Published by

AMERICAN INSTITUTE *for* ECONOMIC RESEARCH

Great Barrington, Massachusetts 01230

RESEARCH REPORTS

Vol. LXVII No. 2 January 24, 2000

A Record Expansion

This month, the current economic expansion tied that of 1961-69 as the longest on record and, in the near term at least, no end is in sight. It does not follow, however, that the business cycle is dead—or that the political and monetary authorities have become more adept at managing it. Rather, in the current boom they would seem to have enjoyed a large measure of good luck.

This month the current U.S. business expansion tied the record for the longest expansion in U.S. history. The economy has been growing without a recessionary interruption for 8 years and 10 months. The only other time this happened was in the 1960s. The next longest expansion after that was the one in the 1980s, which lasted 7 years and 8 months. With no end in sight, in February the current expansion will become the longest ever.

This expansion has been described as an "astounding economic boom." It clearly is in terms of longevity. However, in most respects it has been less vigorous than other long expansions. This is evident in the accompanying table, which uses selected measures of economic growth to compare the nine expansions that have occurred since the end of World War II.

Since this expansion began in March 1991, Gross Domestic Product (GDP), adjusted for price inflation, has increased 34 percent. By comparison, during the expansion of 1961-69, GDP increased 53 percent. Even during the expansion of the 1980s, which was 14 months shorter, GDP grew more, rising by 37 percent. To some extent this difference may be due to slower growth in the working-age population during the 1990s. All else equal, when the population grows faster, GDP will grow faster. But even on a per capita basis, GDP grew faster in the 1960s and 1980s than it has during the current expansion.

Income also has grown more slowly during this cycle. Real after-tax personal income has increased 30 percent since 1991. This is only about half as much as it grew during the sixties, and less than the 34 percent increase in the eighties. Indeed, it is only a little more than the income growth that occurred during the expansion of 1949-1953, even though that one lasted less than half as long as the current expansion has.

The index of industrial production also increased more in the 1960s. This index is the most comprehensive measure of the physical volume of goods produced by the manufacturing, mining, and electric utility sectors of the economy. It does not cover production on farms, in the construction industry, in transportation, or in various trade and service industries. Since 1991, it has increased 47 percent. In the 1960s it increased 77 percent. Presumably, the slower rate of industrial growth in the current expansion partly reflects the shift in business activity away from the industrial sector and toward services and trade. This long-term trend that may also account for the relatively weaker growth of industrial production in the 1980s, when it increased just 35 percent. That it has grown more in the 1990s than it did in the 1980s may be due to stronger demand for U.S. exports now compared to the 1980s, when the high foreign-exchange value of the dollar dampened foreign demand for U.S. goods.

The strong job market of the past few years has received a lot of attention, but here again, a comparison with previous business cycles offers a different perspective. During the current boom, the number of jobs has increased by nearly 22 million, bringing the total number of U.S jobs to 130 million. In percentage terms, employment has increased 20 percent. In the 1960s, however, payrolls increased 34 percent, and in the shorter expansion of the 1980s they increased 23 percent.

The unemployment rate has averaged

A Capsule History of Business Expansions since 1949
Selected Economic Measures

—— Month of —— Trough	Peak	Duration (Months)	Real GDP* (% Chg.)	Real After-tax Personal Income* (% Chg.)	Industrial Production* (% Chg.)	Nonagric. Employment* (% Chg.)	Unempl. Rate** Low (%)	Unempl. Rate** Decrease (% Pt. Chg.)	Price Inflation*** (Average Annual Rate)	S&P 500* (% Chg.)
Oct. 49	Jul. 53	45	30	28	50	18	2.5	-5.4	3.4	87
May 54	Aug. 57	39	11	18	24	9	3.7	-2.4	1.5	110
Apr. 58	Apr. 60	24	11	12	23	8	4.8	-2.7	1.0	48
Feb. 61	**Dec. 69**	**106**	**53**	**59**	**77**	**34**	**3.4**	**-3.7**	**2.7**	**98**
Nov. 70	Nov. 73	36	15	19	26	12	4.6	-1.5	5.0	57
Mar. 75	Jan. 80	58	24	23	35	19	5.6	-3.4	8.4	72
Jul. 80	Jul. 81	12	4	5	8	2	7.2	-0.6	10.8	32
Nov. 82	Jul. 90	92	37	34	35	23	5.0	-5.8	3.8	230
Mar. 91	**?**	**106†**	**34[1]**	**30[2]**	**47[2]**	**20[2]**	**4.1[3]**	**-3.7[3]**	**2.5[2]**	**365[3]**

* Percentage increase from low month or quarter to high. ** Lowest monthly figure reached and decrease from high to low. *** Average annual increase in Consumer Price Index. † Through January. [1] Through third quarter 1999. [2] Through November 1999. [3] Through December 1999.

4.1 percent of the labor force since October, and it has been 4.5 or lower for the past 21 months. This is remarkable given that the last time the unemployment rate was below 5 percent for even one month was in 1973. The last time it was this low for this long was in the late 1960s. Clearly, by this measure the job market is better now than it was in the 1980s. But this low rate is hardly unprecedented. During the fifties and sixties, unemployment rates below 5 percent and even 4 percent were common. Similarly, the average rate of price inflation during this expansion, 2.5 percent per year, is a remarkable improvement over the higher rates seen in the 1970s and 80s, but it is not exceptional compared with the low rates observed in earlier expansions.

The weaker performance of the economy during this expansion can be traced to the slow recovery from the 1990-91 recession. Although the recession itself was mild, economic growth before and after it was sluggish. Typically, the economy grows fastest during the early stages of an expansion. However, GDP and income grew slowly for the first five years of this expansion, and the unemployment rate continued to rise for 15 months after the recession ended. It was not until 1995 that economic growth began to accelerate rapidly. Since then, by most measures the economy has surpassed its performance in previous long expansions.

The one area of the economy where the current expansion has been genuinely astounding is the stock market. As shown in the last column of the table, the S&P 500 has increased by an extraordinary 365 percent since 1991. In the same number of months in the 1960s, the S&P increased just 98 percent. Even the 230 percent increase during the eighties bull market pales next to the gains of the nineties. Most of this gain occurred since 1996.

One factor in this unprecedented gain is the absence of significant "corrections" in stock prices. Historically, the stock market has been more volatile than the general economy. Most recessions have been preceded by a decline in stock prices, but there also have been periods when stock prices decreased but the economy did not enter a recession. As economist Paul Samuelson famously said, the stock market has predicted nine of the last five recessions.

The upswing in stock prices that accompanied the 1961-69 business expansion was interrupted by two significant downturns. During a six month period in 1962, the S&P 500 fell 23 percent. Over a period of 10 months in 1966, it fell 17 percent. (This turned out to be a false signal of recession, but just barely. The economy slowed substantially in 1967 and GDP declined for one quarter. Most recessions are characterized by at least two quarterly decreases in GDP.) Finally, in December 1968 the market reached its peak for the expansion and declined 29 percent over the next 18 months. This time the market accurately signaled a downturn in business activity—a recession began in December 1969. As a result of the two earlier declines, the total increase in the S&P 500 during the entire 1961-69 business expansion was limited to 98 percent.

The bull market of the eighties was interrupted by only one downturn, but it was a big one—the October 1987 crash. The monthly average of the S&P 500 actually peaked in August and hit its low in December. During these four months, the index lost 27 percent of its value.

In contrast, during the current expansion there have been no downturns approaching the magnitude of these earlier corrections. In 1994, the S&P 500 fell 5.4 percent. From July to September 1998, it fell 12 percent. Most recently, between July and October in 1999, it fell 5.5 percent. Compared to the downturns of 15 or 20 percent or more that occurred during earlier decades, even when there was no recession, these declines were small and short-lived. In short, the stock market has never gone this long without a substantial correction.

The stock market, of course, is now overvalued by virtually every conventional measure. Whether the conventions are outdated ("things are different this time") or this is a speculative bubble, will be clear only in hindsight. The next market downturn, whenever it happens, may or may not portend a recession, even if it is a relatively large correction. Market downturns tend to be more severe when business activity is contracting, but, as the stock price declines of the 1960s and 1980s suggest, market corrections can be large even when the economy continues to expand.

The Next Recession

The unprecedented length of this expansion and its unusual strength in recent years has led some analysts to suggest that the business cycle is dead. We have entered a new age of prosperity, they say, with no foreseeable end. Two comments are warranted. One, economists have a poor track record in foreseeing things. They failed to foresee the Asian financial crisis, the consequences of the Russian debt default and the failure of Long Term Capital Management, the Mexican peso crisis of 1994, the disappearance of the federal deficit, the collapse of commercial real estate values in 1990-92, and the credit crunch of 1989-90. Most glaringly, very few economists predicted the last recession. After each of these developments, economists struggled to explain why their theories and models failed to predict them or their economic and financial consequences. This track record is not reassuring.

Second, even if it does become widely apparent that the economy is slowing down, there is no guarantee that policymakers—in particular, the Fed—can pilot the economy to a "soft landing" rather than an outright recession. Alan Greenspan tried to do just this prior to the 1990 recession and failed. Moreover, policies that successfully soften a recession or slowdown may carry longer-term costs. There is concern that the Fed's policy of easy credit, which it adopted when the economy was weak, may have fueled the bull market in stocks to a level of overvaluation that will end in a crash. The notion that the Fed can steer the economy safely through every negative development and avoid crashes, crunches, and recessions is not supported by the record.

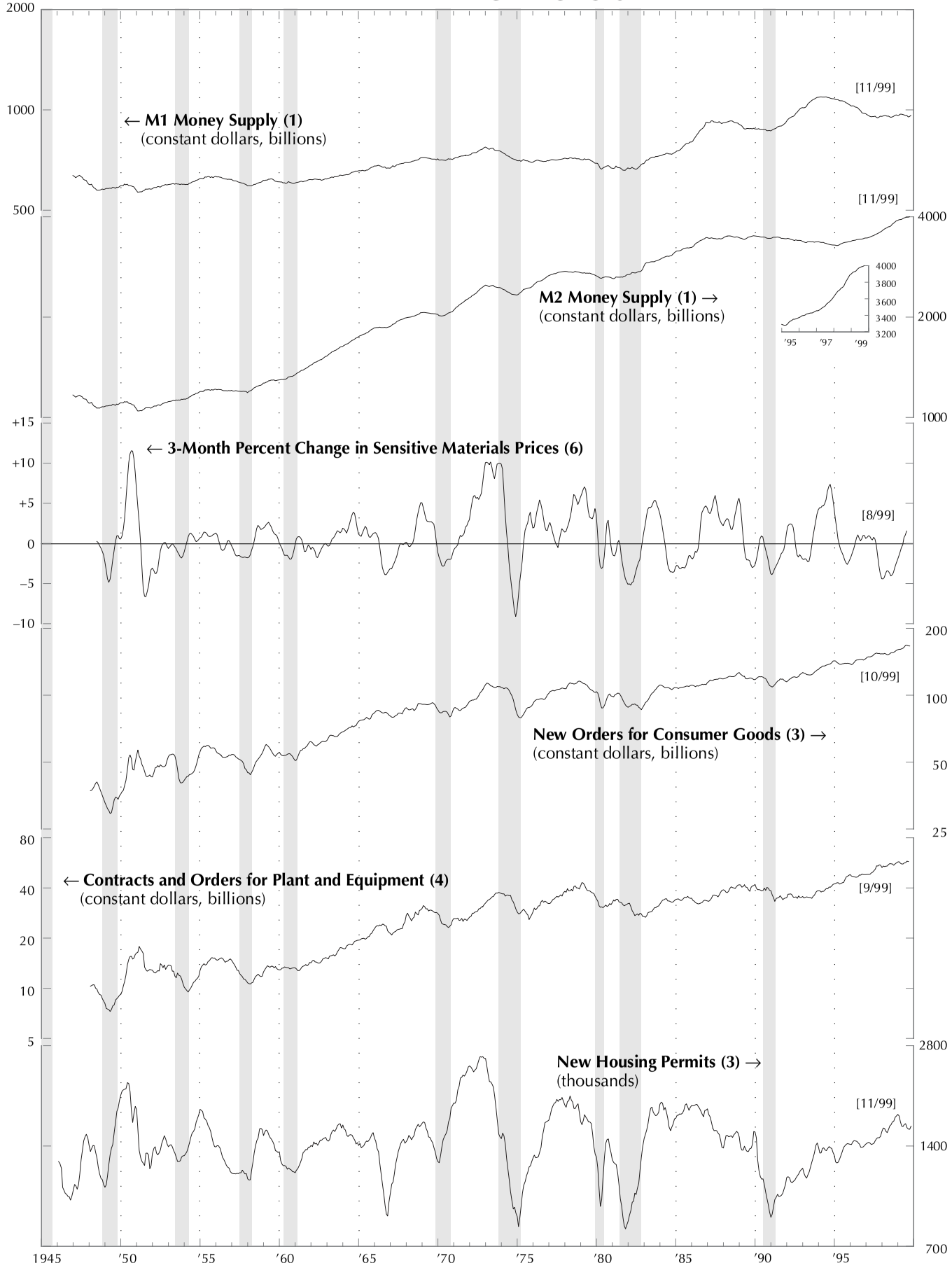
We are not persuaded that the business cycle is dead. Eventually, the economy can be expected to become vulnerable to recession. One or more of these scenarios are likely: rising interest rates will increase the cost of borrowing and of doing business, consumers will curtail their spending, sales will fall short of expectations and inventories will increase, profits will fall short of expectations, and stock prices will decrease. Any one of these developments by itself may not be sufficient to trigger a recession, but if they occur together, the risk of recession is high.

Good Management or Good Luck?

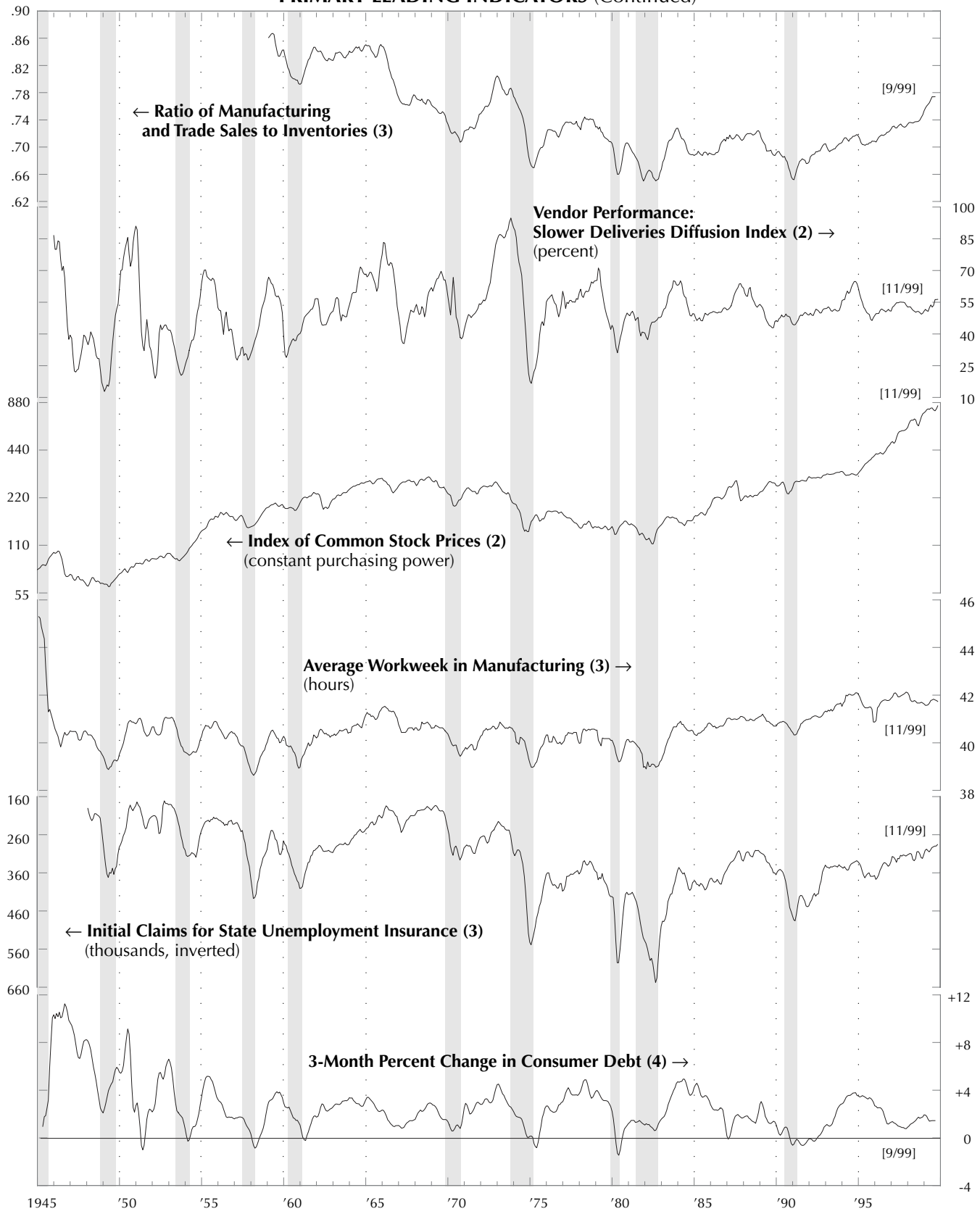
Moreover, despite all the talk about the "recent" globalization of the American economy, the fortunes of the U.S. domestic economy *always* have been shaped to some extent by international events and circumstances. In the 18th and early 19th centuries, for example, domestic economic policy (so far as it went) was fashioned largely as a response to the impact of British trade. Perceived differences of interest then between the U.S. agricultural and industrial sectors came to a head over tariff policy, which many credit as a leading source of friction that culminated in the Civil War. And throughout most of the latter part of the last century, European wars promoted demand especially for U.S. agricultural exports. Although it goes unmentioned in current discussions of the global economy, U.S. exports during the 19th century at times accounted for a greater proportion of domestic output than they do today.

In this century, domestic economic events have been closely linked to the tur-

PRIMARY LEADING INDICATORS

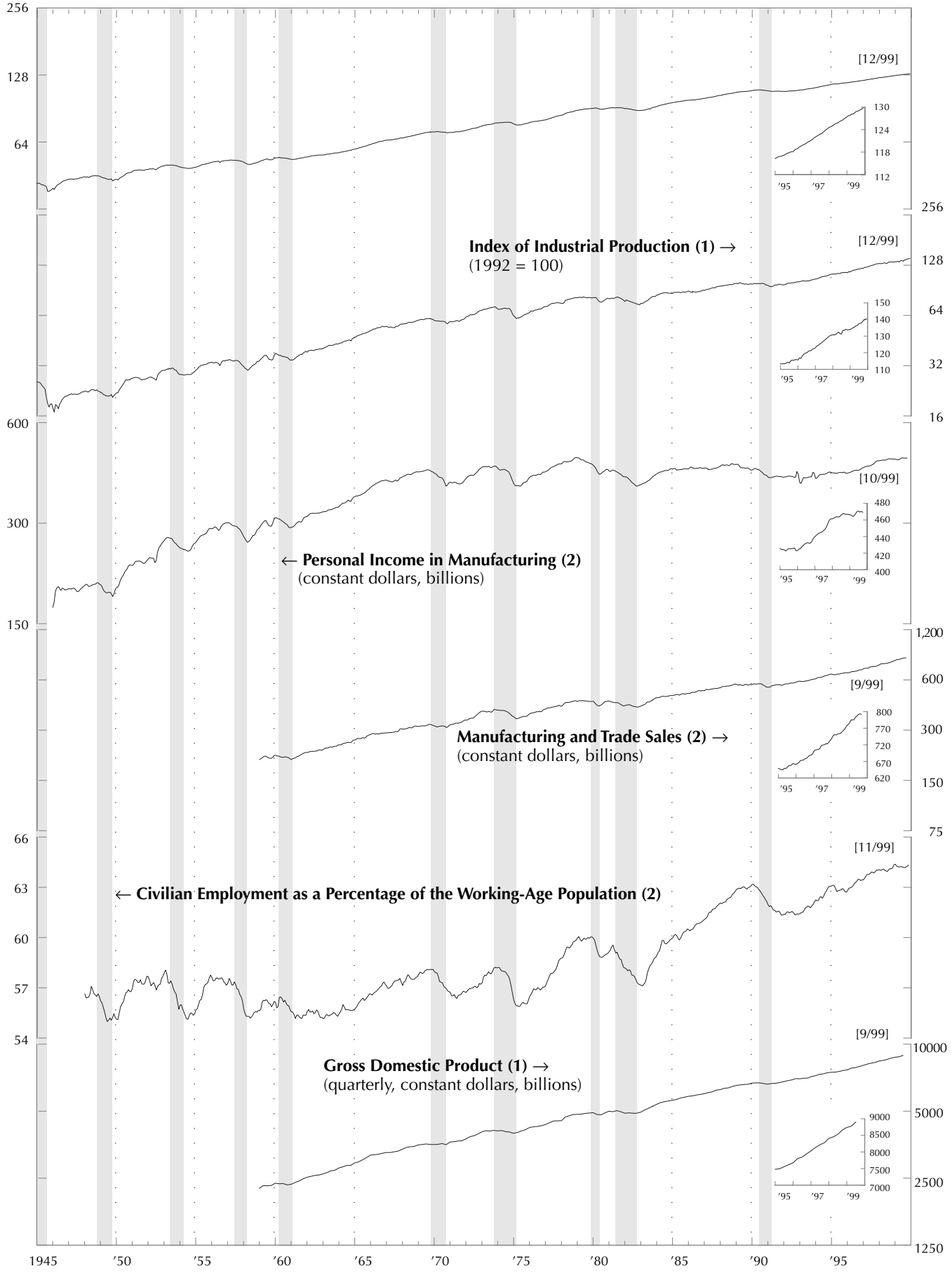


PRIMARY LEADING INDICATORS (Continued)

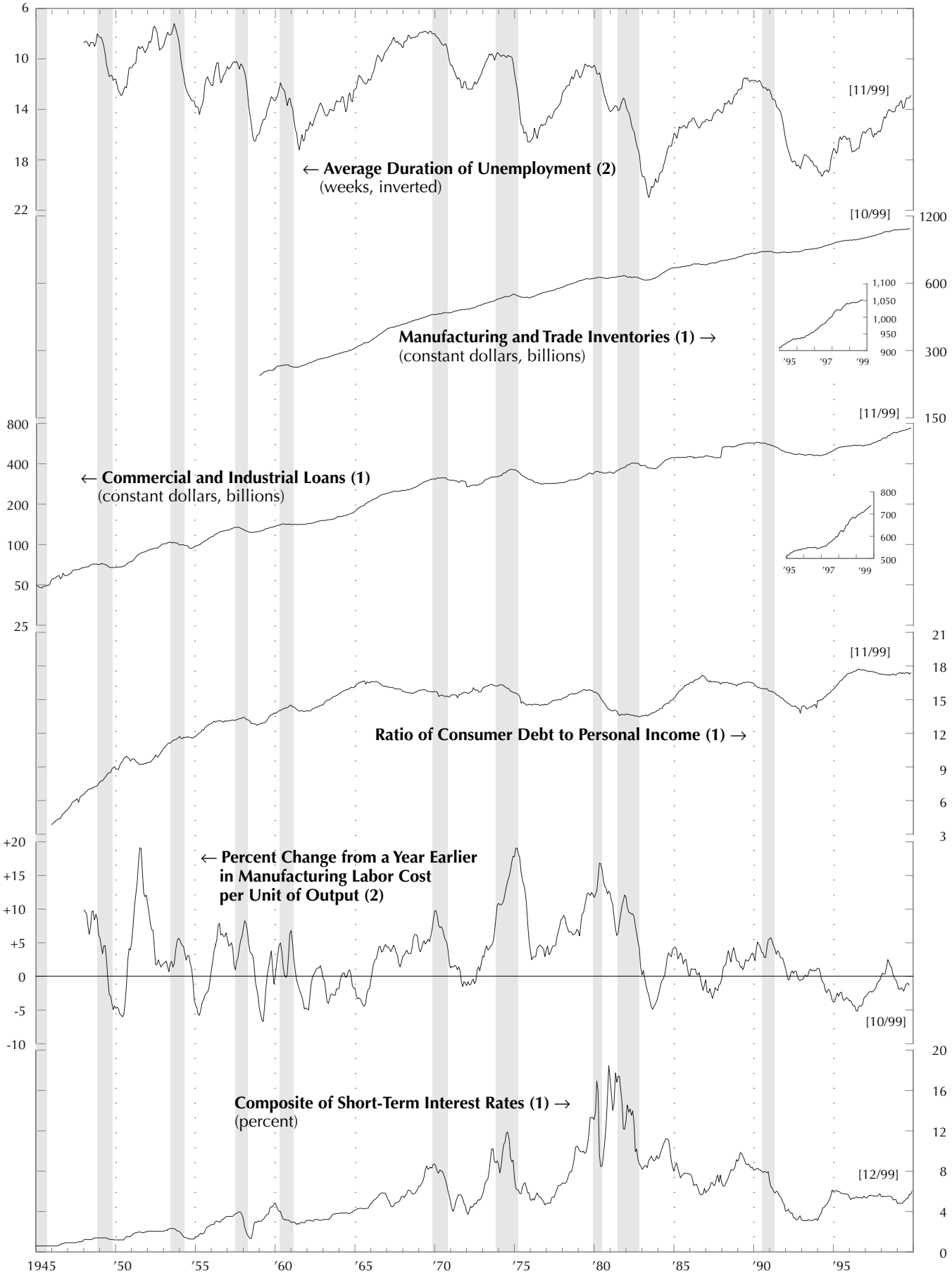


Notes: 1) Shaded areas indicate recessions as dated by the National Bureau of Economic Research. 2) The number in parentheses next to the name of a series is an estimate of the minimum number of months over which cyclical movements of a series are greater than irregular fluctuations. That number is the span of each series' moving average, or MCD (months for cyclical dominance), used to smooth out irregular fluctuations. The data plotted in the charts are those MCDs and not the base data. The number in brackets is the latest month for which the moving average is plotted. 3) The insets in selected charts show recent trends more clearly. These insets have arithmetic scales, even when the main chart is plotted on a ratio scale.

PRIMARY ROUGHLY COINCIDENT INDICATORS



PRIMARY LAGGING INDICATORS



moil surrounding World War I and the global protectionist regime that followed (the infamous Smoot-Hawley tariff was but one factor in the protectionist equation). World War II, which saw many of the depression-battered unemployed volunteer for or drafted into military service, and which created vast demand for domestic workers in wartime industry, is credited by many for pulling the Nation out of economic purgatory. And the postwar boom that followed was incalculably aided by pent-up demand fostered by wartime rationing as well as the marked absence of international competition in goods and services. Most of the rest of the developed world had much of its productive capital in both material and human resources literally blown up.

More recently, the Vietnam War kept domestic unemployment in rein as the baby boomers began to enter the workforce—and contributed to the record 1961-69 expansion which was tied this month. Oppositely, the subsequent OPEC oil crises, which came just when the flood of boomers into the labor market was at full tide, provoked a variety of idiotic domestic policy responses, including wage and price controls and a perverse energy policy that, in effect, subsidized oil imports.

The point is that exogenous events involving global markets historically have cut both ways, as often as not providing direction to much domestic economic activity no matter what changes in modes of production and consumption were simultaneously occurring. Despite the attention focused on the supposed attributes of the "new economy," the situation today seems much the same. Perhaps the most notable difference is that, on balance, the influence of such exogenous factors on domestic economic activity during the current expansion has been overwhelmingly favorable.

In this respect, and whatever the wisdom of their policies and actions, President Clinton, Mr. Greenspan, the Members of Congress, and the various architects and managers of the "digital revolution," would seem to have enjoyed a large measure of good luck.

A Genuinely New Economy

In broad economic perspective it is difficult to exaggerate the importance of the collapse of the Soviet Union, even though at this time it remains difficult to quantify its effects. For a *de facto* consequence of that collapse has been the dissolution to one extent or another of the patron-client state relationship that described the economic status of many developing economies throughout the Cold War. As a matter of political necessity, and no matter the patron (the Soviets or the United States) the client state regime was profoundly protectionist and anti-competitive. Over the long run such arrangements are just as destructive to underdeveloped nations, and costly to developed ones, as various welfare policies are to the domestic underclass. Although we have not seen it described as such, what the pundits often refer to as the "globalization" of today's economy would seem at least in part a result of this fundamental change.

That is, nations formerly sheltered, even if destructively, from international market transaction now must compete—which in turn imposes market discipline on everyone else, including our own domestic economy. It is not surprising in this respect that today the strongest advocates of protectionism are the developed nations of Europe and Asia, while its strongest opponents are former satellite nations seeking entry to international markets. Be that as it may, the endurance of the current expansion owes at least in part to the continuing liberalization of trade promoted here and elsewhere around the globe since the Soviet collapse.

From this perspective, the seemingly insatiable foreign appetite for U.S. dollars also seems understandable, as newly "freed" developing economies sort out the means of doing business in different circumstances. Even Cuba wants U.S. dollars. Ironically, the introduction of the euro may simply encourage this tendency. Although the euro reportedly was designed by its political architects to compete with the dollar, to the developing nations turned away at the door to the European Union it may appear rather as the currency of "fortress Europe." Whatever the perception, it goes without saying that the rest of the world's "free loan" to the United States has had a benign influence on the domestic economy.

The World's Broker

In the perfect world of economics textbooks, capital flows from more-developed to less-developed economies, where returns on investment can be expected to be relatively greater. But "real world" experience often confounds even the most elegant theory, and current circumstance is no exception. Ever since the international banking crises of the 1980s, capital has flowed not from, but to, the United States—which may account in part for the extraordinary behavior of the domestic financial markets in relation to actual economic performance.

For the property rights and legal infrastructure that support investment in American enterprise are absent in most of the developing world. In global perspective, investments in, say, U.S. multinational corporations would seem to enjoy marked advantages even over their developed-world counterparts. Japanese multinationals seem bound to cronyism; and the European multinationals labor under intractable structural impediments—notably an inflexible labor force wedded to protectionism. Given these circumstances, it is understandable that the United States financial markets have, in effect, served as the "world's broker"—and the flood of capital here has sustained an entrepreneurial boom unmatched elsewhere. Until the rest of the world "gets its act together"—or until conditions here deteriorate (as they may very well do)—it is difficult to see how this will change. In any event, as we review below, in the near term at least there is no end in sight to the current expansion. ❑

BUSINESS-CYCLE CONDITIONS

With strength showing across our leading indicators, the record 106-month expansion could be far from over.

This month the current expansion ties with the February 1961 - December 1969 expansion as the longest on record and the latest round of economic data shows no indication that it is likely to end soon. Four of the 12 primary leading indicators—*M2 money supply*, the *ratio of manufacturing and trade sales to inventories*, *initial claims for state unemployment insurance* (inverted), and *the index of common stock prices*—reached new cyclical highs. (To adjust for price inflation, M2 money supply and all other dollar-denominated series are reported in constant dollars.) M2 money supply rose 0.4 percent to $4.017 trillion. The ratio of sales to inventories rebounded off of last month's slight drop to match its previous high. Initial claims for unemployment fell by 4,000, but *the index of common stock prices* reached a new high and was upgraded. All four series now are appraised as clearly expanding.

Although not at new highs, four other leading indicators—the *3-month change in sensitive materials prices*, *new orders for consumer goods*, *contracts and orders for plant and equipment*, and *vendor performance*—are appraised as clearly expanding as well. Sensitive materials prices remained in positive territory for the third consecutive month. Despite a drop in its moving average, there are indications of strength in the base data for the new or-

ders series and its cyclical status was unchanged. Both the base data and the moving average for contracts and orders fell this month, but this one-month decrease was not sufficient to warrant downgrading the series' cyclical status. Vendor performance, the percentage of purchasing managers reporting slower deliveries from their suppliers, remains well below its cyclical peak of November 1994. But this peak has become statistically "stale," and more recent data indicate that the series now is clearly expanding.

Despite a two-month decrease in the data, the cyclical status of the *M1 money supply*, the Federal Reserve's narrowest measure of money, remains indeterminate. The recent up tick in M1 may reflect the increased demand for cash prior to the New Year in anticipation of Y2K problems (which overwhelmingly failed to materialize). The base data for *average workweek in manufacturing* were unchanged, and its moving average dropped slightly. Still, the series has no apparent trend and its status remains indeterminate. The *3-month change in consumer debt,* which provides an indication of how fast the level of debt is increasing or decreasing, was unchanged at 1.45 percent. The debt series has fluctuated only very narrowly over the past several months and, until more pronounced changes are reported, must remain indeterminate.

The only leading indicator with signs of weakness is the level of *new housing permits*. Although the moving average of this series increased despite a drop in the base data, the improvement was insufficient to warrant upgrading the series' cyclical status. It remains appraised as probably contracting.

Overall, 89 percent (eight out of nine) of the primary leading indicators with apparent cyclical trends are expanding. The cyclical score, AIER's purely mathematical assessment of the leaders, increased to 86, its highest level since March 1994.

Three of the six primary roughly coincident indicators—*nonagricultural employment*, the *index of industrial production*, and *gross domestic product* reached new cyclical highs. All three are appraised as clearly expanding. *Nonagricultural employment* increased by 315,000 jobs. Job growth occurred primarily in the service-producing sector and in construction, while employment in manufacturing fell slightly. The *index of industrial production* increased 0.4 percent, the same as last month. The final estimate for the third quarter annualized change in *gross domestic product* is 5.7 percent—an upward revision of 0.9 percentage point from the advance estimate. Later this month the advance estimate for the fourth quarter will be available.

Although *manufacturing and trade sales* failed to reach a new high, it, too, is appraised as clearly expanding. *Personal income in manufacturing* fell for the third consecutive month—enough to warrant downgrading its status to probably expanding. On the other hand, the *civilian employment to population ratio* was upgraded from indeterminate to probably expanding. Overall 100 percent (six out of six) of the primary roughly coincident indicators with apparent cyclical trends are expanding.

Three of the six primary lagging indicators—the *average duration of unemployment* (inverted), *manufacturing and trade inventories*, and *commercial and industrial loans*—reached new highs this month. All three are appraised as clearly expanding. The *composite of short-term interest rates*, although not at a new high, is also appraised as clearly expanding. Short-term rates are up 100 basis points, or one full percentage point, to 6.0 percent from their low in May 1999.

The *ratio of consumer debt to personal income* increased 0.12 points to 17.38 percent and remains appraised as probably expanding. In both absolute and relative terms, the labor costs series continues to decrease. Both the base data and the moving average for the *percent change from a year earlier in manufacturing labor cost per unit of output* fell. However, the cyclical status of the series remains indeterminate. Overall, 100 percent (five out of five) of the primary lagging indicators with apparent cyclical trends are expanding.

Given the duration of the current expansion, such across-the-board strength in the statistical indicators is impressive. At least for now, there is no end in sight. ❑

Statistical Indicators of Business-Cycle Changes

Change in Base Data					*Cyclical Status*		
Sep.	*Oct.*	*Nov.*	*Dec.*	***Primary Leading Indicators***	*Nov.*	*Dec.*	*Jan.*
-	+	+		M1 money supply	?	?	?
+	+	+		M2 money supply	+	+	+
+	-	+		Change in sensitive materials prices	+	+	+
-	-	+		New orders for consumer goods	+	+	+
-	-	-		Contracts and orders for plant and equipment	+?	+	+
-	+	+	-	New housing permits	-?	-?	-?
-	+			Ratio of manufacturing and trade sales to inventories	+	+	+
+	+	-	+	Vendor performance	+	+	+
-	-	+	+	Index of common stock prices (constant purchasing power)	+?	+?	+
nc	nc	-	nc	Average workweek in manufacturing	?	?	?
-	+	+	+	Initial claims for unemployment insurance (inverted)	+	+	+
-	-	+		Change in consumer debt	?	?	?
				Percentage expanding cyclically	89	89	89
				Primary Roughly Coincident Indicators			
+	+	+	+	Nonagricultural employment	+	+	+
+	+	+	+	Index of industrial production	+	+	+
-[r]	+	-		Personal income in manufacturing	+	+	+?
-	+			Manufacturing and trade sales	+	+	+
-[r]	+	+	+	Civilian employment to population ratio	?	?	+?
+				Gross domestic product (quarterly)	+	+	+
				Percentage expanding cyclically	100	100	100
				Primary Lagging Indicators			
+	-	+	+	Average duration of unemployment (inverted)	+	+	+
+	+			Manufacturing and trade inventories	+	+	+
+	+	+		Commercial and industrial loans	+	+	+
+	-	+		Ratio of consumer debt to personal income	+	+?	+?
-[r]	+	-		Change in labor cost per unit of output, manufacturing	?	?	?
+	+	nc	+	Composite of short-term interest rates	+	+	+
nc No change.		[r]Revised.		*Percentage expanding cyclically*	100	100	100

Under "Change in Base Data," plus and minus signs indicate increases and decreases from the previous month or quarter and blank spaces indicate data not yet available. Under "Cyclical Status," plus and minus signs indicate expansions or contractions of each series as currently appraised; question marks indicate doubtful status when shown with another sign and indeterminate status when standing alone.

PRICE OF GOLD

	1998	*1999*	*—— 2000 ——*	
	Jan. 22	*Jan. 21*	*Jan. 13*	*Jan. 20*
Final fixing in London	$293.80	$287.75	$282.10	$288.10

Research Reports (ISSN 0034–5407) (USPS 311–190) is published twice a month at Great Barrington, Massachusetts 01230 by American Institute for Economic Research, a nonprofit, scientific, educational, and charitable organization. Periodical postage paid at Great Barrington, Massachusetts 01230. Sustaining memberships: $16 per quarter or $59 per year. POSTMASTER: Send address changes to ***Research Reports***, American Institute for Economic Research, Great Barrington, Massachusetts 01230.