The Economy in Perspective

Laboring under a false impression ... If inflation is, as Milton Friedman once said, always and everywhere a monetary phenomenon, why do so many Fed-watchers scan the labor market for clues to future inflation? Why do they think that the unemployment rate, the employment growth rate, or wage changes foreshadow inflation movements?

Two reasons come to mind: Some prominent economists say it is so, and history provides us with certain examples where it appears to be true. Nevertheless, it would be a mistake to think that labor market conditions *cause* inflation; accepting this idea uncritically could create serious misunderstandings about monetary policy.

In a simple textbook economy with a stable money-demand function, the monetary authority has the straightforward job of supplying a quantity of money that matches the amount demanded at the prevailing price level. Supplying too much or too little will eventually raise or lower the price level.

What happens if productivity improves? For the simplified economy as a whole, more output can be produced with the same amount of land, labor, and capital; as a result, the standard of living rises. When the real value of output expands, nominal spending increases at a constant price level. To accomplish this result, the monetary authority must enlarge the money supply to accommodate a greater value of transactions. In other words, noninflationary growth requires an expanding money supply.

The relative prices of various goods, services, and other necessities of production will change during the transition to the new equilibrium. Labor markets' response depends on the nature and magnitude of the initial impetus for change. For example, with technical progress, real wages may rise for some skills and in some regions, and decline elsewhere. Wage changes may affect peoples' inclination to look for jobs and their success at finding them. Another possibility is that workers take some of the productivity gain in the form of more leisure time (which could show up as an increase in parttime employment).

Suppose an innovation expands aggregate supply, making people wealthier in real terms. Their nominal demand for goods and services increases, and the monetary authority expands the money supply in an effort to steady the price level. Next, suppose the money supply increases more than necessary, but people don't realize it. They notice only that their nominal income and wealth are improving. As aggregate demand outstrips supply, markets for productive factors like raw commodities, land, and labor eventually become tight enough for most prices and wages to

rise persistently. This is the condition we call inflation, which, in the short run, exhibits a negative correlation with unemployment.

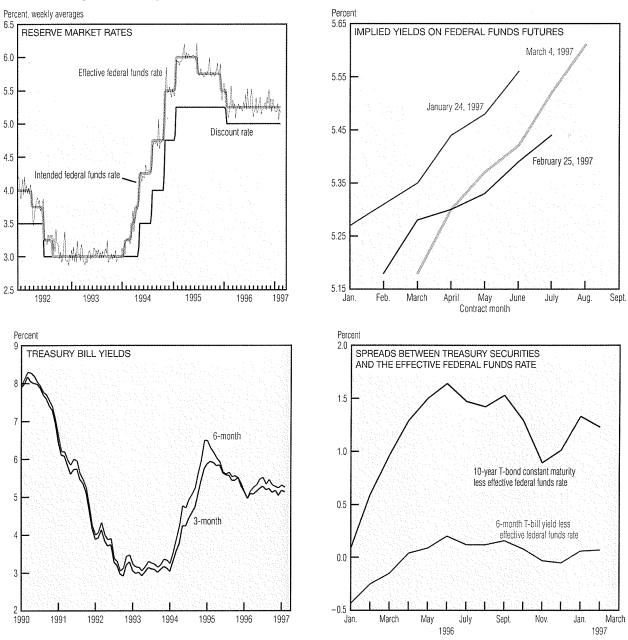
Now consider the connection between labor markets and monetary policy. The textbook economy features a natural rate of unemployment, which exists in equilibrium because of labor markets' structural characteristics. Inflation holds steady at the natural rate, but rises or falls as actual unemployment is driven below or above the natural rate by sustained shifts in aggregate demand relative to aggregate supply. There need be nothing special about the labor market in this example. In principle, natural rates of industrial capacity utilization, real estate vacancy, inventory stocks, and delivery lead times exist along with the natural rate of unemployment. Inflation is no more caused by tight labor markets than by shortages of office space or railroad boxcars.

As a practical matter, inflation forecasters have examined a wide variety of leading indicators at different times. Even a partial list would include gold prices, capacity utilization rates, the exchange value of the U.S. dollar, money growth, help-wanted advertising, unemployment insurance claims, industrial commodity prices, asset prices, surveys of inflation expectations, and long bond prices. None of these variables has proven an infallible leading indicator, because their underlying demand and supply functions have not been stable. Time and again, indicators that formerly seemed useful fail to hold up. Labor market variables are no exception.

The Federal Open Market Committee (FOMC) has been employing a federal funds rate operating procedure, providing whatever money growth the economy wants at the intended funds rate. If the FOMC felt confident that money demand was stable, it could rely more on money growth rates in assessing when—and how much—it should change its intended funds rate to control inflation. Instead, the FOMC recently has relied more heavily on nonmonetary attributes of economic activity to guide its actions.

Federal Reserve Chairman Alan Greenspan told Congress last month that there are some signs the M2 monetary aggregate may be reestablishing a stable relationship with nominal spending, in which case the FOMC would be willing to regard it more seriously. Such a development would be welcome on two counts. Having a reliable indicator of future inflation is desirable in its own right. Moreover, since monetary policy does *not* seek to restrain either employment or real wage increases, it would be helpful to replace rhetoric that unfortunately creates the contrary impression.

Monetary Policy



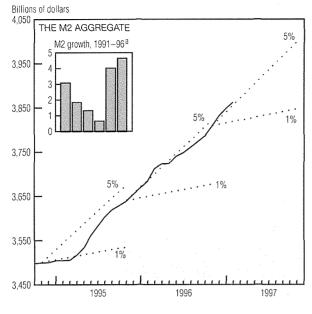
SOURCES: Board of Governors of the Federal Reserve System; and the Chicago Board of Trade.

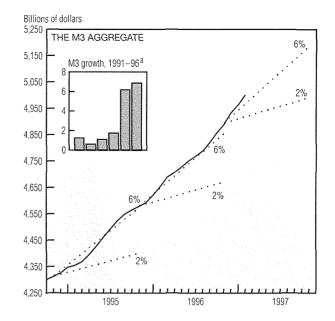
Mention monetary policy, and the first thing that many people think of is the federal funds rate. Thus, to the extent that the behavior of the funds rate is truly synonymous with monetary policy, the news from the latest meeting of the Federal Open Market Committee (FOMC) is no news: Subsequent to that meeting, the federal funds rate has remained in the 5-1/4% neighborhood where it has resided since January 1996.

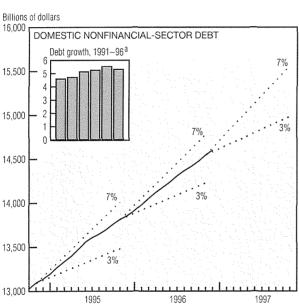
It is clear that market observers do not expect this stability to persist indefinitely. Implied yields on federal funds futures, which reflect expectations of future policy, suggest that investors are anticipating higher rates as the year proceeds. Although such expectations have in the past proved far from infallible—the higher rates expected to materialize during 1996 never did—the belief that a rate hike is imminent was undoubtedly bolstered by Chairman Greenspan's recent reminder that the "FOMC in fact has signaled a state of heightened alert for possible policy tightening since last July in its policy directives."

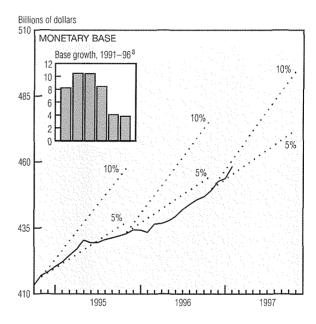
It bears noting that the absence of a federal funds rate change does not necessarily imply a constant monetary policy. A growing gap between market rates and the funds rate is likely to require changes in the growth rate of bank reserves supplied by the Fed, which in turn implies a change in the growth rates of the broader measures of money. No compelling sign of any such gap has developed, but it is worthwhile to remember that monetary policy is ultimately about the rate at which

Monetary Policy (cont.)









a. Growth rates are percentage rates calculated on a fourth-quarter over fourth-quarter basis.

NOTE: All data are seasonally adjusted. Last plot is estimated for February 1997. For the monetary base, dotted lines represent growth ranges and are for reference only. All other dotted lines are FOMC-determined provisional ranges.

SOURCE: Board of Governors of the Federal Reserve System.

the money supply expands, not about a narrow interbank interest rate (the federal funds rate) that monetary authorities employ to monitor money growth.

The FOMC chair's semiannual report to Congress, typically referred to as the Humphrey–Hawkins testimony, still reflects the fact that monetary policy is about money. As part of his report of February 26, Chairman Greenspan noted that "at its February meeting, the FOMC reaffirmed the provisional ranges set last July for money and debt growth this

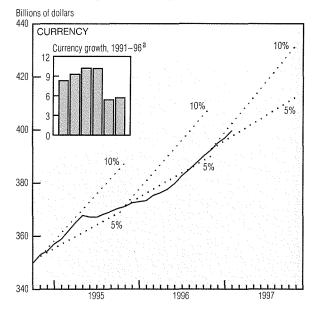
year: 1 to 5 percent for M2, 2 to 6 percent for M3, and 3 to 7 percent for the debt of domestic nonfinancial sectors."

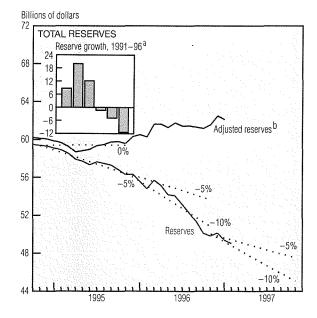
Although the Humphrey–Hawkins tradition of reporting monitoring ranges for these broad monetary aggregates continues, it is commonly recognized that the role of these money measures in the ongoing operations of monetary policy has diminished over time. At least part of the problem arises from the fact that measures like M2—which includes such bank liabilities as savings ac-

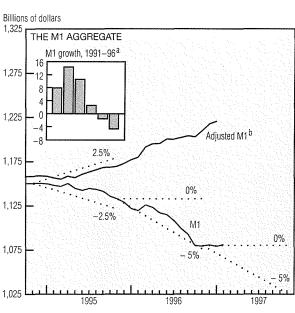
counts, money market mutual funds, and so on—are relatively far removed from direct control by the monetary authority.

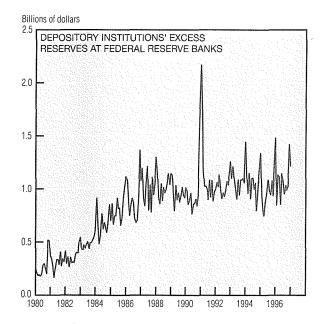
One measure of money more directly under the influence of monetary policy is the monetary base, which consists of currency held by the public plus bank reserves. However, even this measure can be problematic. The prime contributor to base growth in recent years has been currency growth, and it is unclear how much of this is attribut-

Monetary Policy (cont.)









- a. Growth rates are percentage rates calculated on a fourth-quarter over fourth-quarter basis
- b. Adjusted for sweep accounts.

NOTE: All data are seasonally adjusted except depository institutions' excess reserves at Federal Reserve Banks. Last plots are estimated for February 1997. Dotted lines represent growth ranges and are for reference only.

SOURCE: Board of Governors of the Federal Reserve System.

able to domestic rather than foreign accumulation. In fact, total reserves have continued to shrink at a rapid pace. Although stabilizing of late, negative reserve growth has shown through to a leveling off in the narrow money measure M1. (M1 consists primarily of currency and checkable deposits.)

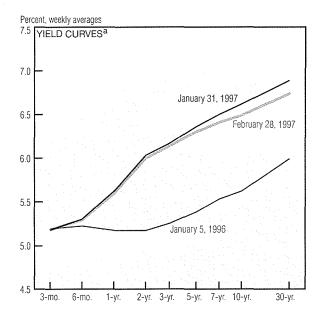
The behavior of reserves and M1 over the past several years has generally been attributed to the development of sweep accounts, which allow banks to minimize reserve po-

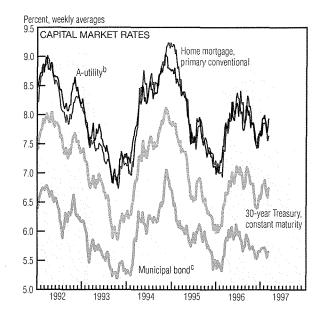
sitions by short-term "sweeping" of deposits from accounts that require reserves into those that do not. Indeed, after adjusting for sweep activities, the negative trends seen in the nonadjusted data disappear.

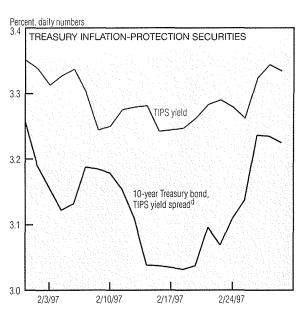
Still, this provides little solace given the recognition that reserves are the proximate lever of monetary policy. Developments that have allowed banks to minimize their reserve positions have raised concerns about the Fed's ability to control monetary growth, prompting some

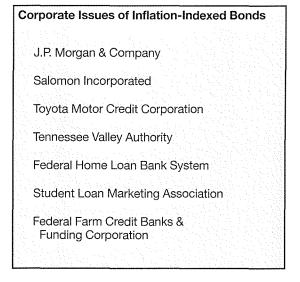
to suggest legislation that would boost the reserves held by banks. However, certain theories suggest that excess reserves, rather than total reserves, are the critical determinants of money growth and monetary control. Here the news may be less threatening: Despite substantial changes in the financial markets, there is little indication that excess reserve levels are changing dramatically.

Interest Rates









- a. All instruments are constant-maturity series.
- b. Estimate of the yield on a recently offered, A-rated utility bond with a maturity of 30 years and call protection of five years.
- c. Bond Buyer Index, general obligation, 20 years to maturity, mixed quality.
- d. 10-year Treasury bond constant-maturity yield minus the yield quote for the Treasury Inflation-Protection Securities found in Bloomberg information service. SOURCES: Board of Governors of the Federal Reserve System; Bloomberg information service; and *The Wall Street Journal*, various issues.

Since last month, the yield curve has flattened slightly, with very little movement except at the long end. The 3-year, 3-month spread stands at 96 basis points (b.p.), and the 10-year, 3-month spread is at 131 b.p., both above their long-term mean. Since the beginning of last year, however, the curve has become noticeably steeper. At the long end, 30-year rates have risen nearly a point, while at the short end, the 2-year, 3-month spread has changed from a slight inversion of -2 b.p. to a more normal +82. The longer-term

capital market rates continue to track changes in the 30-year Treasury bond closely.

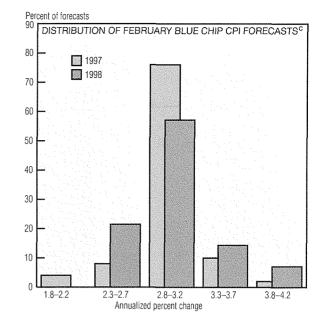
Certainly the most exciting recent development in the bond market has been the introduction of Treasury Inflation-Protection Securities, or TIPS. The principal and coupon payments on these 10-year bonds rise (or fall) with changes in the Consumer Price Index. Besides potentially offering lower borrowing costs to the Treasury and long-term inflation protection to investors, TIPS are particularly intriguing because they may provide a direct measure of real

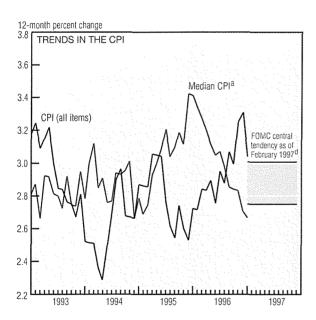
interest rates and a better estimate of expected inflation.

Putting aside liquidity differences, the interaction between inflation and real interest rates, and the risk premium associated with inflation uncertainty, one can get a measure of expected inflation by subtracting the real interest rate observed from TIPS from the nominal 10-year rate on Treasury bonds. In terms of protecting investors, one desired result of the introduction of TIPS has already occurred—the private sector has begun to issue inflation-indexed bonds.

Inflation and Prices

January Price Statistics						
		Annualized percent change, last:			Year avg.	
	1 mo.	6 mo.	5 yr.	1995	1996	
Consumer Prices						
All items	1.5	2.9	2.9	2.5	3.3	
Less food and energy	1.4	2.3	2.9	3.0	2.5	
Median ^a	3.1	2.5	2.9	3.4	2.7	
Producer Prices						
Finished goods	-3.5	2.8	1.7	2.2	2.9	
Less food and energy	0.0	0.4	1.4	2.6	0.6	
Commodity future prices ^b		-3.5	2.8	5.4	-0.7	







- a. Calculated by the Federal Reserve Bank of Cleveland.
- b. As measured by the KR-CRB composite futures index, all commodities. Data reprinted with permission of the Commodity Research Bureau, a Knight-Ridder Business Information Service.
- c. Forecast of the Blue Chip panel of economists.
- d. Upper and lower bounds for CPI inflation path as implied by the central tendency growth ranges issued by the FOMC and nonvoting Reserve Bank presidents. SOURCES: U.S. Department of Labor, Bureau of Labor Statistics; Federal Reserve Bank of Cleveland; the Commodity Research Bureau; National Association of Purchasing Management; and Blue Chip Economic Indicators, February 10, 1997.

Substantial declines in a handful of categories contributed to mild increases in the major price indexes in January. Falling food prices and airline fares, along with slower energy price gains, helped hold the Consumer Price Index (CPI) to a seasonally adjusted annual rate of 1.5%. Sharp declines in food prices also helped push the Producer Price Index (PPI) down.

The PPI for finished goods posted its first downtick since October 1994, falling 3.5% for the month. Excluding the volatile food and en-

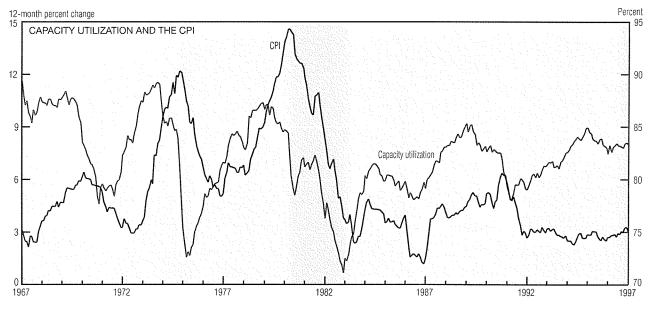
ergy components, however, the PPI was unchanged and the CPI rose a mere 1.4%, with both indexes following a moderating trend for more than a year. Nonetheless, the median CPI's increase of 3.1% suggests that, at least at the retail level, underlying price pressures have remained stable.

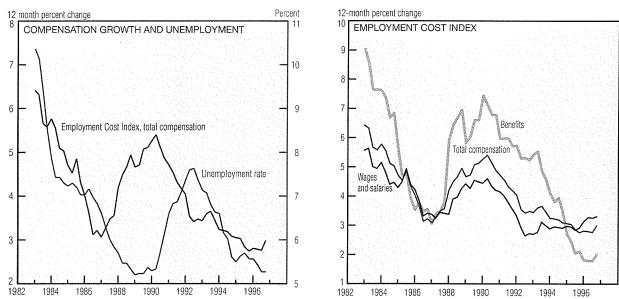
Reports from purchasing managers hint that the downturn in producer prices has also run its course. In January, the National Association of Purchasing Management's index rose to its highest level since July

1995. Still, more than 80% of those surveyed reported no change or a decrease in supplier prices.

More than 75% of the economists participating in the latest Blue Chip survey see CPI-measured inflation rising in the 2.8% to 3.2% range in 1997. For 1998, the distribution changes only slightly, with nearly 60% of the respondents predicting that the index will remain within a few tenths of a percentage point of its five-year average (2.9%).

Inflation and Prices (cont.)





SOURCES: U.S. Department of Labor, Bureau of Labor Statistics; and Board of Governors of the Federal Reserve System.

The Blue Chip consensus forecast varies little from that of the Federal Open Market Committee (FOMC). In his semiannual report to Congress in February, Federal Reserve Chairman Alan Greenspan noted that the central tendency of policymakers' 1997 inflation projections is 2.75% to 3.0%. The Chairman suggested that the unusually good inflation outcome in 1996 and the expectation of continued restraint in 1997 "...owe in large part to some temporary factors, of uncertain longevity." Specifically, he noted that worker compensation costs have been held down by savings on employee benefits resulting

from considerable, but perhaps temporary, reductions in health care prices. Over the last two years, the Employment Cost Index (ECI) for benefits has been tracking one full percentage point below the ECI for wages and salaries, after trending substantially above the rate of wage growth for nearly eight years.

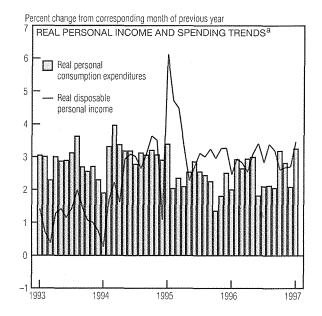
More important, the Chairman addressed the apparent breakdown of the link between inflation and resource utilization—particularly the use of labor. During the 1960s and 1970s, capacity utilization rates of more than 80% typically corresponded to an acceleration in the CPI. Similarly, when the unemploy-

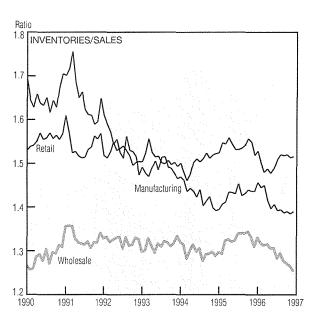
ment rate fell below about 6%, wage and price growth tended to pick up.

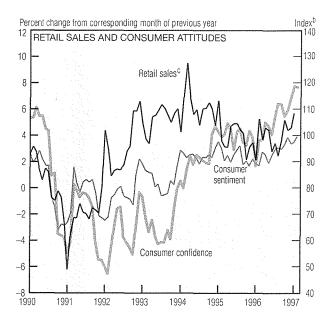
In light of this historical relationship, our current subdued inflation in the face of high capacity utilization and low unemployment may seem surprising. Greenspan suggests that the "... atypical restraint on compensation increases...appears to be mainly the consequence of greater worker insecurity." But he warns that this is a "...temporary rather than a lasting phenomenon, because there is a limit to the value of additional job security people are willing to exchange for lesser increases in living standards."

Economic Activity

Real GDP and Components, 1996:IVQ ^a (Preliminary estimate)					
<u> </u>	Change,	Percent change, las			
	billions of 1992\$	Quarter	Four quarters		
Real GDP	66.0	3.9	3.2		
Consumer spending	39.8	3.4	2.7		
Durables	6.2	4.1	5.2		
Nondurables	5.2	1.5	1.7		
Services	28.1	4.3	2.7		
Business fixed					
investment	10.4	5.4	9.5		
Equipment	-1.2	-0.8	9.7		
Structures	10.9	25.2	8.9		
Residential investment	-0.2	-0.3	4.2		
Government spending	-1.3	-0.4	2.0		
National defense	-5.7	-7.0	0.1		
Net exports	37.4		- .		
Exports	46.4	24.8	7.4		
Imports	9.0	3.8	8.4		
Change in business inventories	-18.1		_		







- a. Chain-weighted data in billions of 1992 dollars
- b. 1985 = 100 for consumer confidence; February 1966 = 100 for consumer sentiment.
- c. Data since March 1996 are estimated by deflating nominal retail sales by the Consumer Price Index for commodities.

NOTE: All data are seasonally adjusted except for consumer sentiment.

SOURCES: U.S. Department of Commerce, Bureau of the Census and Bureau of Economic Analysis; U.S. Department of Labor, Bureau of Labor Statistics; The Conference Board; and the University of Michigan.

The U.S. Commerce Department recently lowered its estimate of fourth-quarter real GDP growth from 4.7% to 3.9%. Still, the economy's end-of-year performance remained well above the third-quarter's 2.1% pace.

Small business inventories accounted for most of the downward revision, suggesting that the economy may be better poised for growth in the coming months than originally thought. Despite small downward adjustments, exports and

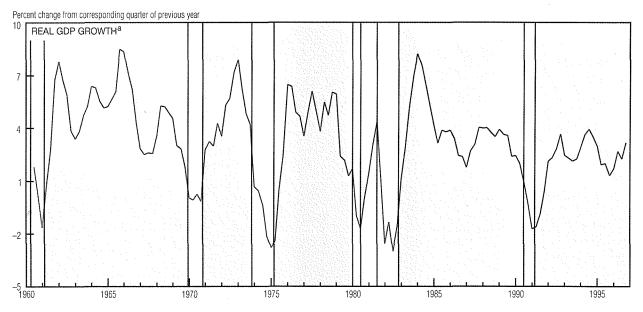
personal consumption expenditures continued to post substantial gains last quarter. The rise in exports, however, did not prevent the trade deficit for 1996 from reaching an eight-year high.

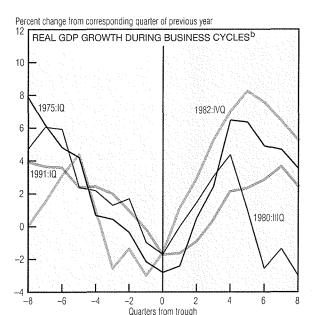
Businesses added \$16.6 billion to their inventories in 1996:IVQ, compared with \$34.5 billion in the previous quarter. (Advance estimates put the fourth-quarter inventory accumulation at \$31.9 billion.) Recently released data for December show that overall inventories remain low

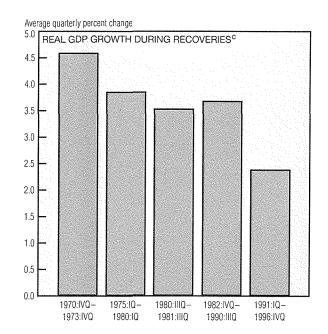
relative to sales. The inventory-tosales ratio for manufacturing has been hovering below 1.4% in recent months, reaching its lowest point this decade. At the wholesale level, the ratio has actually been falling over the course of the past year. Although retail inventories rose sharply in December (largely because of autos), they are not out of line with sales.

The latest Blue Chip survey of economists predicts real economic (continued on next page)

Economic Activity (cont.)







- a. Shaded areas indicate recessions.
- b. Dates are business cycle troughs.
- c. Defined as period from business cycle trough to peak.

NOTE: All data are in chain-weighted 1992 dollars.

SOURCE: U.S. Department of Commerce, Bureau of Economic Analysis.

growth of approximately 2% in each quarter of 1997. A strong consumer sector figures prominently in the forecast. Real disposable personal income grew 3.4% in January (year over year), while consumer outlays jumped 3.2%. Retail sales in constant dollars rose a healthy 5.7%, a spending pattern that is consistent with strong consumer confidence readings in recent months. Indeed, the Conference Board's consumer confidence index peaked at 118.7 in Jan-

uary, its highest level since the summer of 1989. Although the index dipped slightly in February, the University of Michigan's index of consumer sentiment rose to 99.7.

As the current expansion heads into its seventh year, some observers have asked whether its longevity implies anything about its sustainability. Economists have no standard for a *typical* expansion. Comparisons with recent business cycles indicate that the current upswing is by no means the longest. The 1982–90 ex-

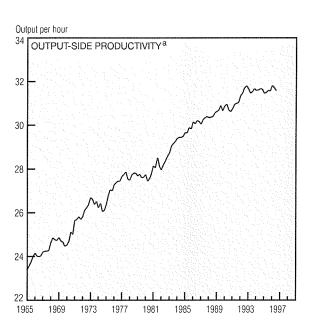
pansion lasted approximately 92 months, almost one year longer than our present experience, and the 1961–69 episode lasted 106 months.

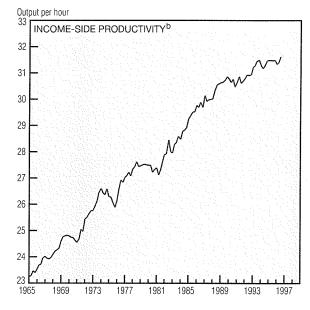
Some have attributed the duration of the current expansion to its relatively slow pace—2.4% (average annual rate) since 1991:IQ. The average growth rate from 1961 to 1969 was twice as large. Although such comparisons are natural, they provide little evidence for predicting the next downturn.

U.S. Productivity Growth

Annual Productivity Growth (Percent)					
	Output- side productivity ^a	Income- side productivity ^b			
1965–1973	1.50	1.46			
1973–1992	0.92	0.89			
1965–1996	0.96	0.98			
1973–1996	0.72	0.79			
1992–1996	0.17	0.54			







- a. Output-side productivity is measured as GDP in chain-weighted 1992 dollars divided by man-hours in non-agricultural establishments.
- b. Income-side productivity is measured as gross domestic income in chain-weighted 1992 dollars divided by man-hours in non-agricultural establishments.
- c. Service-sector productivity is measured as GDP for all services in chain-weighted 1992 dollars divided by man-hours in non-agricultural service establishments. SOURCE: DRI/McGraw-Hill.

Between 1965 and 1973, U.S. annual productivity growth (measured as output per hour worked) averaged 1.5%. This is in sharp contrast to the 0.72% rate recorded since 1973. In the last five years, productivity growth has slipped even further, averaging an anemic 0.17%.

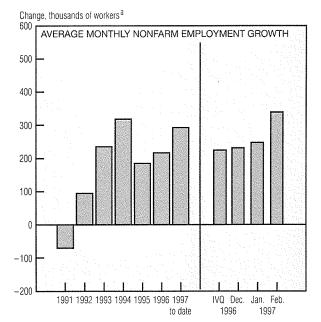
The importance of productivity growth in determining a country's long-run standard of living is undeniable. Given the most recent numbers, it would take the U.S. twice as long to double its standard of living than it would have prior to 1973.

Productivity growth is not uni-

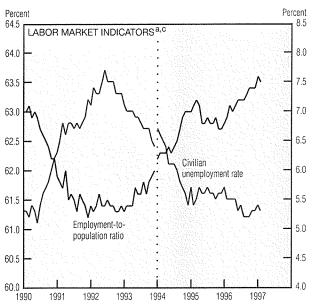
form across the economy. For example, according to official estimates, productivity in the service sector has fallen at a 1.5% average annual rate since 1973. Many economists doubt this dramatic decline, however, questioning the quality of the data instead. Output in the service sector is notoriously hard to measure. For instance, one component of service consumption is education. Is one classroom hour today the same as it was 30 years ago, given the advent of computers in the schools? And how does one measure advances in medical technology?

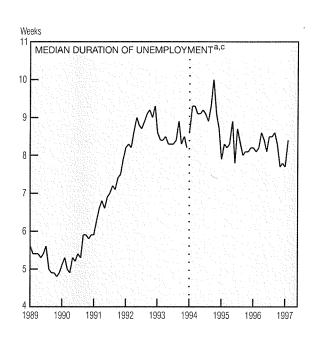
Such data problems not only exist, but are probably worsening. By definition, GDP, and hence productivity, should be the same whether measured by the value of goods and services produced or by the value of the inputs used in producing these goods. Because of data problems, these output- and income-side productivity measures always differ somewhat. Since 1992, however, the measurement problems have worsened, with income-side productivity growth exceeding 0.5%—nearly 0.4% higher than the traditional output-side measure.

. Labor Markets



Labor Market Con	Average monthly change (thousands of employees)				
	1996			1997	
	Year	IVQ	Dec.	Jan.	Feb.
Payroll employment	216	224	231	247	339
Goods-producing	16	33	37	33	109
Manufacturing	-8	10	8	16	-2
Construction	25	24	29	15	109
Service-producing	199	191	194	214	230
Services	100	86	85	136	80
Retail trade	50	76	74	-2	49
Government	15	2	27	26	46
Household employ.	232	202	211	725	-150
	Average for period				
Civilian unemploy. rate (%)	5.4	5.3	5.3	5.4	5.3
	J.4	J.J	5.5	5.4	5.5
Mfg. workweek (hours) ^b	41.5	41.8	42.0	41.7	41.9





- a. Seasonally adjusted.
- b. Production and nonsupervisory workers.
- c. Vertical line indicates break in data series due to survey redesign.

SOURCE: U.S. Department of Labor, Bureau of Labor Statistics.

U.S. labor markets continued to reflect a healthy economy in February as nonfarm payroll employment expanded by 339,000—the largest gain since May. Although much of this growth stemmed from a pickup of 230,000 jobs in the service-producing sector, employment in the goods-producing sector made a strong showing as well.

One of the primary factors driving February's advance was mild weather conditions, which resulted in a huge surge in the construction industry. In fact, with 109,000 new jobs added, this was the industry's

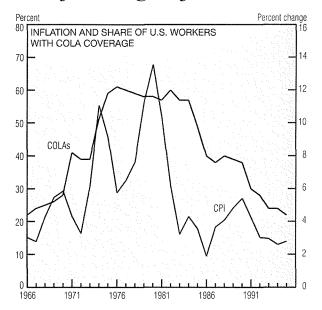
best performance in a year. Manufacturing payrolls fell slightly (-2,000) following four consecutive months of positive reports. Gains in the service-producing sector were buoyed by the retail trade industry, which added 49,000 workers to its payrolls. Department store employment experienced an unseasonably high increase (57,000) as fewer workers were laid off last month than normal.

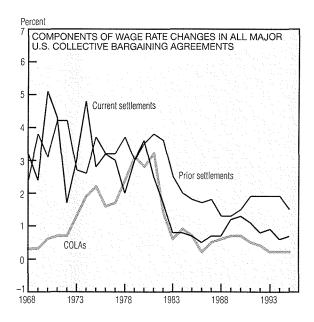
The February unemployment rate also pointed to strength in the nation's labor markets, falling 0.1%, to 5.3%. The employment-to-

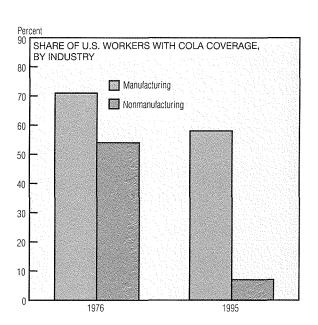
population ratio showed little change from January (63.6% to 63.5%).

Meanwhile, the median duration of unemployment, which has followed a slight downward trend over the current business expansion, continued its more recent uptick. The median unemployment spell rose from 7.7 weeks in January to 8.4 weeks last month. This means that half of all jobless persons wait more than eight weeks before finding work—a relatively long period by historical standards.

Cost-of-Living Adjustments







COLA Agreements with Active Clauses				
Specific provisions	Percent of contracts with COLA clauses			
Wage adjustment per percentage- point change in the CPI				
3.3 cents	36			
2.5 cents	20			
3.8 cents	14			
COLA agreements with caps	20			
COLA agreements paid only if the CPI rises above a ceiling level	38			

SOURCES: U.S. Department of Labor, Bureau of Labor Statistics; and The Bureau of National Affairs, Inc., Collective Bargaining Negotiations and Contracts, vol. 24, no. 1338 (September 12, 1996).

Cost-of-living adjustments (COLAs) are contract clauses that explicitly tie wages and benefits to the inflation rate. They arrange for automatic (often quarterly) wage increases that depend on the rise in a specific price index (generally the Consumer Price Index for urban wage earners, or CPI-W). Because COLAs are fairly simple provisions to write, they might seem a relatively costless way to adjust for inflation.

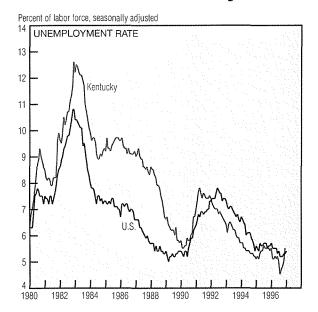
The data suggest otherwise. COLA provisions were included in a small fraction of the major U.S. col-

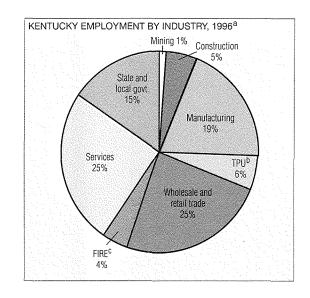
lective bargaining agreements written during the 1960s, when inflation was low. During the double-digit inflation of the 1970s, the share of workers with COLA coverage rose dramatically. If COLAs were costless, one would expect them to be incorporated in labor agreements indefinitely. However, once inflation rates slowed and it was clear that they would remain low, most collective bargaining agreements no longer included COLA provisions.

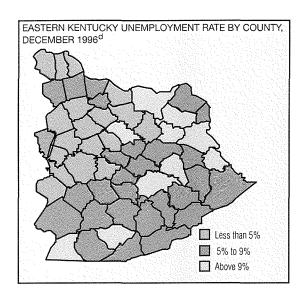
Currently, the share of U.S. workers covered by COLAs is at a record

low, with these adjustments making up a tiny fraction of the wage rate changes resulting from collective bargaining agreements. COLA coverage has dropped in all industries, including manufacturing, where such provisions have historically played a large role. Even where present, current COLA clauses only partially insure against inflation. A 10% increase in the CPI-W will mean a wage adjustment of less than 40 cents per hour in the vast majority of U.S. labor agreements.

The Eastern Kentucky Economy







Unemployment Rate by Metropolitan Area ^e (Percent of labor force)				
	December 1996	December 1995		
- Cincinnati	3.7	4.0		
Clarksville-Hopkinsville	э 3.5	3.6		
Evansville-Henderson	3.6	4.3		
Lexington	2.3	2.4		
Louisville	4.0	4.0		
Owensboro	4.6	4.9		

- a. Non-agricultural data; government share is calculated from non-seasonally adjusted data.
- b. Transportation and public utilities.
- c. Finance, insurance, and real estate.
- d. Non-seasonally adjusted preliminary data. U.S. non-seasonally adjusted unemployment rate was 5.0% in December 1996.
- e. Data are not seasonally adjusted.

SOURCES: U.S. Department of Labor, Bureau of Labor Statistics; and Kentucky Department of Employment Services.

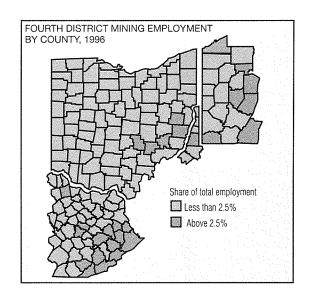
The Fourth Federal Reserve District includes the eastern half of Kentucky, which, because of its coal supplies, has closer economic ties to the industrial economies of Pittsburgh and Cleveland than to the more agricultural western counties. As in the other Fourth District states, unemployment in Kentucky peaked during the early 1980s, when the manufacturing sector went through an extended restructuring. The job-

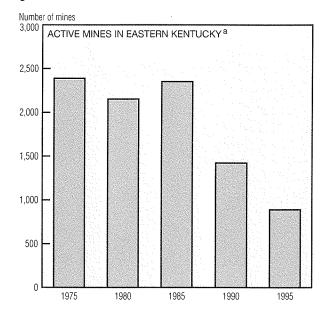
less rate fell below the national average in 1992, and has generally stayed there.

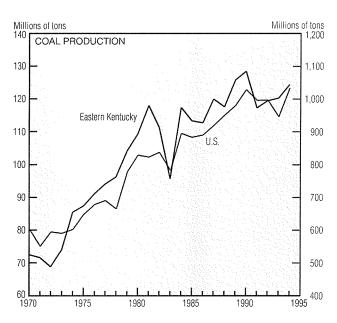
Although Kentucky's economic prospects have improved in the last few years, many counties in the eastern part of the state continue to experience high unemployment rates. This is particularly true of the rural counties, which have been hit by job losses in the textile and coal mining industries in recent years.

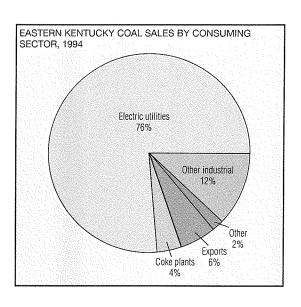
Kentucky's metropolitan areas, by contrast, have very low unemployment rates and tight labor markets. Covington, part of the Cincinnati metropolitan area, has experienced some of the strongest growth in the region, while Lexington, home to the University of Kentucky and the Toyota Georgetown assembly plant, has consistently maintained a low jobless rate.

The Eastern Kentucky Economy (cont.)









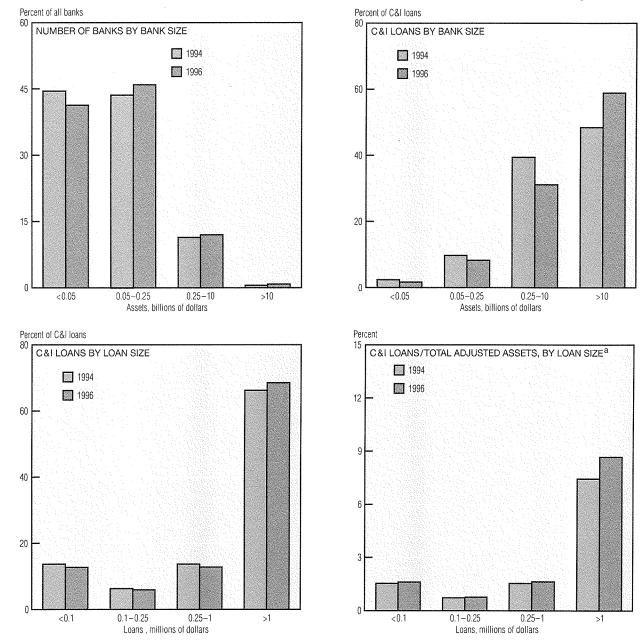
a. Includes temporarily idle mines.
SOURCES: U.S. Department of Labor, Bureau of Labor Statistics; Ohio Bureau of Employment Services; Pennsylvania Department of Labor and Industry; Kentucky Department of Employment Services; West Virginia Bureau of Employment Programs; Kentucky Coal Marketing and Export Council; Kentucky Coal Association; and Kentucky Department of Mines & Minerals.

Although the mining industry employs only a small fraction of the total Fourth District workforce, it plays a significant role in many rural counties, particularly those of eastern Kentucky. Coal mining production has risen slowly for decades in the eastern Kentucky fields, but employment in the industry is just slightly more than half its 1979 level. This reflects productivity increases that span most of the coal

mining industry, both surface and underground, as well as a shift toward more surface mining in the eastern Kentucky counties. The average coal miner in the state's Fourth District areas produced 3.28 tons of coal per hour in 1994, up from 2.2 tons in 1977.

Preliminary reports indicate that employment losses in Kentucky's mining industry may finally be halting. Electric utilities are the primary consumers of the eastern counties' coal, so the current effort to deregulate these industries (directed toward opening local power distributors to competition in power production) will also impact the coal mining industry. If coal-burning power plants continue to be positioned as the lowest-cost providers in the region, mining may be ripe for further growth as power is shipped outside the area to replace higher-cost sources used elsewhere.

Banking Consolidation and Small Business Lending Best available copy



a. Total adjusted assets equals total assets plus reserves allocated against transfer risk and loan and lease losses. SOURCE: Board of Governors of the Federal Reserve System, Call Report RC-C, part II.

Historically, banks in the U.S. have been subject to myriad restrictions on their geographic expansion. At the beginning of the century, most states allowed banks to have only one office. In time, multi-office banks were permitted, provided that the offices were located within the institution's home state.

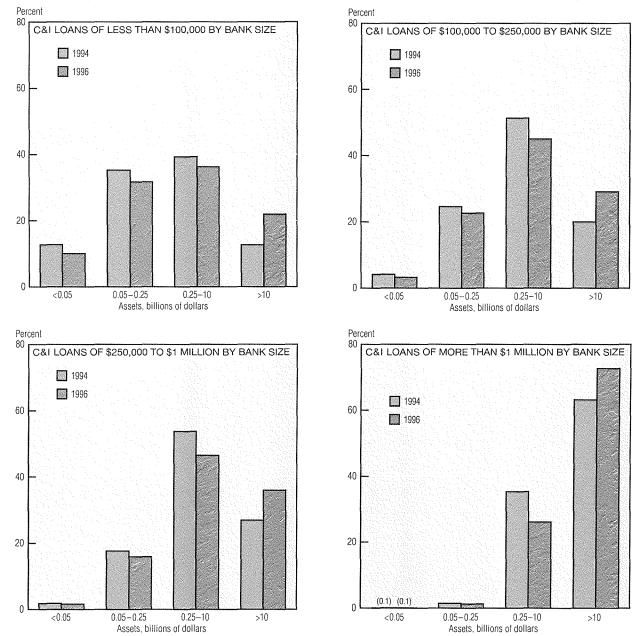
In the first half of the 1950s, banks attempted to expand their activities across state lines by developing bank holding companies (BHCs) with banks located in various states. In 1956, the Douglas Amendment to the Bank Holding Company Act put a stop to this initiative by requiring BHCs to obtain authorization from the home state of an institution it wanted to acquire. At that time, states did not allow outof-state-banks to acquire local firms.

By 1984, these restrictions had pushed the number of banks to a post-Depression high of about 14,500. Subsequent regulatory

changes liberalized restrictions on branching and mergers. As a result, the number of banks fell to approximately 9,500 by the end of 1996. Between June 1994 and June 1996 alone, the number of federally insured U.S. commercial banks decreased by more than 1,000, as small institutions merged with larger ones.

Consolidation may affect the banking industry's performance because banks of different size have different (continued on next page)

Banking Consolidation and Small Business Lending (Best available) copy



SOURCE: Board of Governors of the Federal Reserve System, Call Report RC-C, part II.

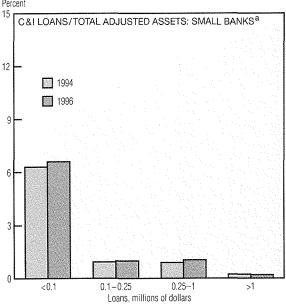
ways of operating. In the past, larger commercial banks, which make most of the commercial and industrial (C&I) loans in the U.S., have devoted a lower share of their assets to small business lending than have smaller banks. This has caused some concern about the possible impact of consolidation on the availability of funding to small businesses. The reason is that consolidation is eliminating many small firms' traditional suppliers of credit—usually small, independent banks—by transferring

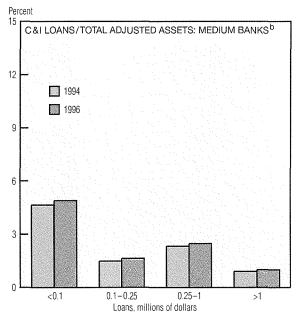
their assets to larger organizations. Whether the funding available to small firms shrinks depends crucially on whether banks' lending propensities remain the same after consolidation.

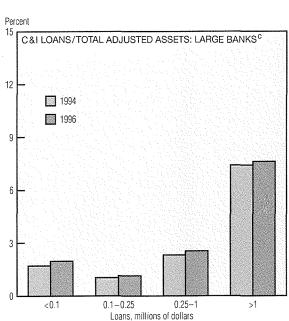
Until recently, research on banking consolidation's effect on small firm credit was hampered by a lack of appropriate data. This changed in June 1993, when Call Reports (statements of banks' condition and income) began to include information on small business loans.

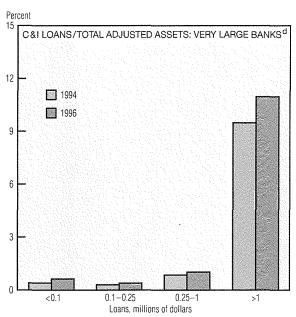
Available data confirm that the largest banks (those with assets above \$10 billion) are not major lenders to small firms. In 1994, for example, this group of depositories made less than 20% of C&I loans below \$100,000. By contrast, they made more than 60% of the loans above \$1 million. Between 1994 and 1996, the number of banks in this class increased, as did their share of C&I loans of all sizes. Note, however, that the greatest increase

Banking Consolidation and Small Business Lending Best-available groups









- a. Total assets of less than \$50 million.
- b. Total assets between \$50 million and \$250 million.
- c. Total assets between \$250 million and \$10 billion.
- d. Total assets of more than \$10 billion.

SOURCE: Board of Governors of the Federal Reserve System, Call Report RC-C, part II.

occurred in their share of loans below \$100,000.

The data also confirm that as the size of a bank increases, the proportion of its adjusted assets devoted to small C&I loans tends to shrink. The smallest banks (those with assets of less than \$50 million) devote approximately 6% of their adjusted assets to C&I loans of less than \$100,000, but only 0.2% to loans above \$1 million. The largest banks have exactly the opposite pattern. The fraction of

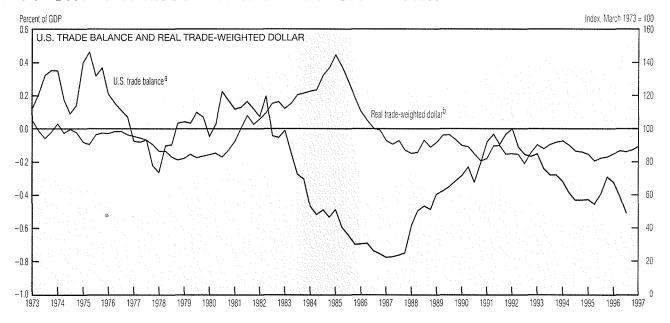
their assets devoted to those two lending classes is about 0.5% and 10%, respectively.

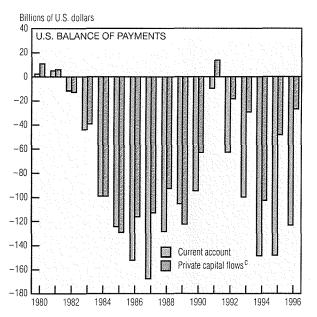
Research on consolidation's impact on small business lending is still in its early stages. So far, the results have been inconclusive on certain issues. For example, the evidence is mixed on whether mergers restrict lending to small businesses: The impact appears to depend on the size of the banks involved in the consolidation. It does appear, however, that mergers and acquisitions involving

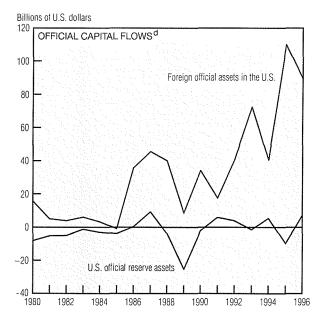
small banks tend to boost small business lending.

Research on consolidation's impact on the overall availability of funding to small businesses is even more limited. The reason is that very little information exists about small firms' alternative sources of funding, which can include other financial arrangements (such as credit cards, residential mortgage loans, and auto loans) and nonbank sources (such as finance companies, trading partners, and venture capitalists).

The Current Account and the U.S. Dollar







- a. Trade in goods and services.
- b. Quarterly average of monthly data.
- c. Private capital flows have signs reversed and include the statistical discrepancy as unrecorded capital flows. Positive values represent a capital outflow.
- d. Positive values represent a capital inflow.

SOURCES: U.S. Department of Commerce, Bureau of Economic Analysis; and Board of Governors of the Federal Reserve System.

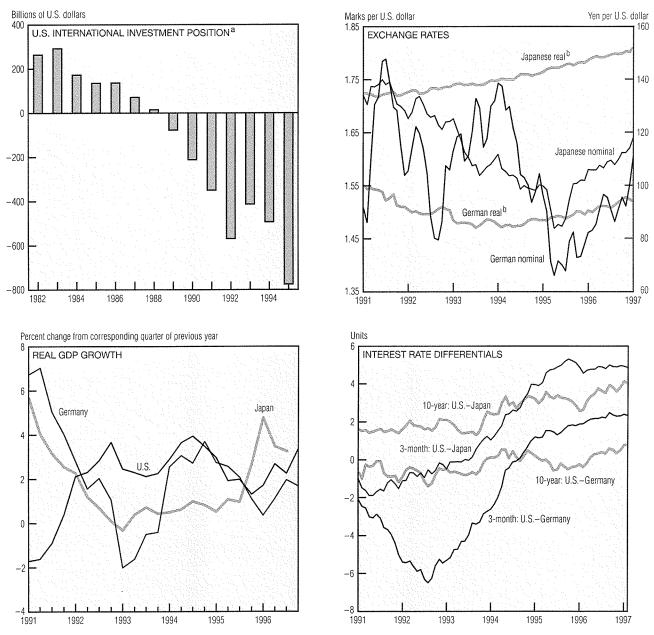
Observations that the dollar is overvalued imply that its current level is unsustainable and that its recent path is inconsistent with a growing U.S. current account (trade) deficit. Since mid-1995, the real (inflationadjusted) dollar has appreciated 10%, while the trade deficit has widened by \$6 billion. Much of this appreciation reflects dollar movements against the Japanese yen. Unfortunately, the relationship between the dollar and the trade deficit is neither as clear nor as un-

ambiguous as many pundits would have us believe.

A country running a trade deficit is absorbing—through its consumption and investment—more of the world's resources than it is producing. Such a country is also spending beyond its current income and must borrow from abroad to finance that expenditure. This economic fact of life guarantees that a net inflow of foreign capital will always exactly match a current account deficit in a nation's balance of payments.

A country may incur a current account deficit through various routes, each with different implications for its exchange rate. If, for example, domestic demand initially increases, imports will expand, the domestic currency will depreciate, and the trade deficit will grow. Domestic interest rates may also rise to attract the counterbalancing inflow of foreign capital. This standard view holds that the dollar depreciates when the U.S. trade deficit widens.

The Current Account and the U.S. Dollar (cont.)



a. Direct investment recorded at market value.

b. The real exchange rate is calculated using consumer prices for Germany, Japan, and the U.S. The base period is November 1991. SOURCES: U.S. Department of Commerce, Bureau of Economic Analysis; U.S. Department of Labor; Bank of Japan; Statistics Bureau of the Japanese Prime Minister's Office; Statistisches Bundesamt; Deutsche Bundesbank; and Board of Governors of the Federal Reserve System.

Alternatively, suppose that improved investment opportunities attract an inflow of foreign capital. The domestic currency may appreciate, making domestic goods more expensive relative to foreign goods and striking the balance between increased capital inflows and a larger trade deficit. This second case connects a dollar appreciation to a U.S. trade deficit.

Which scenario best describes the U.S. position is unclear, but over the recent business expansion, real economic growth and interest rate dif-

ferentials have favored an inflow of foreign capital. Nevertheless, an expanding inflow of foreign official capital—not private capital—has financed our current account deficits since 1994. Conceivably, without this influx, we might have observed some alternative configurations of higher interest rates and lower dollar exchange rates.

In any case, as a current account deficit persists, the world accumulates claims on the future output of the deficit country. Eventually, as happened to the U.S. in the late 1980s, that country becomes a debtor. If debts pile up, creditors may hesitate to acquire additional debt unless the risk premium also increases. At this point, either higher interest rates, currency depreciation, or some combination of the two will become necessary to attract additional foreign savings. The dollar's exchange rate may depend more on our accumulated stock of international debts than on our current trade deficits, but the point at which our debts become problematic is difficult to predict.