments would be significantly diminished.

In addition to deterring devaluation and inflation, dollarization reduces the transaction costs associated with international trade and finance with the United States, which is the most important trading partner for Latin America as a whole (see Chart 2). Eliminating currency conversion would allow trade to flow more easily.

Dollarization should not be viewed as a panacea for an environment created by economic mismanagement, however. Developing policy credibility to a point at which residents have sufficient confidence in the currency takes decades of prudent fiscal and monetary policies, uninterrupted over many administrations and supported by major political parties. Since most Latin American nations are in their first decade of real and sustained economic reform, their policy credibility is still being built. Dollarization in this environment should be viewed on a case-by-case basis.

The costs of dollarization

Dollarization also implies some costs to the economy of a country that adopts it. A dollarizing country relinquishes several important policy instruments. For one, monetary policy in a dollarized economy is made by the Federal Reserve in the United States. The Federal Reserve's policy mandate is domestic, and the U.S. economic outlook chiefly dictates its policy decisions.

Of course, the United States is not a closed economy. The Federal Open Market Committee (FOMC), the Federal Reserve's policymaking body, cannot ignore developments in the global economy that may affect the United States. But the FOMC bases its decisions on considerations about the welfare of the United States and its

ATLANTA FED CHIEF ON THE FEDERAL OPEN MARKET COMMITTEE'S GLOBAL ROLE

citizens, not about the welfare of countries that have dollarized. The role of the Federal Reserve and its domestic mandate in a highly globalized economy remain important issues, issues that Jack Guynn, president and chief executive officer of the Federal Reserve Bank of Atlanta, noted in a speech last year (see the sidebar on page 17).

A country's decision to dollarize its economy does not require the permission of the U.S. government or the Federal Reserve. But chief policymakers at both the Fed and U.S. Department of the Treasury have stated that the policies of the United States will not be altered to adapt to the economic considerations of countries that choose to dollarize. So foreign governments that may be considering full dollarization must do so with the understanding that U.S. monetary policy will remain focused on domestic issues.

Jack Guynn, president and chief executive officer of the Federal Reserve Bank of Atlanta, discussed the Federal Open Market Committee's policy mandate in a speech to the Money Marketeers of New York University in September 1998.

> Guynn said, "The mandate of the FOMC is chiefly domestic. We're charged with delivering the best economic conditions we can as defined by, among other things, the inflation rate, GDP growth, the unemployment rate and the safety and soundness of the banking system in the United States. But the policy environment in which we attempt to achieve this mandate is global. No economic condition in any part of the world can be considered exogenous. And any action intended to produce a strictly domestic result is almost instantly transmitted around the globe and may or may not be countervailed by a concomitant change in international economic conditions.
>
> "Globalization complicates the policy environment," he said. "It presents enormous opportunities for capital. But it also presents equally formidable challenges for those of us whose job it is to sort it all out, to take advantage of it or to understand where the policy action is. In the global economy, our policies are more influential than ever, although the equation through which we calculate them is more complex. Understanding that equation is the challenge."

Countries debating whether to dollarize should also consider how reversible that policy would be. Although a government can always choose to end its dollarization policies, the risk of financial instability from this move would be a powerful force working against reversing dollarization.

There is also a measurable monetary cost, called lost seigniorage, involved with forgoing a national currency. Seigniorage is the revenue gained by issuing currency. Governments that dollarize will give up the benefits of seigniorage, although this total benefit is estimated to be less than 1 percent of gross domestic product (GDP) in most countries.

Adopting the dollar as the official currency has both political and economic ramifications for a nation. The loss of sovereignty that accompanies the surrender of monetary policy control, the national currency and the central bank is likely to spark opposition within a country. Such opposition is evident in some Latin American countries where the dollarization debate is under way.

Although the business community in many of these nations appears to back dollarization, other segments of society may view the loss of sovereignty as too great a price despite the economic benefits. The outcome of this debate will be one of the most important economic developments in Latin America in the near term.

Dollarization also implies some costs to the economy of a country that adopts it. A dollarizing country relinquishes several important policy instruments. For one, monetary policy in a dollarized economy is made by the Federal Reserve in the United States. The Federal Reserve's policy mandate

Who should dollarize?

Although dollarization may not be feasible for all economies, it would seem to benefit some. Small, open economies that are particularly vulnerable to international shocks may find that adopting a high level of dollarization or pegging their currency to the U.S. dollar can help prevent extreme exchange-rate variations that can harm their economies.

Countries with strong international trade and financial ties to the United States are also among those better equipped to seriously consider dollarization. Transaction costs between such countries and the United States should be reduced by dollarization, and this reduction could help develop even stronger ties through other economic arrangements.

is domestic, and the U.S. economic outlook chiefly dictates its policy decisions.

This advantage is particularly important for Latin America, which has a stronger trade relationship with the United States than with any other country or region. The move toward a Free Trade Area of the Americas has dropped from the headlines because of international financial crises and political developments in the United States. Dollarization could lead to the deepening of trade relationships that may integrate the hemisphere. Latin American countries stand to gain the most from such a development.

In Latin America, the cases of Argentina, Mexico and Brazil highlight the current dollarization debate. Argentina has stated officially that it would like to totally dollarize its economy. The country instituted a currency board in 1991 in response to hyperinflation and a lack of policy credibility. Despite its fixed exchange rate and constitutionally self-imposed restrictions on issuing currency, Argentina still finds itself buffeted by international shocks.

Because the Argentine peso circulates along with the dollar, the chance of devaluation remains a possibility in spite of Argentine policymakers' hard work to assure investors and peso holders that such a currency realignment would never happen. Therefore, the country's interest rates maintain a notable spread over comparable U.S. instruments (see Chart 1). Argentina's economy is not small, nor does it have extensive ties with the United States. The fact that it has successfully operated a currency board arrangement for much of the last decade, however, goes a long way toward enhancing Argentina's drive toward full dollarization.

In Mexico, business leaders recently petitioned President Zedillo to move toward fully dollarizing the nation's economy. The continuing effects of Mexico's peso crisis in 1994 and 1995, coupled with the strong economic ties between the United States and Mexico, make the dollarization debate there more lively. The loss of sovereignty that accompanies dollarization is a difficult political hurdle in Mexico at present. Despite Mexico's apparent hesitancy, Central American countries are actively considering a move toward dollarization, and their leaders plan to meet in July to formally discuss the idea.

Brazil shows no interest in pursuing official dollarization despite its recent economic troubles and hyperinflationary bouts in the 1980s and early 1990s. Brazil's economy is the largest in Latin America. Its trade and financial ties with the United States are as strong as those of many other South American economies, but its economy remains comparatively closed, with total exports accounting for roughly 7 percent of GDP.

Dollarization and U.S. business

Businesses in the United States could benefit from dollarization in countries that are trade partners. Like the dollarizing countries, U.S. companies doing business in these countries would see transaction costs decrease. Currency conversion could be eliminated, and the administrative costs associated with international trade and investment would decrease. As long as the

DEFINING TERMS IN THE DOLLARIZATION DEBATE

Currency Boards

- Domestic currency is converted to the reserve currency on demand at a fixed exchange rate.
- Monetary policy is automatic. If investors switch out of domestic currency into dollars, the supply of domestic currency will automatically shrink. This decline will cause interest rates to rise until it becomes attractive for investors to hold local currency again.

Total Dollarization

- The process involves adopting the U.S. dollar as the official currency. The national currency unit ceases to exist.
- Monetary policy is made by the Federal Reserve in the United States with no formal input from officials in the dollarized economy.

Monetary Union

- Members of a monetary union agree on a common currency, either by adopting an existing one or issuing a new currency altogether.
- Monetary policy is made collectively, with input from each member of the union.

U.S. economy is stable, full dollarization should diminish the kind of currency volatility that restricts investment and curtails deeper economic ties.

Businesses in the United States would also benefit from the expected fall in inflation and interest rates in dollarized economies because these developments should, in turn, lead to faster rates of economic growth in these countries. The stronger consumption and increased sales this growth would spark could improve the performance of U.S. businesses that export to the dollarized markets.

To dollarize or not to dollarize

Dollarization is one proposition currently under consideration as a means to prevent, limit or contain the kinds of financial crises that have swept the globe during the past two years. Countries considering dollarization need to undertake a careful cost-benefit debate, weighing the benefits against the resulting loss of sovereignty and the realization that monetary policymakers in the United States have a domestic focus, considering international issues only insofar as they affect U.S. economic conditions.

Not all countries appear suited for dollarization. The current debate in Argentina about dollarization deserves attention, as do increasing discussions in several other Latin American countries. The immediate implications for the U.S. economy are not profound, although widespread dollarization throughout the hemisphere would focus attention on the appropriateness of the Federal Reserve's domestic mandate in such an environment.

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

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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.

Economic models can shed light on crime

Polls identify crime as the number one public worry. Crime also exacts tremendous costs not factored into official measures of well-being, and it is a favorite subject of politicians' campaign promises. But the public seems largely unaware that crime responds to economic conditions and incentives and that a number of studies by economists have important implications for public policies related to crime.

In a recent article, Zsolt Becsi, an Atlanta Fed economist, introduces the economics and crime literature by describing a simple supply-and-demand crime model in which criminals supply crime, the public demands protection from crime and the government provides public protection. He uses the model to show how crime responds to a variety of demographic and economic factors and what results to expect from public policy proposals.

Using state data from 1971 to 1994, the author outlines broad regional differences and trends in the patterns of crime in the United States. While in the 1990s crime has fallen dramatically nationwide in almost all categories, not all regions have benefited equally. In particular, southeastern states have seen distinct worsening in crime rates relative to other regions.

The author points out some measurement problems with crime data, such as underreporting and undercounting of crimes, that must be considered when interpreting these data. To help control for such problems, he focuses part of his analysis on data categories that are less subject to these measurement problems.

Becsi also cautions that correlations between crime and possible explanatory factors can be distorted by the aggregation of data over time. To deal with this problem, he subjects the data he analyzes to a panel regression approach that estimates the effects of demographic and economic variables on crime over time.

Becsi's analysis suggests several policies that could help alleviate crime, including providing unemployment insurance, increasing welfare expenditures and increasing imprisonment rates.

The results of his analysis mirror those of some other researchers. Generally, the demographic and economic variables explain crime rather well, and estimates for the most part conform to the economic model of crime.

ECONOMIC REVIEW
FIRST QUARTER 1999

Former Fed president leaves a legacy for monetary policy debate

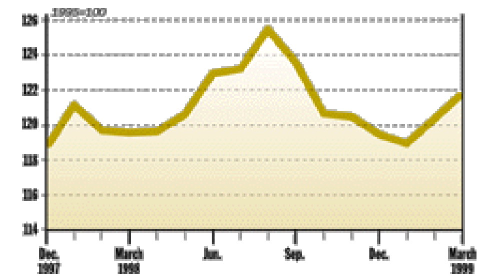
Monetary policy was freed from the straightjacket of pegging U.S. Treasury interest rates following the Treasury-Federal Reserve Accord in 1951. This newfound freedom led to a growing debate inside and outside the Federal Reserve System about the appropriate measures to use as operating guides. A recent article by Atlanta Fed visiting scholar R.W. Hafer examines the contributions of Malcolm Bryan, president of the Atlanta Fed from 1951 through 1965, to this debate and to the evolution of monetary policy since the 1951 accord.

Bryan parted company with most of his colleagues on the Federal Open Market Committee (FOMC) by trying to steer policy away from a focus on interest rates and money market conditions to placing more weight on the monetary aggregates. Hafer reviews the transcripts of the committee meetings during Bryan's tenure, which reveal Bryan's concerns about preventing the disruptive effects of short-run fluctuations in money growth and the longer-term effects of expansive Fed actions — namely, inflation.

Bryan's approach to monetary policy was a dramatic departure from the prevailing views of the FOMC at the time. He took the new and controversial research results coming out of monetary economics and tried to implement them. His contributions went beyond merely implementing others' ideas, however. His introduction of short-run aggregate growth targets — growth cones — stands out as a significant and innovative development in U.S. monetary policy. Even though Bryan's targets and procedures were not adopted by the FOMC at the time, his strategy for monetary policy would resurface as the inflation produced by the policies he fought against became unacceptable.

Hafer also notes that Bryan's contribution is important from a larger perspective. Bryan's willingness to advocate a controversial view within the FOMC promoted an airing of diverse views and concerns that helped foster an environment in which alternative theories and approaches to economic analysis could be used for improving monetary policy.

ATLANTA FED DOLLAR INDEX



After falling slightly in January, the dollar rose moderately in February and March versus the 15 major currencies tracked by the Atlanta Fed. Most of this movement was due to changes versus the European and Asian currencies. The upturn reversed the dollar's steady decline since August 1998.

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/index.html.

ECONOMIC REVIEW
FIRST QUARTER 1999

A simple model provides lessons on practical forecasting issues

Constructing forecasts of the future path for economic series such as real gross domestic product growth, inflation and unemployment is vital to applied economic analysis for business and government. Model-based forecasts are easier for independent researchers to replicate and validate than forecasts in which expert opinion is used to adjust a model's results. In addition, the forecaster can formally investigate the source of systematic errors in model forecasts, and a forecast model's performance can be established before it is used by a decision maker.

A recent article by John C. Robertson and Ellis W. Tallman, senior economists at the Atlanta Fed, describes a particular model-based forecasting approach. The model studied is a vector autoregression (VAR) comprising six U.S. macroeconomic variables. The idea underlying forecasting with a VAR model is first to summarize the dynamic correlation patterns among observed data series and then use this summary to predict likely future values for each series.

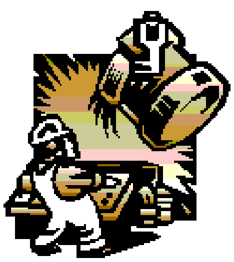
Robertson and Tallman discuss various methods that attempt to improve VAR forecast accuracy and then provide some empirical evidence that compares the accuracy of forecasts created using these various techniques.

The authors also focus particular attention on the technical hurdles that must be addressed in a real-time application of their model and methods for overcoming those hurdles. The solutions to these technical problems include conditional forecasting to handle the staggered release of data and matching quarterly with monthly data.

In emphasizing the practical problems of forecasting economic data using a statistical model, Robertson and Tallman draw on experience in using such a model at the Federal Reserve Bank of Atlanta. Although the model studied is small and highly aggregated, it provides a convenient framework for illustrating several practical forecasting issues. The focus on a simple model provides potential users with a road map of how one might implement such a forecasting model in specific applications.

THE STATE OF THE STATES

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

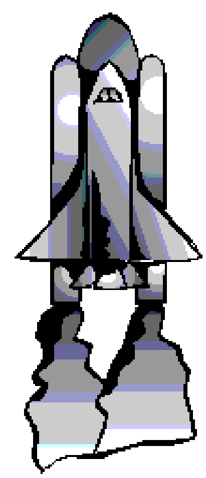


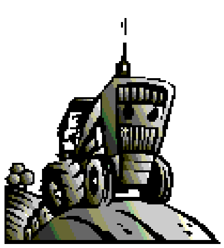
Alabama

- Alabama is adding jobs at about the same rate as the nation, and employment in the state has more or less tracked the nation's performance since last summer. The state's construction sector is currently very strong, with considerable growth focused in Birmingham.
- Ongoing contraction in Alabama's manufacturing sector is led by losses in apparel. But Birmingham is defying state and national trends, showing some net manufacturing employment gains, although month-to-month numbers remain volatile.
- The steel industry continues to suffer from intense foreign competition, particularly from Pacific-basin countries.
- The aerospace industry, based in the Huntsville area, remains quite strong.

Florida

- The cruise business is still the hottest segment of Florida's strong tourist industry. Virtually every major cruise line operating in the state has at least one new ship on order, suggesting that growth is expected to continue in that industry. Tourism in central Florida continues to expand, adding more jobs in an already robust market.
- The state's economy as a whole is outperforming both the district's and the nation's, with only the Miami area expanding at a slower rate than the nation.
- The state's aerospace industry, centered in the Melbourne area, remains strong, and the outlook for the industry is solid.

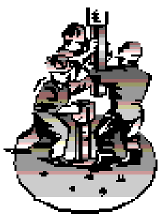




Georgia

- Georgia's payroll growth is slightly outperforming the district's, with Atlanta and the rest of the state nearly matching in performance since the beginning of the year. In contrast to its stagnation in the district and decline nationally, manufacturing employment in Georgia continues to grow at around 1 percent year over year.
- While Atlanta's single-family housing growth was relatively flat year over year in 1998, Georgia still led the nation last year in the number of single-family housing permits. The state's overall permits remain at a high level even though growth has been flat in 1999.

" Agricultural commodity prices are still low although cotton prices have recovered somewhat from 1998. The Vidalia onion crop is small compared with last year's because of weather-related problems.

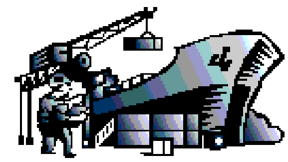


Louisiana

" Some rebound in oil prices has helped stabilize drilling, slowing the downturn in exploration in the state. But prices have not been high enough for a long-enough period to engender sufficient confidence to resume oil field development.

" New Orleans' economy continues to be weaker than the rest of the state's, which is expanding at rates similar to the nation's. Baton Rouge, on the other hand, has shown notable strength in services, wholesale and retail trade, and government employment.

" While the U.S. Defense Depart-ment did not support the proposed acquisition of Newport News Shipbuilding by General Dynamics because of concerns over industry competition, Newport News announced that it will continue with its plans to merge with Louisiana's Avondale Industries, a move that has received antitrust clearance from the Justice Department.



Mississippi

" The gambling industry remains a major source of growth for the Gulf Coast with the opening of the largest single casino project to date. This expansion has led AirTran Airways to establish commercial flight service from sev-eral southern cities to the Gulfport-Biloxi Regional Airport.

" While Mississippi's manufacturing sector employment levels have declined slightly overall, the state is adding jobs in areas that are not directly benefiting from the gaming sector's strength.

" Auto component manufacturing is beginning to pick up in the northern portion of the state.

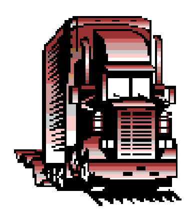
Tennessee

" Conditions in the state's labor markets, which had been among the tightest in the nation, have abated somewhat, particularly recently in east Tennessee. Nashville continues to suffer from labor pressures, especially for skilled employees.

" A shortage of qualified truck drivers is forcing some trucking firms in central Tennessee to leave part of their capital idle, a problem that has occurred to a lesser extent in some other parts of the district.

" Dell Computer announced that it is locating a new computer assembly center in the greater Nashville area.

" Diminished demand for synthetic fiber products has led to industrial layoffs in the eastern part of the state.



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

Southeastern Economic Indicators

		Alabama	Florida	Georgia	Louisiana	Mississippi	Tennessee	6th District	United States
Total Payroll Employment (thousands)[a]	1999Q1	1,929.2	6,824.0	3,815.0	1,911.0	1,135.8	2,648.5	18,263.3	127,560.7
Percent change from	1998Q4	0.5	0.7	0.8	-0.1	0.1	-0.2	0.5	0.6
Percent change from	1998Q1	2.2	3.9	3.2	1.7	0.9	1.2	2.8	2.2
Manufacturing Payroll Employment (thousands)[a]	1999Q1	373.8	497.9	596.1	191.5	242.3	508.1	2,409.8	18,487.0
Percent change from	1998Q4	-0.5	0.0	0.0	-0.1	-1.0	-0.4	-0.3	-0.5
Percent change from	1998Q1	-1.7	1.0	1.0	-0.6	-0.9	-2.0	-0.4	-1.8
Civilian Unemployment Rate	1999Q1	4.1	4.2	4.1	5.3	4.9	4.3	4.3	4.3
Percent change from	1998Q4	0.0	1.6	2.5	0.0	-6.4	4.9	0.7	-2.3
Percent change from	1998Q1	-7.6	-3.8	-7.6	-7.6	-13.1	-3.0	-6.4	-7.2
Single-Family Building Permits (units)[b]	1999Q1	15,786	107,321	72,135	14,568	10,286	30,118	250,214	1,287,833
Percent change from	1998Q4	-0.8	6.2	-4.7	-6.4	6.1	2.9	1.2	0.8
Percent change from	1998Q1	14.1	14.2	14.1	9.8	33.0	9.3	13.9	10.0
Multifamily Building Permits (units)[b]	1999Q1	4,964	66,998	17,537	3,907	3,212	4,177	100,796	488,957
Percent change from	1998Q4	7.6	3.4	-28.5	182.2	-42.6	-35.0	-6.1	4.7
Percent change from	1998Q1	-0.8	45.4	-25.2	111.2	10.3	-49.3	15.1	5.3
Personal Income ($ billions)[b]	1998Q4	94.7	394.0	196.1	94.6	53.3	130.4	963.0	7,282.1
Percent change from	1998Q3	0.9	1.3	1.5	1.2	1.5	1.3	1.3	1.5
Percent change from	1997Q4	4.5	6.3	7.6	4.2	5.9	4.9	5.9	5.6

		Atlanta	Birmingham	Jacksonville	Miami	Nashville	New Orleans	Orlando	Tampa
Total Payroll Employment (thousands)[a]	1999Q1	2,082.0	481.4	545.1	985.8	657.6	628.8	865.6	1,166.5
Percent change from	1998Q4	0.9	0.9	1.2	0.0	0.7	0.2	1.2	1.5
Percent change from	1998Q1	3.4	2.4	4.0	1.7	1.8	1.8	5.2	5.8

Civilian Unemployment Rate	1999Q1	3.3	2.7	3.0	6.7	2.8	4.4	3.0	2.9
Percent change from	1998Q4	5.7	-3.8	0.4	2.7	1.1	-1.3	1.4	1.0
Percent change from	1998Q1	-5.4	-6.9	-7.6	-0.6	-2.2	-10.5	-3.8	-10.7

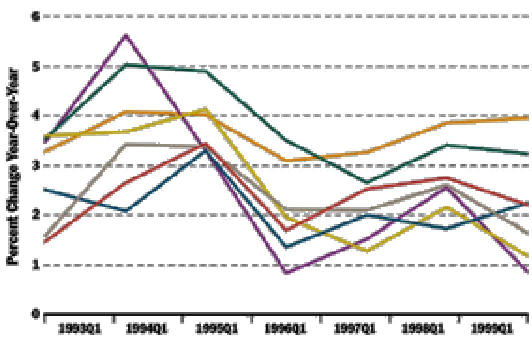
[a] Seasonally adjusted

[b] Seasonally adjusted annual rate

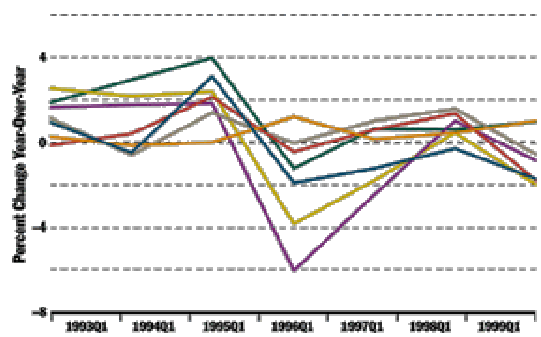
Sources: Payroll employment and civilian unemployment rate: U.S. Department of Labor, Bureau of Labor Statistics. Initial unemployment claims: U.S. Department of Labor, Employment and Training Administration. Single- and multifamily building permits: U.S. Bureau of the Census, Construction Statistics 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



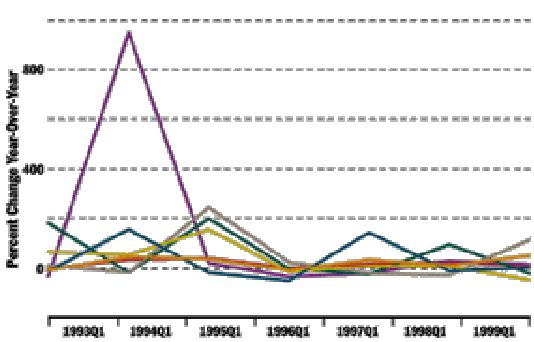
Manufacturing Payroll Employment



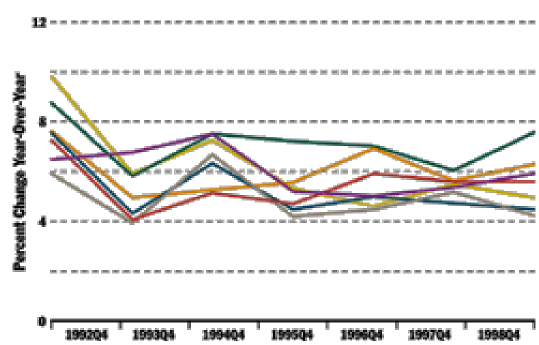
Civilian Unemployment Rate

Single-Family Building Permits

Multifamily Building Permits



Personal Income



Alabama

Florida

Georgia
Louisiana
Mississippi
Tennessee
United States

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Southeastern Manufacturing Survey

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

"Current indicators for the region's manufacturing activity generally eased in April after notable gains the previous month.

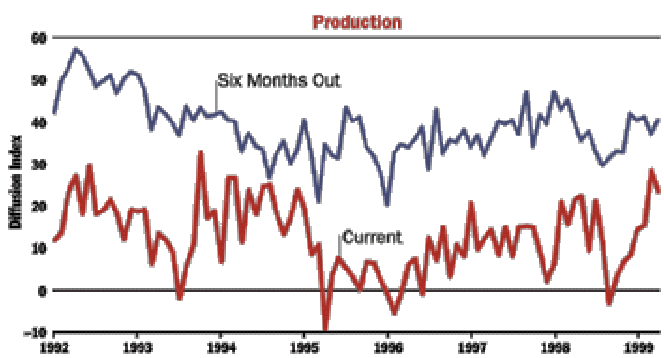
"The current production index edged down to 23.5 from 28.3 in March.

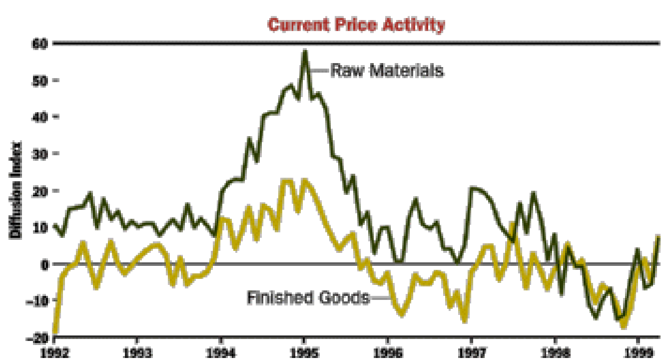
"Other indexes of current activity declined or were little changed. The indexes for backlog orders and the number of employees declined. The new orders index dipped only slightly, and the shipments index fell after a sharp boost in March. The materials inventories index fell to its lowest level since June 1995.

"Current price indexes, which have been volatile but stronger recently, turned positive. The prices received index reached its highest level since July 1997, and the prices paid index reached its highest level since January 1998.

"Outlook indexes were mixed but at moderate levels. The indexes for production, shipments, new orders and backlogs rose slightly. Both the number of employees and the average workweek indexes slipped after notable gains in March. The materials inventories index turned negative. The prices received index posted its fourth consecutive increase, while the prices paid index jumped sharply after a sizable drop in March.

SOUTHEASTERN MANUFACTURING INDICATORS
(through May 1999)





For more complete, monthly information see the Southeastern Manufacturing Survey index.