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Before The  
POSTAL RATE COMMISSION  
WASHINGTON, D.C. 20268-0001

Postal Rate and Fee Changes, 2000

Docket No. R2000-1

REBUTTAL TESTIMONY  
OF  
VICTOR ZARNOWITZ  
ON BEHALF OF THE  
UNITED STATES POSTAL SERVICE

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1 AUTOBIOGRAPHICAL SKETCH

2           My name is Victor Zarnowitz. I am an economist working for The  
3 Conference Board, the premier worldwide business membership and  
4 research network. I am Professor Emeritus of Economics and Finance in  
5 the Graduate School of Business of the University of Chicago, and  
6 Research Associate at the National Bureau of Economic Research  
7 (NBER). I have been with the NBER since 1952, and teaching at Chicago  
8 since 1959. I have been a consultant to the Bureau of Economic Analysis  
9 in the U.S. Department of Commerce, the Census Bureau, the Energy  
10 Department, and the Congressional Budget Office. I have visited and  
11 lectured at the Universities of Mannheim, Munich, Zurich, Columbia,  
12 Harvard, and Stanford. I have authored numerous articles and several  
13 books on business cycles, indicators, and forecasting.

14           In addition, I was in charge of the *ASA-NBER Quarterly Survey of*  
15 *the Economic Outlook* from 1968 to 1990; a coeditor of the *Journal of*  
16 *Business* and associate editor of several other professional journals; and  
17 an editor of and regular contributor to *Economic Forecasts: A Monthly*  
18 *Worldwide Survey*. I am a Fellow of the National Association of Business  
19 Economists, a Fellow of the American Statistical Association, and  
20 Honorary Member of the Center for International Research on Economic  
21 Tendency Surveys. I earned my Ph.D. in economics at the University of  
22 Heidelberg (Germany) in 1951.

1 I. PURPOSE AND SCOPE OF TESTIMONY

2 I have been asked by the Postal Service to rebut testimony presented to  
3 the Commission which asserts that economic conditions will continue to be  
4 stable and that inflation will continue to be relatively low and predictable over the  
5 projected rate cycle. Specifically, I address comments by witnesses Buc  
6 (USPS/DMA-T1), Burns (USPS/OCA-T2), Rosenberg (USPS/OCA-T3), and  
7 Stapert (USPS/CPRA-T1).

8 II. THE RELEVANCE OF NEW ECONOMICS OF A PERPETUAL

9 NONINFLATIONARY BOOM

10 The United States Postal Service has included in its request for changes  
11 in rates and fees a provision for contingencies of 2.5 percent of test-year  
12 expenses.<sup>1</sup>

13 Intervenor witnesses diverge in their estimates of the nature and extent of  
14 the “contingencies” now faced by Postal Service management.

15 Those contingencies relate to uncertainties in real economic activity  
16 (aggregate employment, production, and incomes) and the overall nominal  
17 changes (in inflation and interest rates). The following issues are relevant to the  
18 evaluation of these uncertainties. Has the business cycle been abolished?  
19 What was the risk of a slowdown or recession when the Postal Service case was  
20 filed and how has it changed since? What was the risk of increased inflation

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<sup>1</sup> According to 39 USC § 3621:

Postal rates and fees shall provide sufficient revenues so that the estimated income and appropriations to the Postal Service will equal as nearly as practicable total estimated cost of the Postal Service. For purposes of this section, “total estimated costs” shall include (without limitation) operating expenses, depreciation in capital facilities and equipment, debt service . . . , and a reasonable provision for contingencies.

1 then and what is it now? What can we learn from economic and financial  
2 history? How should inflation, growth trends and cycles be measured in this  
3 context?

4 It is on these questions concerning the economy, its state and likely  
5 changes, that this testimony will concentrate. The main reason for this is my  
6 qualifications as a witness: as stated above, I am an economist who has spent a  
7 long career studying, teaching, and writing about macroeconomics and finance,  
8 with particular attention paid to business cycle theory and history, indicators, and  
9 forecasting. A secondary reason is that, in my judgement, changes in the  
10 economy are a very important set of factors for the problem that we address  
11 here.

12 Consider the witness opinion that the Postal Service's provision for  
13 contingencies amounting to 2.5 percent of its total estimated costs is not  
14 reasonable. This view, represented in particular by the direct testimony of  
15 economist Edwin A. Rosenberg on behalf of the Office of the Consumer  
16 Advocate (OCA), is based on a highly optimistic appraisal of the state of the U.S.  
17 economy. According to witness Rosenberg, "The United States is currently  
18 enjoying the longest economic expansion in over half a century. We continue to  
19 have robust economic growth combined with low and relatively stable inflation."  
20 Tr. 22/9815. Similar comments are made by witness Buc, Tr. 22/9750, while  
21 witness Burns relies on information from witness Rosenberg's testimony (Tr.  
22 22/9746-47). Witness Stapert refers to witness Buc's characterizations of the

1 economy, as well as projections by "Congressional and Administration sources"  
2 that forecast favorable economic conditions. Tr 22/14456, 14475.

3         These statements are similar to those made by proponents of the "New  
4 Economy" paradigm that has now been held by some enthusiastic or interested  
5 parties for years without much change and without much evidence and analysis.  
6 Under this paradigm, the economy is seen as undergoing a sea change and  
7 entering a new era of indefinite prosperity. The current business expansion is  
8 believed to be uniquely long, strong, and stable, with inflation no longer feared to  
9 be a serious threat to prosperity.

10         But each of these points is highly questionable. My testimony will show  
11 that, although the U.S. economy has benefited from benevolent economic  
12 conditions since the mid-1990s, there has been a gradual increase in the  
13 imbalances and risks that accompany any boom. This process has accelerated  
14 in the immediately past and current year, resulting in a much higher level of  
15 uncertainty about the direction of the economy.<sup>2</sup>

16 III. U.S. ECONOMIC ACTIVITY AND LEADING INDICATORS: SIGNS OF A  
17 SLOWDOWN?

18         Witness Rosenberg speaks of the present U.S. expansion as being the  
19 longest on record. While this is true, it has not been the strongest: the  
20 cumulative gains in total output (real GDP) and nonfarm employment were

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<sup>2</sup> I have analyzed the subject in three recent papers, from which I shall draw selectively in the arguments that follow. See Victor Zarnowitz, "Has the Business Cycle been Abolished?" *Business Economics*, vol. 23, no. 4, pp. 39-45 (1998); "Theory and History Behind Business Cycles: Are the 1990s the Onset of a Golden Age?" *Journal of Economic Perspectives*, vol. 13, no. 2, pp. 69-90 (1999); "The Old and the New in U.S. Expansion of the 1990s" National Bureau of Economic Research (NBER) *Working Paper* 7721 (May 2000).

1 greater in the 1960s and even in the 1980s than in the 1990s (measured over  
2 the same number of periods since the initial troughs; see Chart 1). This is  
3 because the early recovery in 1991-92 was unusually sluggish, as shown in  
4 particular by stagnant employment and rising unemployment. Only since 1996  
5 did U.S. economic growth become remarkably high and stable. This reduces the  
6 claim that a new pattern of noninflationary growth and noncyclical prosperity is  
7 already firmly entrenched and underscores the continued relevance of lessons  
8 from the long business-cycle history.

9         Second, total output and employment flattened in the late stages of past  
10 long U.S. expansions, as shown by the patterns for the 1960s and the 1980s:  
11 slowdowns often precede recessions. There is no sign yet that this is occurring  
12 now in our chart 1, panel A, for real GDP. However, this graph ends in Q1 2000  
13 (years and quarters used in my testimony are calendar years and quarters).  
14 There is new evidence that growth of consumption declined substantially in the  
15 second quarter (see section VII below for detail). Growth in employment tapered  
16 off slightly by June 2000 (panel B). Business investment accelerated but some  
17 of it is likely to be reversed, since inventories increased strongly relative to sales.  
18 The rise in government expenditures on the military and Census 2000 is also apt  
19 to prove temporary.

20         Third, and more importantly, a slowdown shows up first in the leading  
21 indicators before it does in the coincident indicators such as output and  
22 employment. The Composite Index of Leading Economic Indicators (LEI)  
23 reached a high of 106.3 (1996=100) in January 2000, then stayed flat and eased

1 to 106.0 by May (Chart 2). Its average monthly percent change drifted down  
2 from 0.8 percent to 0.3 percent between June - December 1999 and November  
3 1999 – May 2000.

4 In particular, the financial sector subindex of the LEI moved sharply down  
5 at the end of 1999, propelled by changes in each of its three components. Real  
6 money supply (M2) grew more slowly since the Fed began to tighten by raising  
7 its benchmark interest rate about a year ago. Stock prices (S&P 500) flattened  
8 in 2000 after rising sharply in the late 1990s, and the market's exuberant  
9 technology sector declined. The interest rate spread (10-year Treasury bonds  
10 less Federal Funds), which moved in the 0.7-1.2 percent range from June 1999  
11 through February 2000, has plunged into negatives lately (-0.43 percent in June  
12 2000). Such yield spread inversions, when caused by increases in short-term  
13 interest rates, usually occur before and near business cycle peaks, and are  
14 viewed as relatively reliable adverse signals. (However, note that reductions in  
15 the supply of long-term Treasury bonds related to fiscal policy contributed  
16 recently to increases in prices and decreases in yields of such bonds. This blurs  
17 somewhat the meaning of the recent U.S. yield inversions, but they still represent  
18 lower profit margins for the banks and raise a disturbing prospect of conflicting  
19 effects of monetary and fiscal policies on the direction of interest rates.)

20 Series that represent costs of doing business such as the inventory-sales  
21 ratio, change in unit labor cost, average prime rate charged by banks, and  
22 commercial and industrial loans outstanding are components of the U.S. Index of  
23 Lagging Indicators. So are such measures of consumer and social costs as ratio

1 of installment credit to personal income, change in the consumer price index for  
2 services, and average duration of unemployment. Thus, an accelerated rise in  
3 the lagging index, which often occurs late in an expansion, provides a warning  
4 that an imbalance due to rising costs may be developing. When their scales are  
5 inverted (put upside down) some of the laggards turn into long leaders. The ratio  
6 of the Coincident to the Lagging Index, which had leads of 8-11 months at most  
7 recent U.S. business cycle peaks, has now risen to a new high-plateau level  
8 (above 110 in March-May 2000).

9 In his July 20 testimony to the Senate Banking Committee, Federal  
10 Reserve Chairman Greenspan stated that demand may be slowing and getting  
11 better aligned with the economy's potential output growth, while impressive  
12 productivity advances continue. The Fed has raised the overnight bank lending  
13 (Federal Funds) rate six times since June 1999 to 6.5 percent. "Even without the  
14 rise in interest rates," Greenspan said, "an eventual leveling out or some  
15 tapering off of purchases of durable goods and construction of single-family  
16 housing would be expected." Further, the cessation of huge market gains this  
17 year should dampen the "wealth effect," which has consumer spending,  
18 particularly on homes and durables, driven up by rising stock prices.

19 Chart 2 shows that the U.S. Leading Index increased but very gradually in  
20 the first five years of the present expansion, much faster and steadier in the next  
21 four years (see panels A and B for levels and six-month smoothed and  
22 annualized growth rates, respectively). Remarkably, the cumulative gains of the  
23 leading index in the 1990s were quite modest compared with the 1960s and

1 even with the 1980s. However, since 1996 the growth rate of the leading index  
2 was relatively high and stable. Its decline in the latter half of 1999 and 2000 still  
3 looks moderate and reversible.

4 IV. UNEMPLOYMENT AND INFLATION: THE SUCCESSES AND THE  
5 RISKS

6 Intervenor witnesses cite a low unemployment rate as evidence of strong  
7 and continuing growth in the U.S. economy (for example, Tr. 22/9750 (witness  
8 Buc)). At first glance, the combination of low unemployment and low inflation  
9 does look remarkable. The U.S. unemployment rate rose from over five to nearly  
10 seven percent of the civilian labor force during the recession and initial recovery  
11 in 1990-92, then declined gradually back to 5 percent in 1992-97. Meanwhile,  
12 U.S. consumer price inflation fell sharply from about 7 percent annual rate early  
13 in 1990 to around 3 percent in 1992-95 and then less than 2 percent in 1996-97  
14 – contrary to the conventional forecasts from the Phillips curve that assume an  
15 inverse relationship between the two variables (see Chart 3, panels A and B).  
16 However, after moving narrowly around a low floor in 1998, inflation in 1999-  
17 2000 rose irregularly from below 2 percent to around 4 percent. At the same  
18 time, unemployment continued on its slow way down to near 4 percent now (only  
19 a little above its record lows of the late 1960s).

20 Thus, the enormous surge of U.S. consumption and investment demand  
21 in the second half of the 1990s succeeded in reducing the jobless rate drastically  
22 (below the most optimistic expectations). Yet inflation was stable or declining  
23 most of the time, and rising only lately and that still in the moderate range.

1 These several factors show that we were very fortunate in the recent past but  
2 they are not such as to be highly reassuring about the future.

3 Abroad, disinflation and, in some countries, deflation contributed much to  
4 the recent declines in U.S. inflation through lower prices of imports, materials,  
5 and finished products. But this is largely over since the upturns following the  
6 Asian recessions. The price of oil rose sharply and prices of some industrial  
7 materials such as metals rose moderately. Internationally, the forces of deflation  
8 weakened and those of inflation strengthened. Also, globalization defined  
9 broadly as a trend toward increased integration across countries of product,  
10 input, and asset markets apparently reduced the powers of U.S. corporations to  
11 raise prices and of U.S. labor markets to raise wages. But again these effects  
12 must be expected to decrease when, as many expect, the economic climate  
13 abroad improves relative to that in the United States.

14 In addition, falling prices of computer hardware and software have helped  
15 to contain inflation as has Internet marketing. In a way, this credits good luck, in  
16 the form of a coincidence of favorable "supply shocks" – again, not something  
17 that can be comfortably projected into the future.

18 The latest news is that the U.S. Consumer Price Index (CPI) increased  
19 0.6 percent in June 2000, the highest rate since March (0.7%). In the first half of  
20 this year, the CPI rose at a 4.2 percent annual rate, up from 2.2 percent in the  
21 first half of 1999. Most of this acceleration reflects sharply higher gasoline and  
22 natural gas prices, which jumped by 7.8-8.8 percent in June. In view of the  
23 importance of energy and food costs, I see little consolation in the fact that the

1 “core” inflation (which excludes these costs) is still rising at much lower levels  
2 (from 1.7 to 2.6 percent).

3 The Federal Reserve wants to prevent further increases in inflation, and  
4 its policy to this end is to raise interest rates, thus presumably reducing the  
5 liquidity in the economy and growth of overall demand. According to this  
6 thinking, higher prices of inputs, including presumably higher wages, arise from  
7 pressures of excess demand and must be countered by lowering the pace of the  
8 expansion.

9 The Fed’s reputation is that its resources and powers are big enough to  
10 make its policies likely to succeed and unwise to oppose; hence, a slowing of the  
11 economy is widely expected. Moreover, the prevailing view appears to be  
12 optimistic in anticipating a “soft landing” rather than a “hard landing” – meaning  
13 that the slowdown will not worsen into a recession. But knowledgeable  
14 observers recognize that the risk of things going wrong is significant here. *One*  
15 substantial retardation in aggregate real activity occurring during a long business  
16 expansion (for whatever reason, not necessarily associated with policy or  
17 external shocks) is a frequently observed and hence by no means a surprising  
18 event. On the other hand, it is not often that *two* such sluggish episodes of  
19 cyclical dimensions interrupt a single expansion (as did happen in the 1960s).

20 Historically, U.S. inflation tended to increase in late stages of expansion  
21 and early stages of contraction, decrease before the troughs and thereafter  
22 during recoveries. Inflation, then, being mostly procyclical and lagging, has at  
23 times picked up during slowdowns and even after downturns (see chart 3B for

1 some examples). Declines in demand presumably reduce inflation, but the  
2 corresponding declines in supply have the opposite effect. The adverse and  
3 policy-defying combination of lower real growth and higher inflation, far from  
4 uncommon in recent times, should not be thought of as necessarily a thing of the  
5 past.

6 V. WILL WAGE GAINS STAY MODEST? SOME LESSONS FROM COST,  
7 PRODUCTIVITY, AND PROFITABILITY RECORDS

8 In addition to focusing on unemployment and inflation, there are a number  
9 of other factors to consider when making a judgement about the state and  
10 direction of the economy. One of these is trends in cost and productivity.

11 Average hourly compensation increased most of the time at considerably lower  
12 rates in this expansion than during the 1960s and the 1980s (Chart 4A). Growth  
13 of nominal wages so measured had a downward drift in 1990-94, an upward drift  
14 and less variability thereafter, and some weakening in the last two years (Chart  
15 4B).

16 In real (inflation-adjusted) terms, hourly wages rose strongly in the  
17 recovery of 1991-92, but changed little in the next four years before gaining  
18 sharply in 1997-98 and slowing down again in 1999-2000 (Chart 5A). Growth of  
19 real wages fluctuated largely in the percentage range of -2% to +4%; it declined  
20 from over 4 percent to less than one percent in 1999-2000 (Chart 5B).

21 Total costs of employment in dollars, including fringe benefits covered by  
22 employers, increased by more than 50 percent in 1982-90, less than 30 percent  
23 in 1991-98. The annual growth rate of these costs fell in the first half of the

1 1990s from almost 6 percent to 2.5 percent, but it then drifted up most of the  
2 time in the second half to end up at 4.5 percent in Q1 2000. In the 1980s,  
3 growth of the Employment Cost Index (ECI) was throughout higher, on the  
4 average by about one percentage point (see Chart 6, panels A and B). Most  
5 recently (July 27), the ECI was announced to have increased by one percent in  
6 the second quarter of 2000 after a rise of 1.4 percent in the first quarter (the  
7 largest in a decade). The sharp rise in the ECI in 1999-2000 is unusual in having  
8 been maintained for four consecutive quarters. It supports the fears (apparently  
9 shared by the Fed) that the labor market may yet tighten so as to fuel wage  
10 raises, which lead to more price inflation or a squeeze on profits.

11       The six-month smoothed annualized growth rate of unit labor cost (ULC)  
12 in the nonfarm business sector stayed relatively low in this expansion after the  
13 first year of recovery. It rose from near zero to three percent in 1996-mid-1998,  
14 then fell back to small fractions in the last quarter of 1999 and the first quarter of  
15 2000 (Chart 7B). In the past, ULC typically moved up in late expansion stages,  
16 as shown here for the 1960s and 1980s. The series is classified as lagging, and  
17 its recent decline is unusual.

18       Nonfarm output per hour of work (labor productivity, LP) grew in the 1990s  
19 at rates that for some time were about as variable as those in the comparable  
20 stages of the cycles in the 1960s and 1980s, and often lower. Productivity  
21 stabilized and rose since 1997 but its growth may look surprisingly moderate to  
22 the new technology enthusiasts. However, the recent increase in LP growth,  
23 from two percent to four percent, stands in contrast to the weakness of the same

1 series in late 1980s and its decline in late 1960s (Chart 7A). The patterns for the  
2 earlier expansions agree with the long observed tendency for the LP growth to  
3 be procyclical and leading.

4 Chart 8A shows that corporate profits after taxes in constant dollars have  
5 doubled in the present expansion (after a slow start in the first two recovery  
6 years) and are still going strong. Profit margin-ratio of domestic profits adjusted  
7 for inventory valuation and capital consumption to corporate domestic income -  
8 increased more steadily from about 7 percent to 11 percent (Chart 8B). The  
9 closely related ratio of the implicit price deflator to unit labor cost in the U. S.  
10 nonfarm business sector had an even more persistent upward trend that  
11 accelerated recently (Chart 8C).

12 Profit margins are associated positively with growth rates of real GDP and  
13 labor productivity, negatively with inflation, interest rates, and risk aversion  
14 measured by the difference, yield on new high-grade corporate bonds minus  
15 yield on long-term Treasury Bonds.<sup>3</sup> This helps to explain why economic  
16 slowdowns carry the risk of recession: when growth of total output slows, profits  
17 decline, which drags down stocks, investment in plant and equipment, and  
18 ultimately incomes, spending, and general business activity. Such developments  
19 occurred in late stages of many earlier business expansions (see the patterns for  
20 the 1960s and 1980s in Chart 8, for example). But in the current cycle the profit  
21 variables declined only mildly in 1997-1998 so far.

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<sup>3</sup> For evidence and analysis, see Victor Zarnowitz, "Theory and History Behind Business Cycles: Are the 1990s the Onset of a Golden Age?" *Journal of Economic Perspectives*, vol. 13, no. 2, pp. 69-90 (1999).

1           However, a long and strong expansion in profits can present its own  
2 problems inasmuch as it coincides, and is presumably associated, with a relative  
3 weakness of wages. Such shifts in income distribution have not been  
4 uncommon in the past, and they would be expected to prove temporary. If  
5 booms benefit profits, periods of more moderate or weaker activity are likely to  
6 strengthen or restore the share of labor income.

7           In particular, consider the recent situation, in which the growth rates of  
8 real wages and unit labor costs declined to very low levels even while labor  
9 productivity (output per hour) increased handsomely and corporations enjoyed  
10 high profitability (review Charts 5-8). The combination of such conditions would  
11 make intensified pressures for higher wages very likely – the more so, the longer  
12 it lasted. If the demand for wage and salary raises gained force and spread, the  
13 rising costs could squeeze profits sufficiently to produce a major slowdown or  
14 recession necessary to relieve the pressures.

15 VI. STOCK PRICES SOAR FAR BEYOND PROFITS: AN UNSUSTAINABLE  
16 RISE?

17           One of the most remarkable features of the current expansion, and one of  
18 the favorite explanatory mechanisms of proponents of the “New Economy”  
19 paradigm, has been the tremendous rise in equity prices. The Standard and  
20 Poor' s Index (1941-48=10), which covers common stock prices of 500 large and  
21 medium -size companies using their capitalization numbers as weights, provides  
22 a fair, though certainly incomplete picture of the U.S. equity market. The S & P  
23 500 index rose quite slowly in the first four years of this expansion through 1994,

1 but then just about doubled in 1995-96 and doubled again in 1997-99 with only  
2 one sharp but brief setback. Its growth become less explosive and more  
3 irregular in the first half of the year 2000. The previously most exuberant  
4 technology sector suffered a major slowdown but not a much feared crash. The  
5 comparisons with the 1960s and the 1980s show that the recent bull market has  
6 been indeed exceptionally strong but also increasingly volatile (Chart 9A).

7       While the stock price index quadrupled in 1991-2000 for the S & P 500  
8 companies, their profits or earnings less than doubled so that the price to  
9 earnings (PE) ratio increased from about 15 to 35 or 2 1/3 times. That ratio was  
10 far higher in this expansion than in the previous long U.S. cycles (Chart 9B). In  
11 1999-2000, P/E slid from 35 to 30, still high enough historically for the fears of an  
12 overheated market to persist. Some prominent finance scholars, including the  
13 Nobel laureate Franco Modigliani and Robert Shiller, a long-time student of  
14 market trends and fads, see a bubble about to burst, though with unpredictable  
15 timing; others, e.g. Jeremy Siegel of Wharton, are less pessimistic, but almost all  
16 are increasingly cautious. In any event, it is no longer the case that new  
17 companies in the popular high-tech area enjoy generous market pricing even  
18 without showing any actual or near-term prospective profitability.

19       The most recent study by Yale's professor Ray Fair, performed on his  
20 well-researched econometric model, concludes among others that "the current  
21 level of stock prices implies an unrealistically large share of profits in GDP in the  
22 future." It seems unlikely that profits would increase annually by some 14  
23 percent over the next ten years (more than twice the rate observed since 1952).

1 Moreover, should the market fall to a value consistent with its average historical  
2 growth, then the "Fed does not have the power through interest rate changes to  
3 prevent a recession from taking place."<sup>4</sup>

4 That a significant and persistent overvaluation developed in a substantial  
5 part of the stock market very recently (that is in the last few years of the century)  
6 is actually conceded even by many seasoned observers and forecasters who are  
7 basically optimistic. They believe that the new technology decreased the relative  
8 prices of computers and other capital goods and increased productivity strongly  
9 by substitution of capital for labor, and that this explains much but not all of the  
10 recent stock market boom. However, they also think that the likely effects of this  
11 will include a higher real rate of interest and a greater "wealth effect" on  
12 consumption demand of the rising stock market. To counter the potential for  
13 higher inflation, a tighter monetary policy and higher market interest rates will be  
14 needed.<sup>5</sup>

15 VII. MORE UNCERTAINTY ABOUT INTEREST RATES AND THE PACE OF  
16 EXPANSION

17 Witness Rosenberg testified that Federal Reserve Board actions are  
18 intended to keep inflation at moderate levels. Tr. 22/9812. It is not clear,  
19 however, that the recent rise in interest rates is having the desired effect on the  
20 economy.

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<sup>4</sup> Ray C. Fair, "Fed Policy and the Effects of a Stock Market Crash on the Economy", *Business Economics*, Vol. 35, No. 2, April 2000, pp. 7-14 (quotations from p. 13).

<sup>5</sup> Joel L. Prakken, " Potential Productivity and the Stock Market in the 'New' U.S. Economy", *ibid.*, pp. 15-19.

1           The observed nominal interest rates are procyclical, that is, they usually  
2 rise in expansion and decline in contractions. This reflects largely expectations  
3 of inflation, which have a similar procyclical pattern. In addition, interest rates  
4 show longer trends-upward in the 1960s and 1970s, downward in the 1980s and  
5 1990s. These movements were very large, from about 2-4 percent to 14-16  
6 percent and back to low single digits. Recently, these nearly symmetrical trends  
7 overwhelmed the cyclical changes in the rates, producing declines during the  
8 expansions of the 1980s and 1990s (Chart 10, A and B).

9           Thus, both the 3-month Treasury bill note and the new high-grade  
10 corporate bond yield (representing short-term and long-term interest rates,  
11 respectively) show predominantly upward movements in the 1960s but  
12 downward or sideward movements in the two most recent business cycles.  
13 However, the short rate increased from 4 percent to 6 percent and the long rate  
14 from 6 percent to 8 percent in the past year. These rises, like the previous ones  
15 in 1994, reflect the Fed' s tightening moves and also the bond market's own  
16 changing expectations of inflation and the effects of monetary and fiscal policies.

17           As already noted, the spread or difference, long minus short interest rate,  
18 typically reaches a peak early in a business expansion, then embarks on a long  
19 descent that may end in negatives, that is, in the inversion of the spread  
20 (normally, the long rate exceeds the short rate). Chart 10, panel C, illustrates  
21 these patterns for all three of the recent U.S. expansions, and shows the latest  
22 inversion of the spread in April 2000 (still shallow but deepening in June).

23           Currently, the Federal Funds (overnight bank lending) rate is 6.5 percent, the

1 five-year and thirty-year Treasury bond coupon rates are 6.75 percent and 6.25  
2 percent, respectively.

3 Will the economy slow sufficiently for the Fed to cease raising the interest  
4 rates in the near future? Or will the tight labor market drive up wage demands  
5 and, ultimately, price inflation? Will interest rates continue rising and will the  
6 short rates rise further relative to the long rates? No one can be sure about the  
7 answers and the uncertainties surrounding each of these questions appear to be  
8 rising.

9 What the latest data do establish is that the U.S. economy still resists  
10 showing a decline in the rate of growth for its most comprehensive output  
11 measure, the real gross domestic product (GDP). According to the first  
12 estimates of this series released on July 28 (subject to future revisions), GDP  
13 rose in the second quarter of the year 2000 at a faster-than-expected 5.2 percent  
14 annual rate. Consumer spending did slow to 2.3 percent from a 3.5 percent  
15 increase in the first quarter, so the higher interest rates are likely to be having a  
16 deferent effect, particularly on outlays for durables such as automobiles. But at  
17 the same time business invested heavily in new equipment and software (for the  
18 second time, at a 21% pace!) and built up inventories (at almost twice the annual  
19 rate of the first quarter). However, note that some of the surge in inventories  
20 was presumably brought on by the slower growth of sales, hence unintended  
21 and to be followed soon by business efforts to reduce the stocks of unsold  
22 goods.

1 Government spending rose at a 6 percent annual pace, up from only  
2 about one percent in the first quarter. The trade deficit continued to widen, which  
3 in the long run is unsustainable and a major problem: in Q2 2000, exports  
4 increased at a 7.3 percent annualized rate, imports at a 17 percent rate (!), all in  
5 real terms.

6 VIII. MONETARY GROWTH RATES: STRONGLY UP IN 1995-98, DOWN  
7 THEREAFTER

8 Again, although judging from emphasis in official announcements, the  
9 Fed's main concern in the 1990s was recurrent fears that the economy will  
10 overheat and reignite inflation, the actual behavior of the variables under Fed  
11 control suggests that keeping the economic expansion going was also important,  
12 at times even more so. Thus, growth of the monetary base (MB), which includes  
13 currency and bank reserves, was kept very high during the sluggish early 1990s  
14 but then allowed to drop sharply in 1994-95, when a counterinflationary  
15 slowdown was the policy's target. In the second half of the expansion, MB  
16 growth picked up strongly and reached an explosive rate of 15 percent briefly  
17 last year (presumably to counter the Y2K problem). Even after a quick  
18 downward correction this year, MB growth stayed high at about 8 percent (Chart  
19 11A).

20 Growth of M3 (currency, checking, savings and time deposits, etc.), which  
21 is very difficult to control, was low in 1990-94, increased strongly, from about 2  
22 percent to 11 percent in 1995-98, but then declined to around 8 percent (Chart  
23 11B). This is still relatively high. Despite worries about the bull market's

1 momentum and its concomitants--the wealth effect driving up personal  
2 consumption, including imports, and severely depressing personal saving, the  
3 Fed evidently did little to influence the huge flow of money and credit feeding the  
4 demand for stocks.

5       When expressed in constant dollars (deflated with the Consumer Price  
6 Index), the broad money supply tends to be a leading indicator: M2/CPI, for  
7 example, reaches an early peak when nominal money supply slows while prices  
8 rise(M2 covers mainly currency, time and savings deposits). Chart 12A shows  
9 that growth of real M2 declined from about 7 percent to 2 percent in 1999-2000.  
10 The growth rate of the M2+ aggregate (M2 and mutual bond and stock funds)  
11 starts earlier and extends from 9 percent to less than 1 percent (Chart 12B). If  
12 maintained, such low growth of real money supply could well contribute to  
13 slowing down the pace of economic activity. (Note the low and negative growth  
14 rates of deflated M2 and M2+ in the late stages of the expansions of the 1960s  
15 and 1980s--but also in 1990-95. Similar developments can be observed in the  
16 M3 growth rate; see Chart 12C).

#### 17 IX. LOW SAVING, HIGH BORROWING

18       Another risk to the rosy economic scenario is the decrease in savings,  
19 and the increase in debt. Federal receipts increased more steadily but  
20 cumulatively somewhat less in the past decade than in the corresponding stages  
21 of earlier long U.S. expansions (Chart 13A). Their growth accelerated in recent  
22 years due to a surge in taxes. Federal expenditures rose much less in the late

1 1990s than in the late 1960, and the late 1980s (Chart 13B). This can be largely  
2 attributed to major reductions in military spending.

3 As a result, federal budget deficits declined greatly and were eventually  
4 replaced by increasing surpluses beginning in 1998. National debt increased  
5 from 40 percent of nominal GDP in 1990 to 49 percent in late 1993, then  
6 decreased back to 40 percent by late 1999. The relatively restrained fiscal policy  
7 helped to keep interest rates low and had generally positive effects (let us hope  
8 the recent rise in government spending does not signify a reversal to more  
9 prodigal ways).

10 While the government ceased dissaving and started saving in the form of  
11 surpluses, the personal saving rate dropped persistently from nearly 7 percent of  
12 disposable personal income in 1992 to less than 2 percent in late 1999. The  
13 presumed reasons center on the strong increases in tax receipts and in capital  
14 gains from appreciation of housing and stocks. Gross business savings  
15 (undistributed corporate profits and business depreciation allowances) were  
16 high, above 15 percent of nominal GDP, in 1995-99, reflecting the strength of  
17 profits.

18 With low personal saving, high consumption, high imports, and the stock  
19 market boom, there was a great increase in private borrowing. The bull market  
20 in very volatile or illiquid securities involved investors and traders buying on  
21 margin, a particularly risky and expensive type of credit (when the stocks which  
22 back the loans fall in value, buyers on margin must put up more money to make

1 up the shortfall). The nonfederal (mostly private) debt is huge, exceeding the  
2 current value of GDP by almost half, and creeping slowly upward.

3 As the U.S. economy grew much more quickly than its trade partners,  
4 since mid-1990s, the nation's trade deficits swelled to record levels, absolutely  
5 and relative to GDP. The excess of real imports over real exports, i.e., the  
6 foreign trade deficit financed by foreign borrowing, already large in late 1980s,  
7 grew particularly fast since 1997. This is a long-run problem but a fundamental  
8 one: to avoid piling up foreign debt and exposure to adverse exchange-rate and  
9 trade effects, we need to save more and export more.

#### 10 X. SUMMARY AND CONCLUSION

11 In the preceding sections of this testimony (II-IX), I have presented and  
12 evaluated considerable evidence of the following:

- 13 1. The Business Cycle. The vigorous economic boom in the U.S. developed  
14 only in the second half of the 1990s, the early recovery in this cycle having  
15 been unusually sluggish. The expansions of the 1960s and 1980s were  
16 actually stronger over the same durations. Abroad, the past decade  
17 witnessed numerous financial crises and major recessions. The business  
18 cycle is far from dead and must be considered in any serious forecasts.  
19 Historically, long expansions often ended in slowdowns that risk  
20 recessions by reducing profits and investment. (See sections II, III, and  
21 V).
- 22 2. The Risk of a Slowdown. The Fed raised its benchmark interest rate  
23 seven times before the U.S. economy slowed in 1995 and again six times

1 last year in an effort to bring down what it considers an unsustainably high  
2 and potentially inflationary pace of the expansion. Consumption growth  
3 has finally declined substantially in the second quarter of the year 2000,  
4 but business investment and government spending accelerated. Some of  
5 the latter is temporary and likely to be reversed. Thus, business is likely  
6 to try and reduce inventories that rose relative to sales. Any slowdown  
7 should show up first in the leading indicators before it does in output and  
8 employment (the coincident indicators). In fact, the U.S. Composite Index  
9 of Leading Indicators (LEI) flattened and eased slightly by May 2000. Its  
10 financial subindex, including stock prices, real money supply, and the yield  
11 spread, shows considerably stronger signs that the economy may turn  
12 more sluggish. The frantic bull market of the late 1990s cooled a great  
13 deal this year, especially in the overvalued parts of the popular new  
14 technology sector. The interest-rate spread turned negative recently, an  
15 adverse inversion signal. Monetary growth rates, strongly up in 1995-98,  
16 declined thereafter, and so did the deflated monetary aggregates. The  
17 rise of lagging indicators, which reflect costs of doing business, is also  
18 worrisome.

19 In sum, the uncertainty surrounding the continuation of U.S.  
20 business expansion has undoubtedly increased since the fall of 1999.  
21 (See sections III, VI, VII, and VIII.)

- 22 3. The Risk of a Rise in Inflation. The surprising coincidence of both the rate  
23 of unemployment and the rate of inflation falling in the United States over

1 most of the 1990s was due largely to special factors such as declining  
2 prices of imports, industrial materials and commodities, computer software  
3 and hardware. Foreign deflation, financial crises and economic  
4 contractions contrasted with great strength of the U.S. economy and the  
5 dollar in the context of increasing globalization, new technology and new  
6 marketing. But, after recoveries in a number of economies, prices of oil  
7 and other commodities increased and inflationary tendencies are again  
8 gaining internationally. One cannot count on the continuation of favorable  
9 "supply shocks" -- indefinite declines in import, commodity, and computer-  
10 related prices, for example. Wage gains have been modest in this  
11 expansion, given the sizable increase in labor productivity growth and the  
12 very large increase in corporate profit totals and margins. Growth rates of  
13 real wages and unit labor costs fell to low levels. But pressures for higher  
14 wages are very likely to develop under these conditions. Indeed, the  
15 Employment Cost Index (ECI) has already risen in four consecutive  
16 quarters lately, including as much as 1.4 percent and 1.0 percent in Q1  
17 and Q2 2000, respectively. Both short and long interest rates turned up  
18 and increased significantly in the past year.

19 I conclude that costs of labor, materials, finance, and (probably to a  
20 lesser degree) productive capital are subject to increasing upward  
21 pressures. Even if a slowdown develops, inflation may still rise for some  
22 time (it happened repeatedly in the past). (See sections IV, V, VII, VIII,  
23 and IX).

1 4. The Risk of Overdependence on Foreign Capital. Since American  
2 households are not saving enough, American business investment is  
3 financed to a large extent by borrowing abroad. Imports rise much faster  
4 than exports and the current account deficits swell. Although this is  
5 probably more of a fundamental long-term problem than an immediate  
6 threat, aggravated dependence on foreign borrowing has been cited by  
7 Chairman Greenspan in his congressional testimony earlier in July as  
8 another possible reason for more interest rate increases.

9           Clearly, the undersaving and overborrowing imbalance has been  
10 getting worse over time, and it is not going away. Here again my  
11 conclusion is that, at the very least, the uncertainty about the outcome has  
12 increased considerably this year. (See section IX.)

13 5. The Policy Dilemma. There is also rising uncertainty about the path to be  
14 followed by monetary policy, which can be stated as follows. Leaving  
15 things as they are, that is, at a still rather moderate degree of tightening,  
16 risks more wage inflation and probably in the end more price inflation as  
17 well, since the economy, even if slowing, remains quite buoyant.  
18 Sufficiently high, persistent, and pervasive growth of labor productivity is  
19 unlikely to develop quickly enough to provide a timely solution. Yet raising  
20 interest rates and curtailing the growth of money supply much further  
21 raises the danger of a stock market crash, or at least a serious downward  
22 adjustment of equity prices. Should a major slowdown occur, profits and

1 investment would suffer, raising the risk of a downturn. (See sections VII  
2 and VIII.)

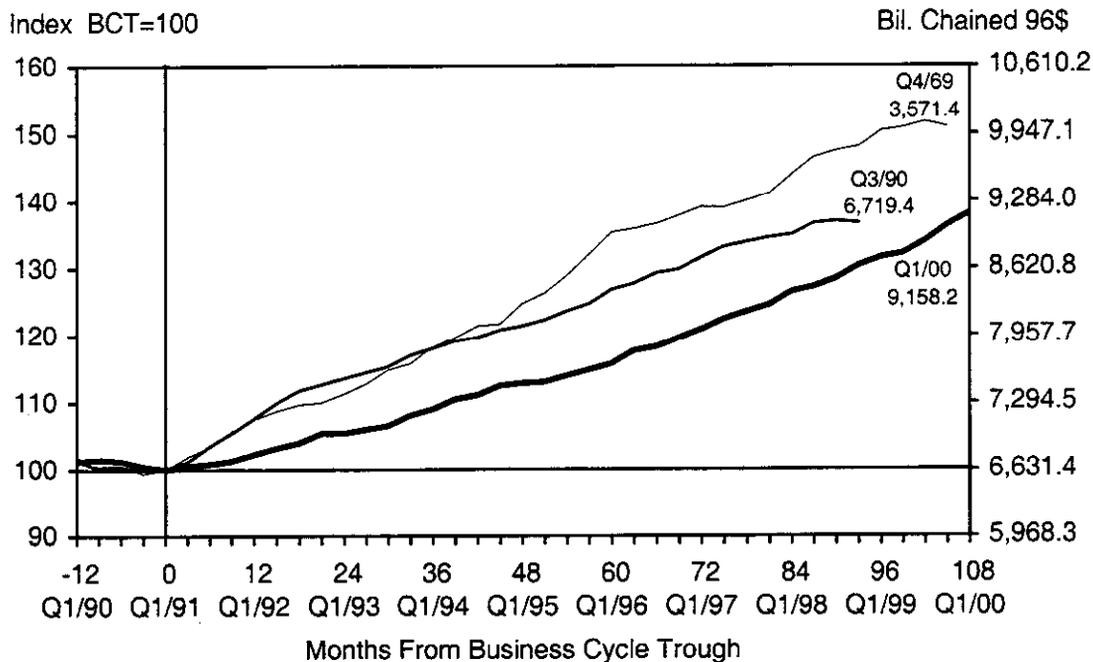
3 6. Overall Conclusion. Since mid-1990s, the U.S. economy benefited from  
4 higher employment, consumption, technical innovations, investment,  
5 productivity, and profitability--just as in previous vigorous business  
6 expansions. But it also experienced a gradual increase in the imbalances  
7 that tend to accompany all booms and produce rising risks. This process  
8 greatly accelerated during the past and, particularly, the current year.  
9 This can be seen from slower growth in leading indicators, employment,  
10 and consumption; more upward pressures on costs of employment and  
11 finance; interest-rate hikes by the Fed to cool the economy and prevent a  
12 bout of inflation; and the more subdued and irregular behavior of the stock  
13 market. Persistent trade and current-account deficits, low saving and high  
14 borrowing all add up to a condition that tends to become more uncertain  
15 and more risky over time.

16 In my opinion, then, the least plausible assumption about the present  
17 state of the U.S. economy is that it will remain unchanged in the foreseeable  
18 future. The risk of a slowdown has increased, and so has the risk of higher  
19 inflation and interest rates. Future destabilization of the stock market cannot be  
20 precluded. Hence there is more uncertainty now than before about the forecasts  
21 of the economy in the years ahead. This includes the projections of the Postal  
22 Service, which will generally need more protection or insurance against

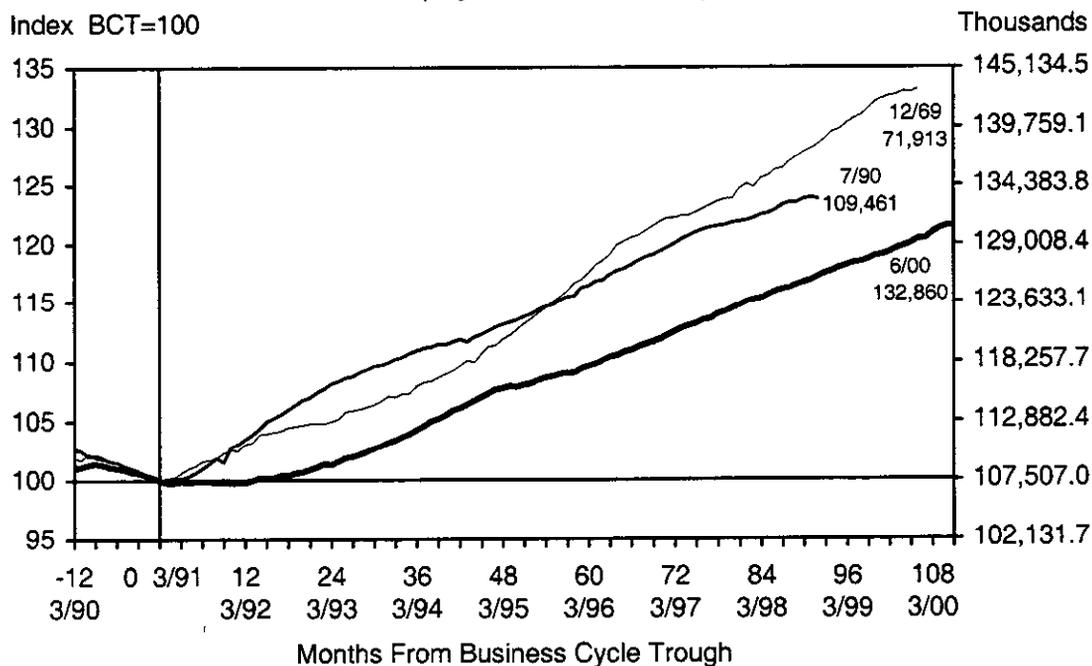
- 1 unexpected adverse events (the presumed function of a contingency provision)
- 2 than it has in recent years.

# Chart 1 U.S. Output and Employment

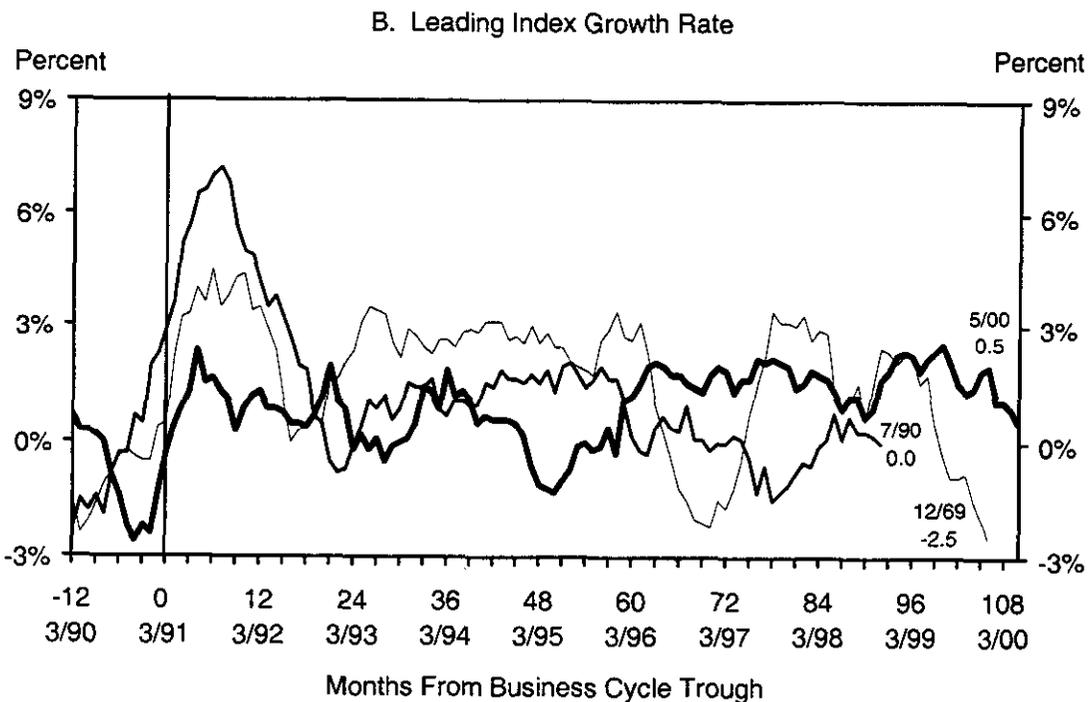
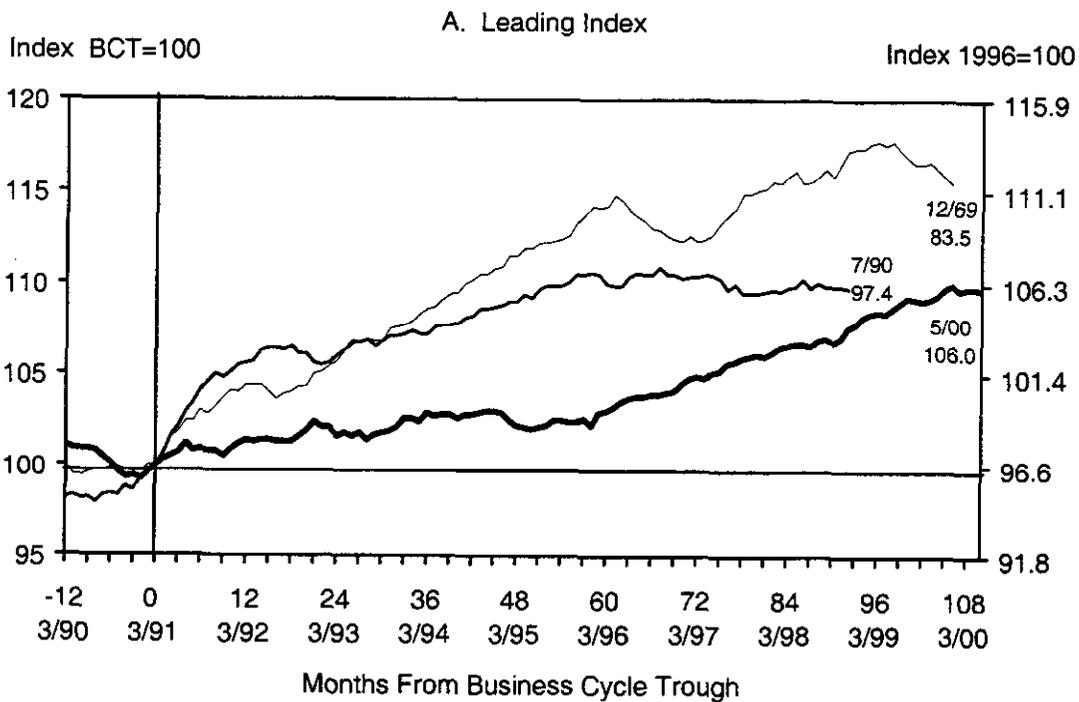
## A. Real Gross Domestic Product



## B. Employees on Nonfarm Payrolls

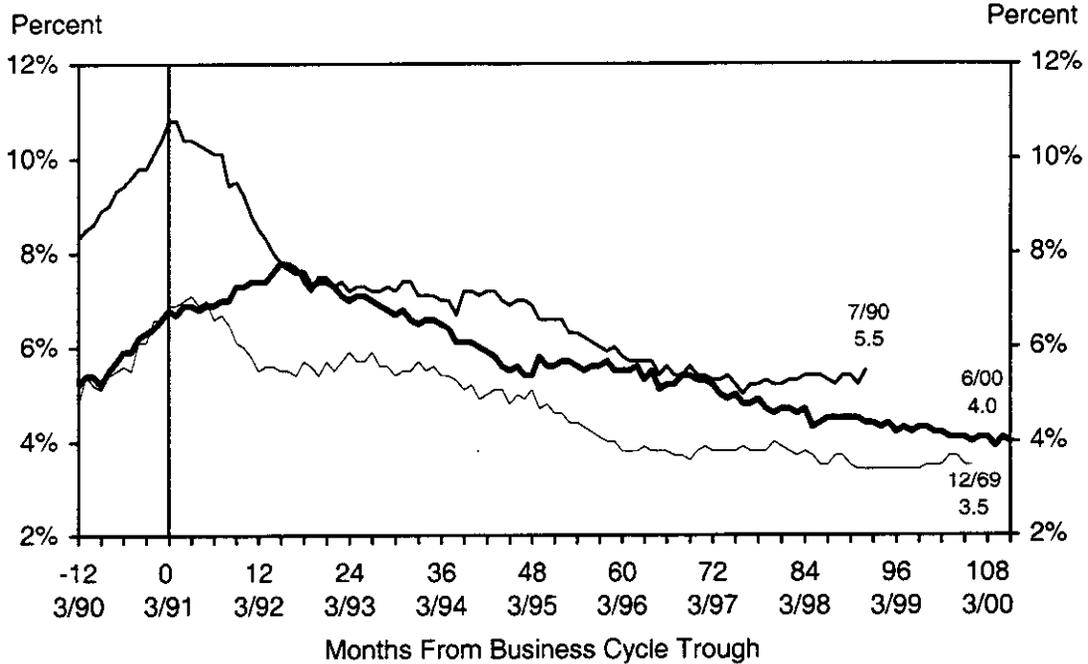


## Chart 2 U.S. Composite Index of Leading Indicators

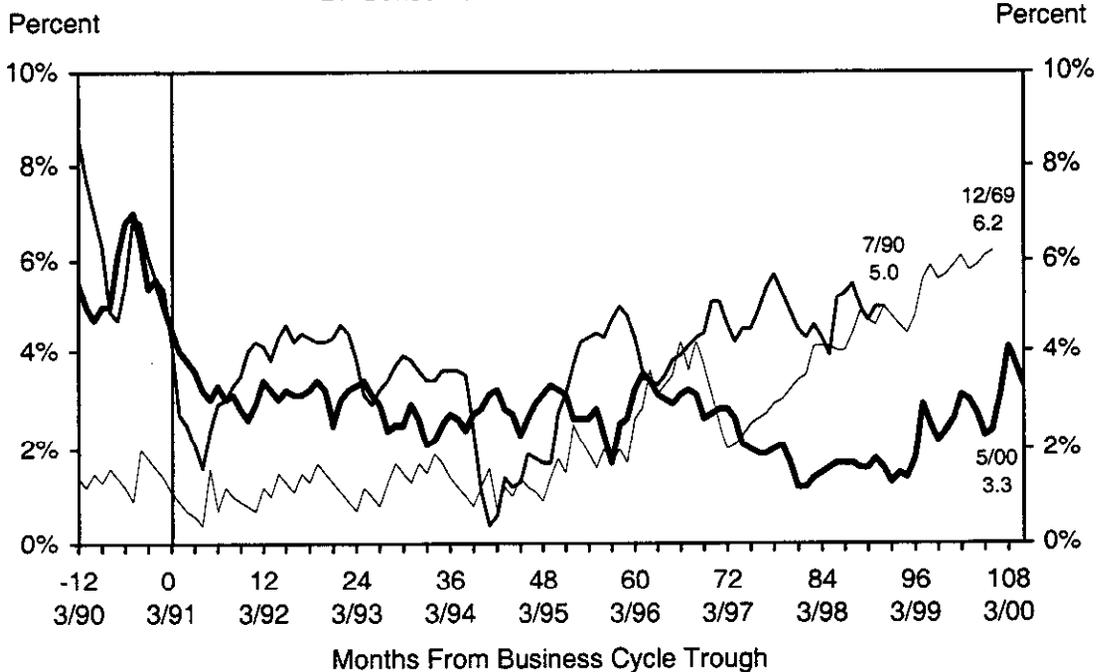


### Chart 3 Unemployment and Inflation

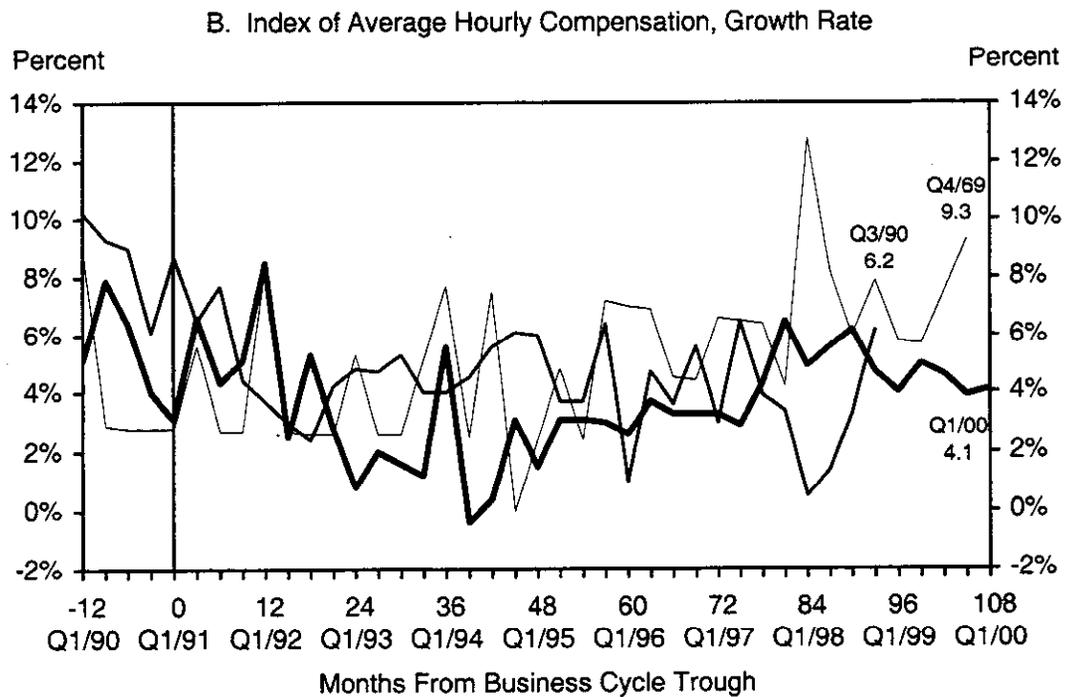
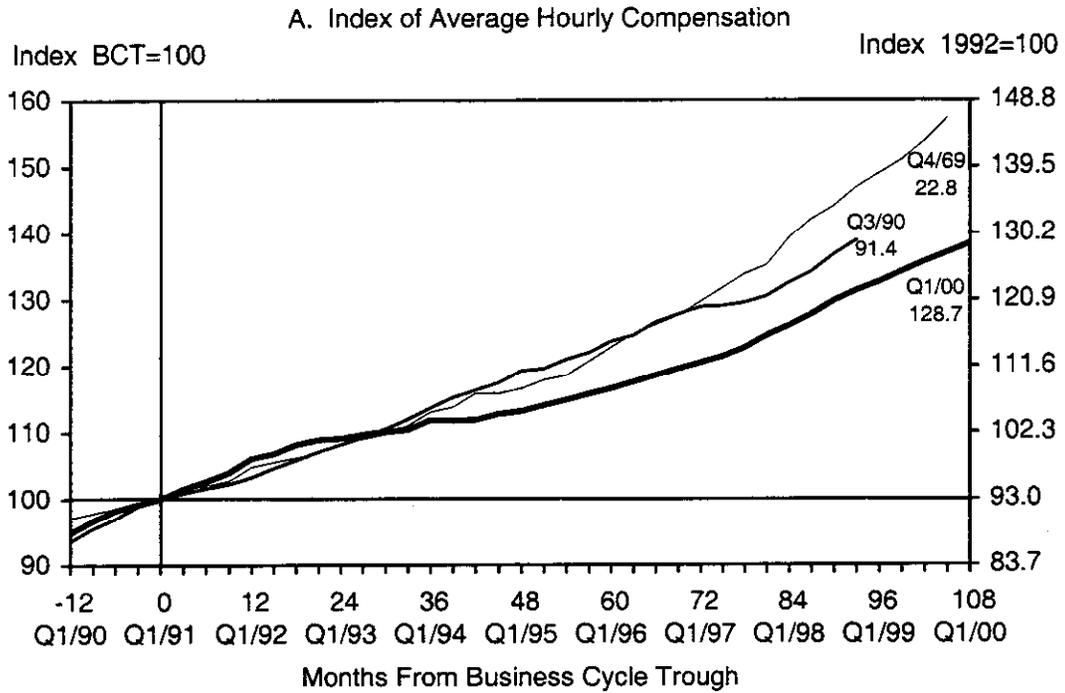
A. Unemployment Rate



B. Consumer Price Index Growth Rate

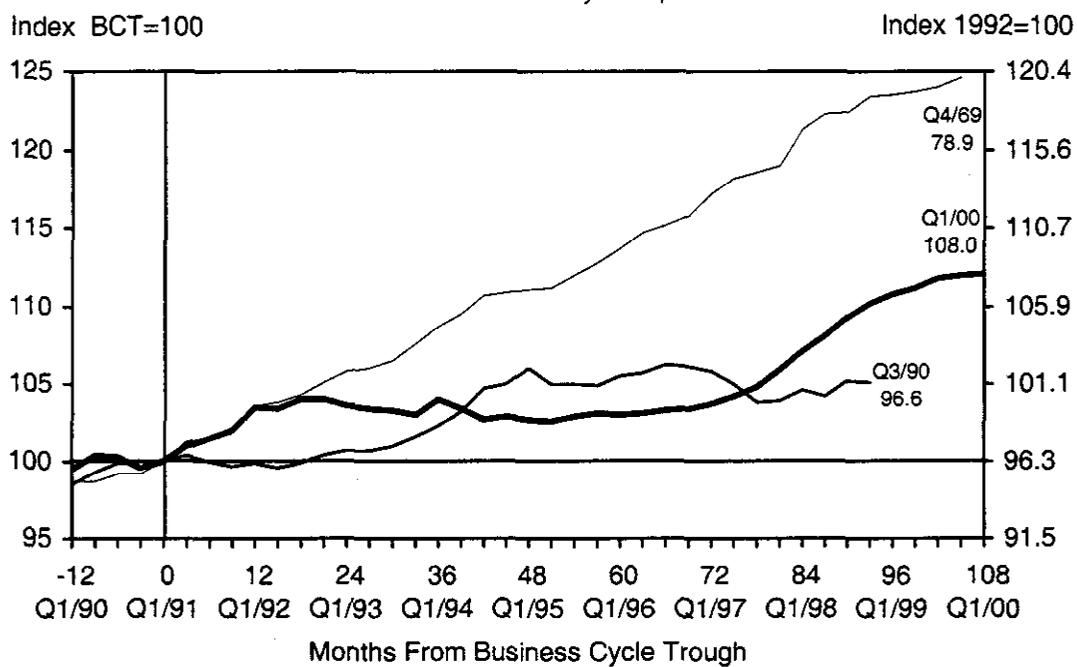


### Chart 4 Nominal Wages, Nonfarm Business Sector

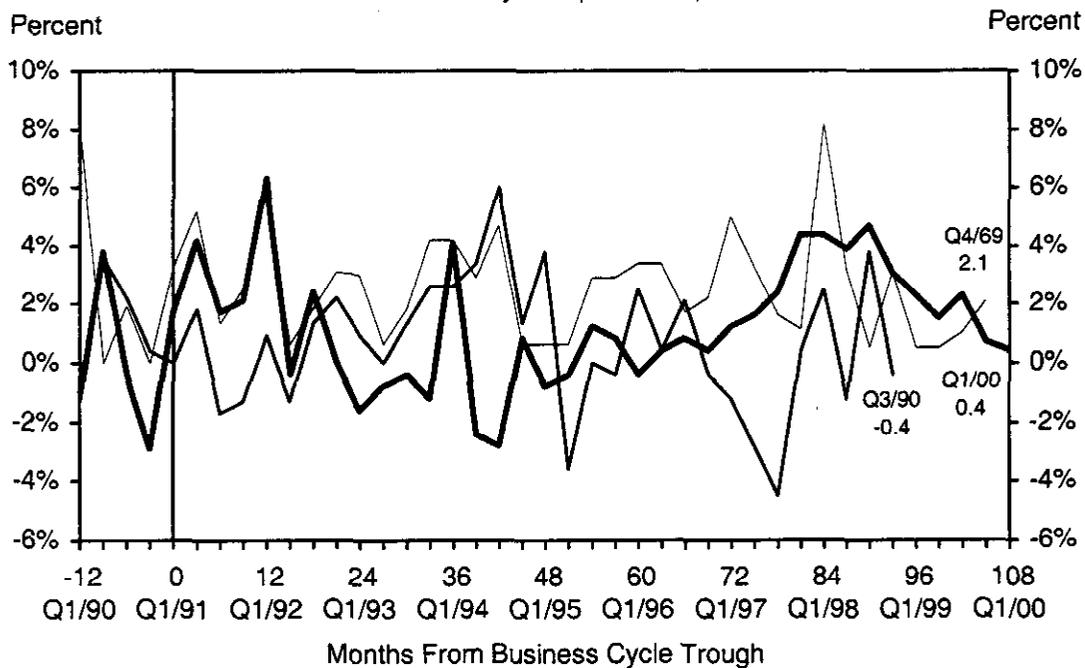


### Chart 5 Real Wages, Nonfarm Business Sector

A. Index of Real Hourly Compensation

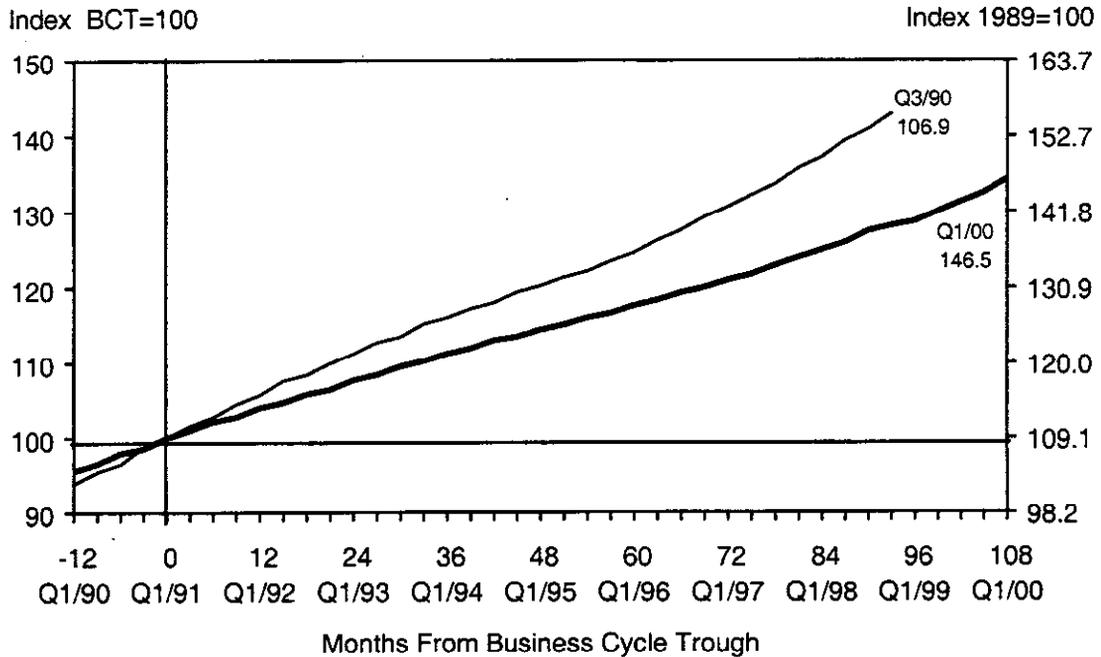


B. Index of Real Hourly Compensation, Growth Rate

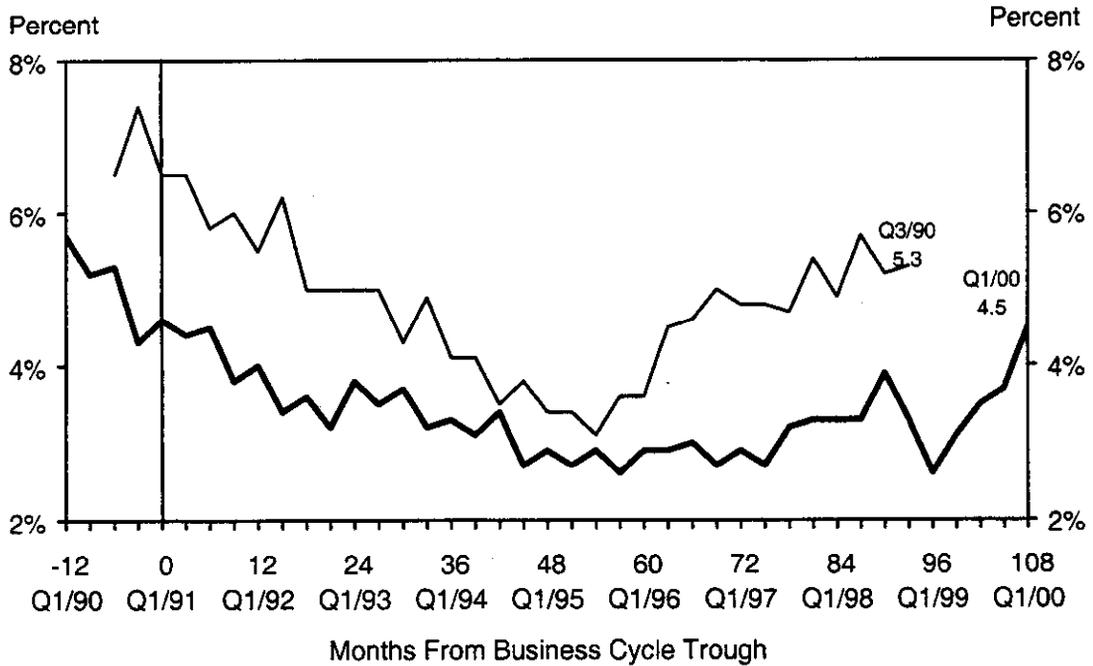


### Chart 6 The U.S. Employment Cost Index

A. Employment Cost Index

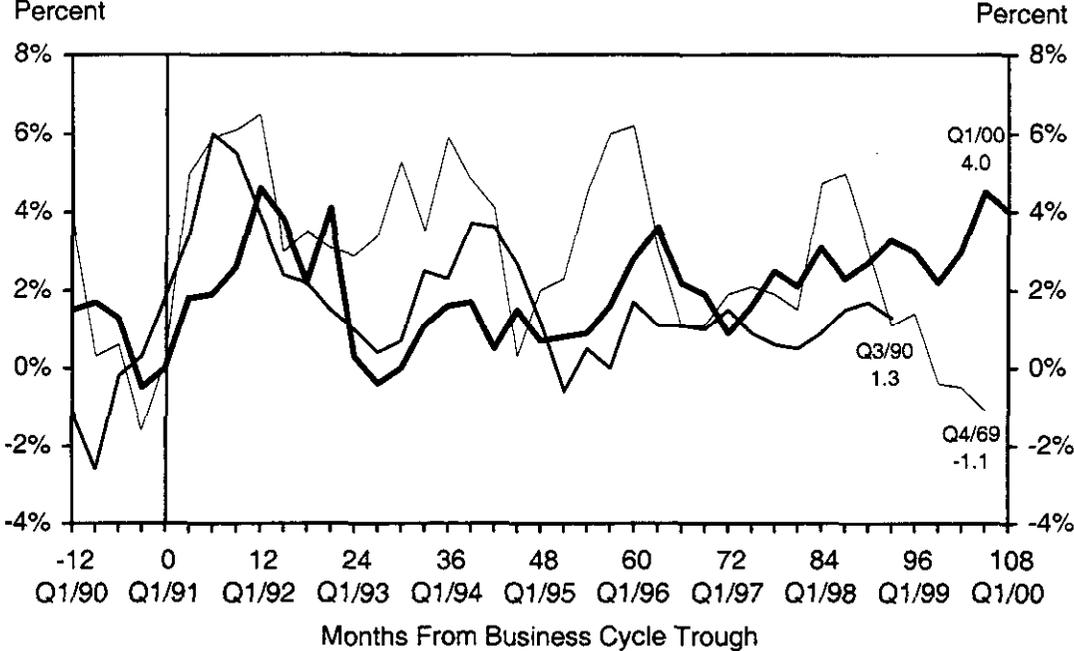


B. Employment Cost Index Growth Rate

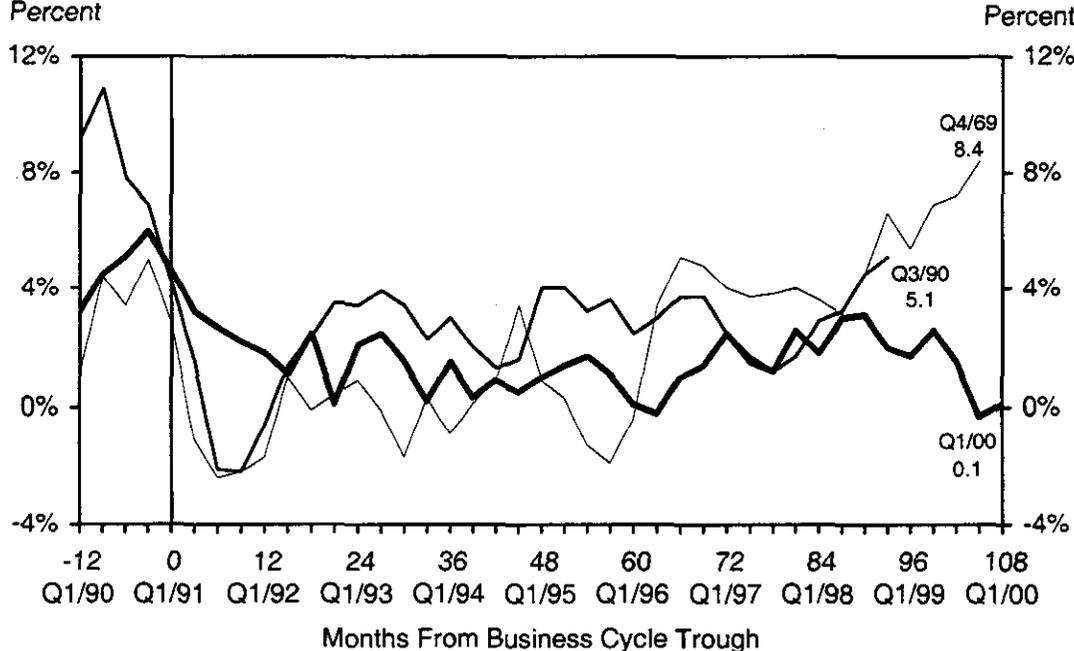


### Chart 7 Cost and Productivity

A. Output per Hour, Nonfarm Business Sector, Growth Rate

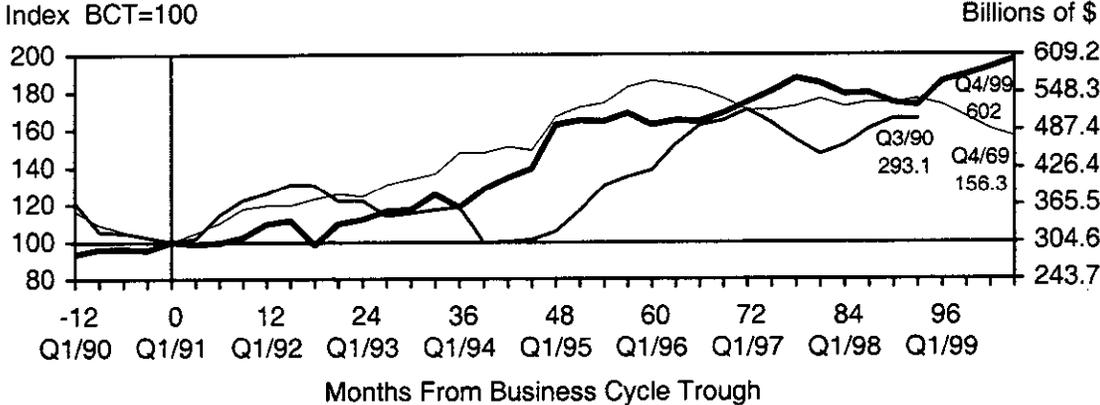


B. Unit Labor Cost, Nonfarm Business Sector, Growth Rate

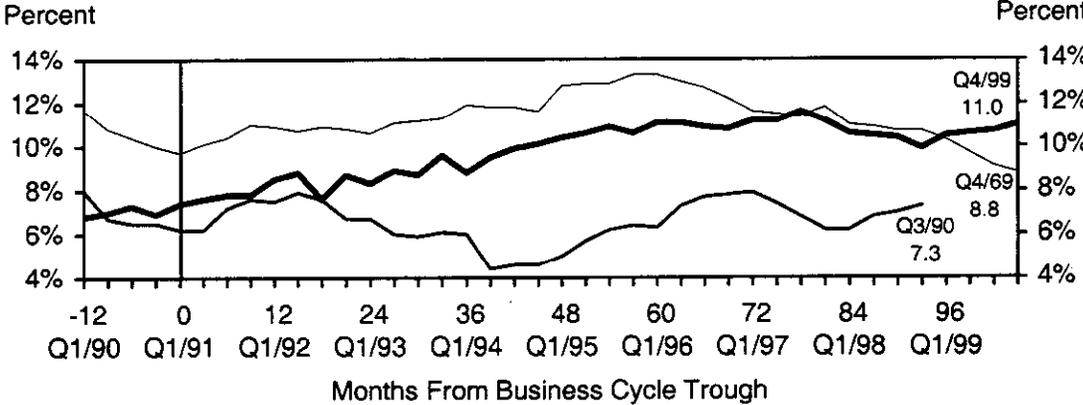


### Chart 8 Three Measures of Profitability

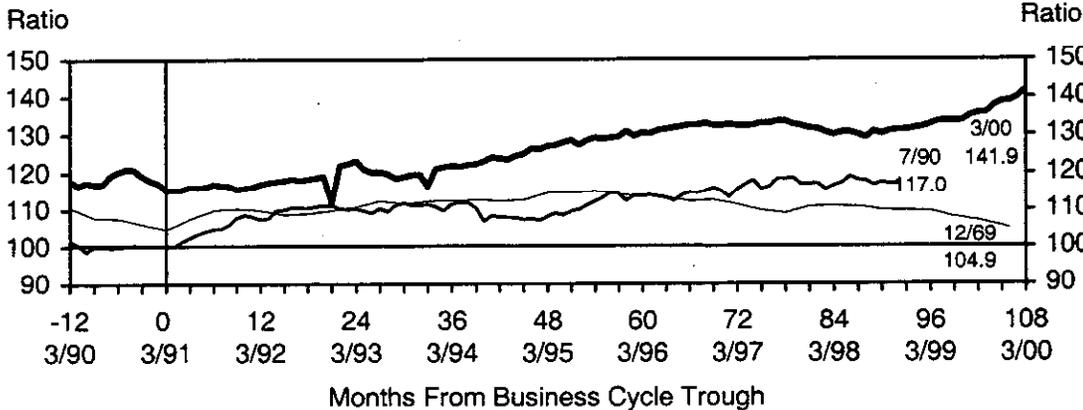
A. Corporate Profits, Total



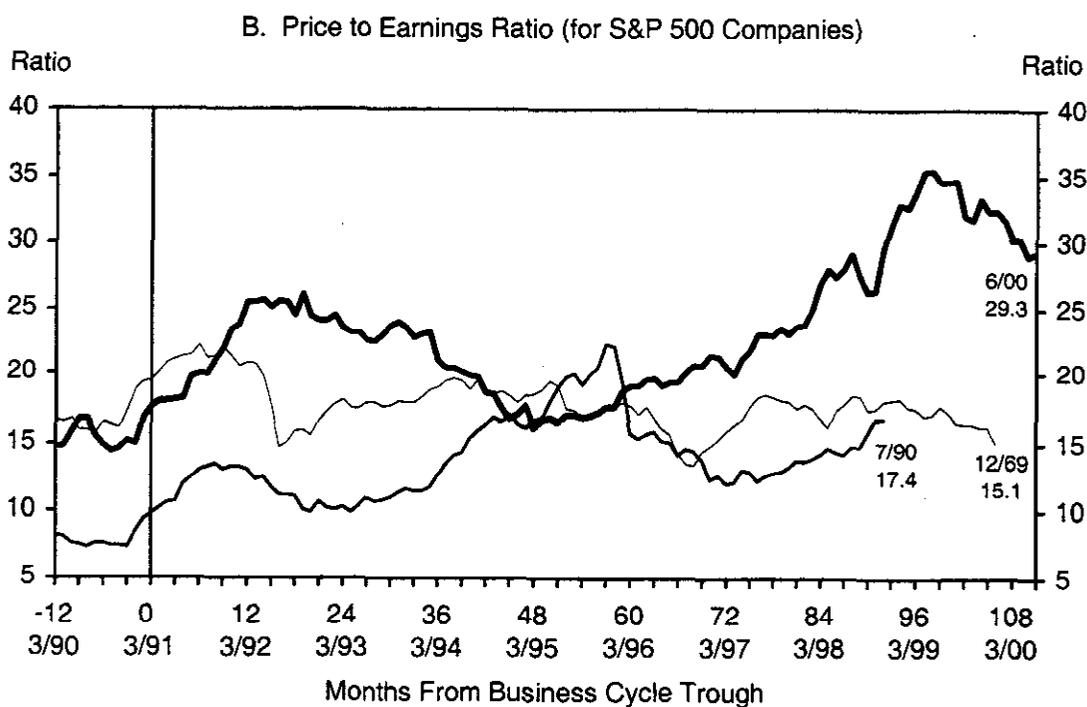
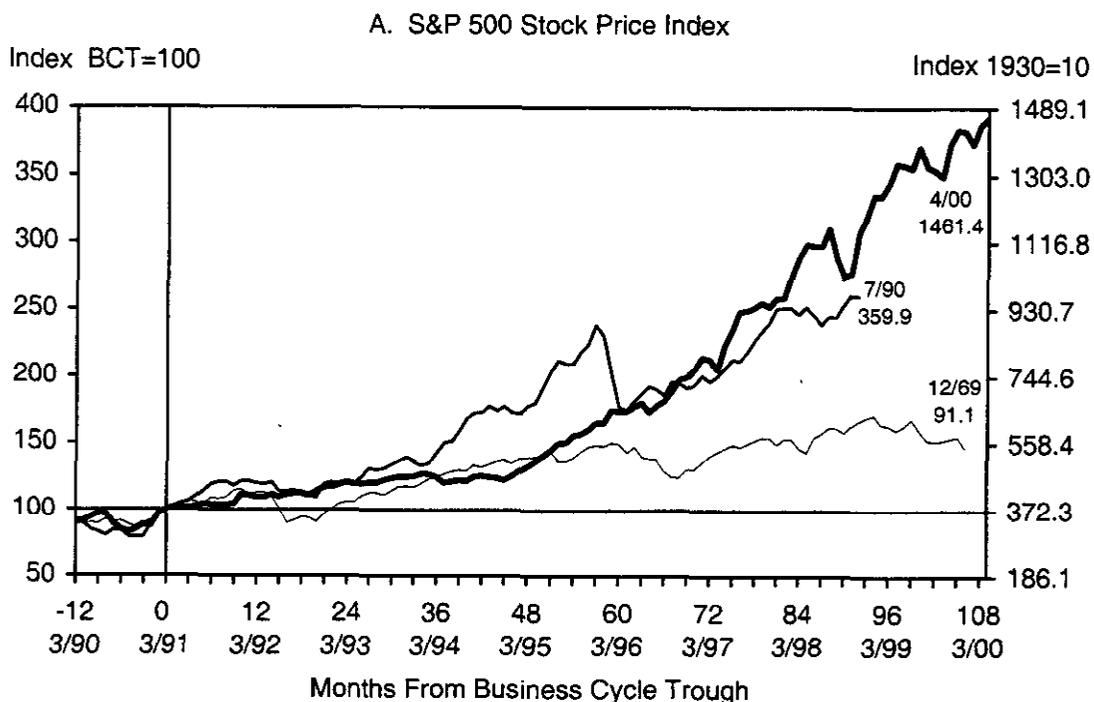
B. Corporate Profit Margin



C. Price/Labor Cost Ratio

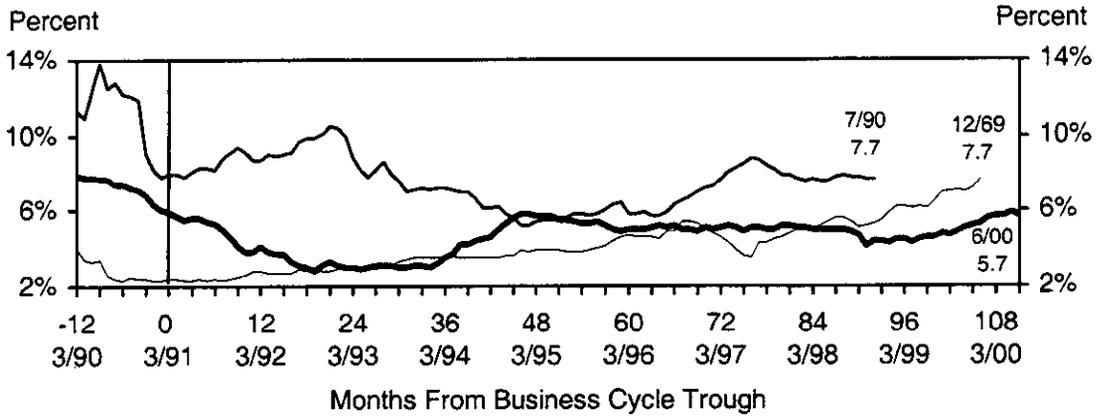


### Chart 9 Stock Prices and Price to Earnings Ratio

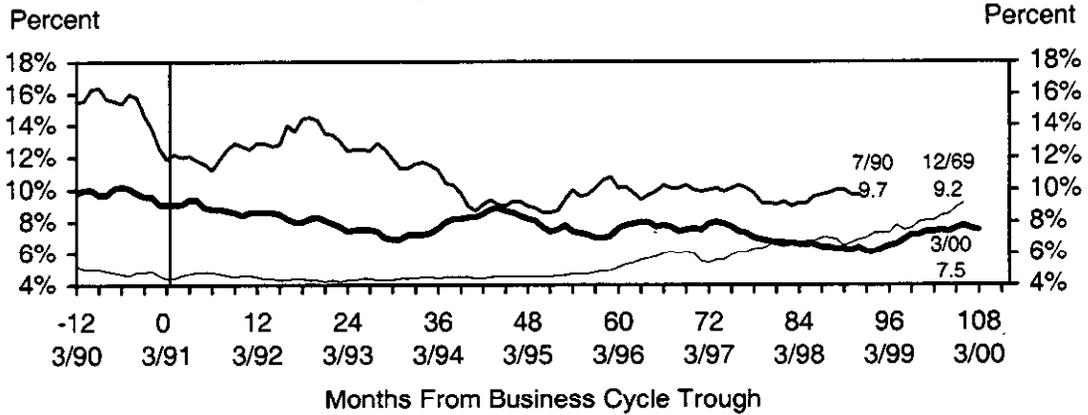


### Chart 10 Short and Long Interest Rates

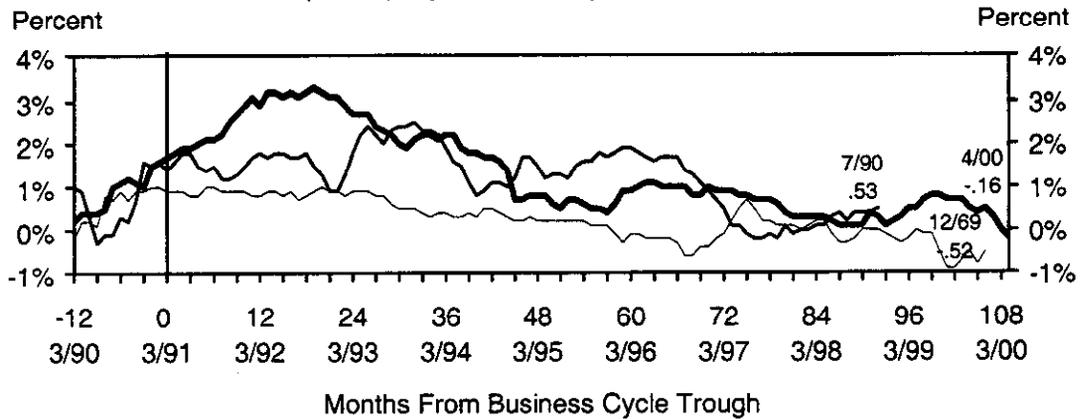
A. Treasury Bill Rate



B. New High-Grade Corporate Bond Yield

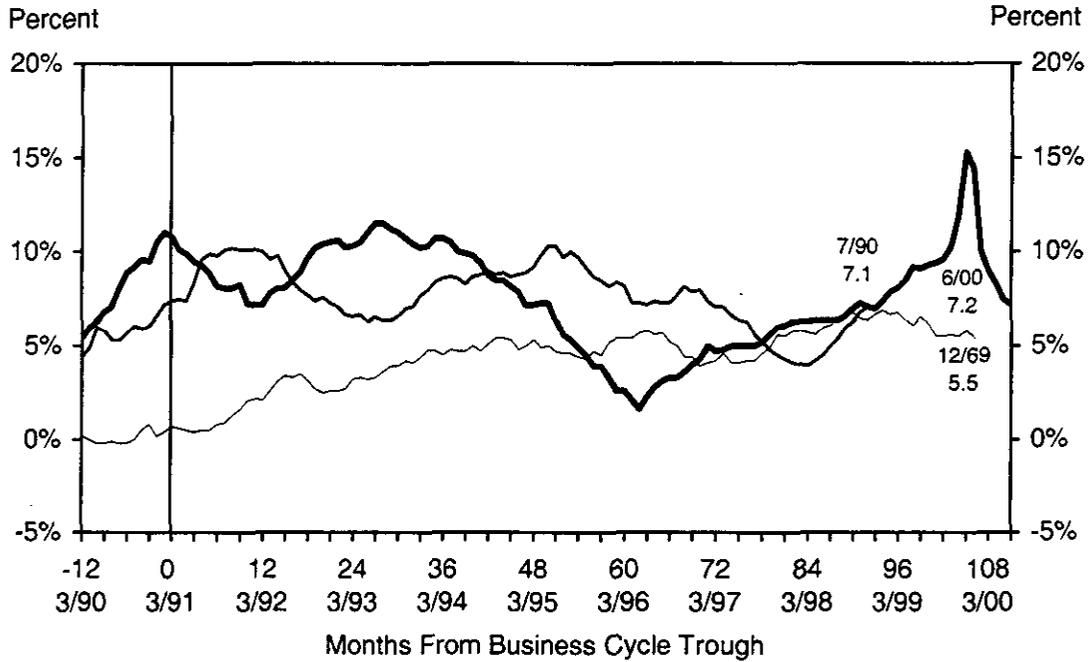


C. Yield Spread (10-year minus 1-year Treasury Bond yields)

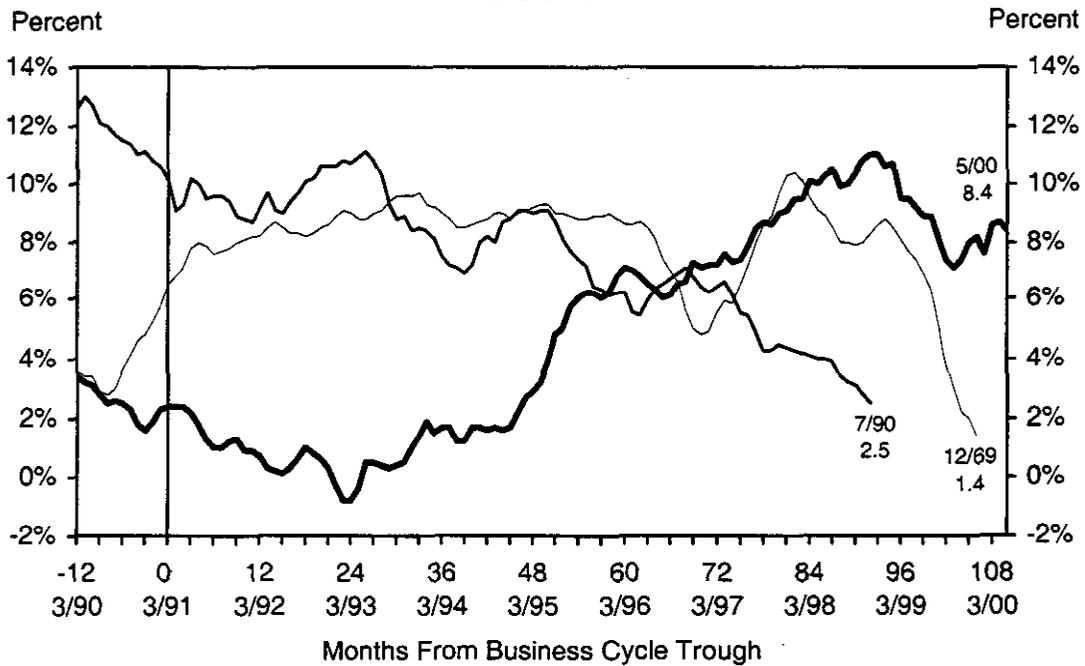


### Chart 11 Monetary Base and Money Supply

A. Monetary Base Growth Rate

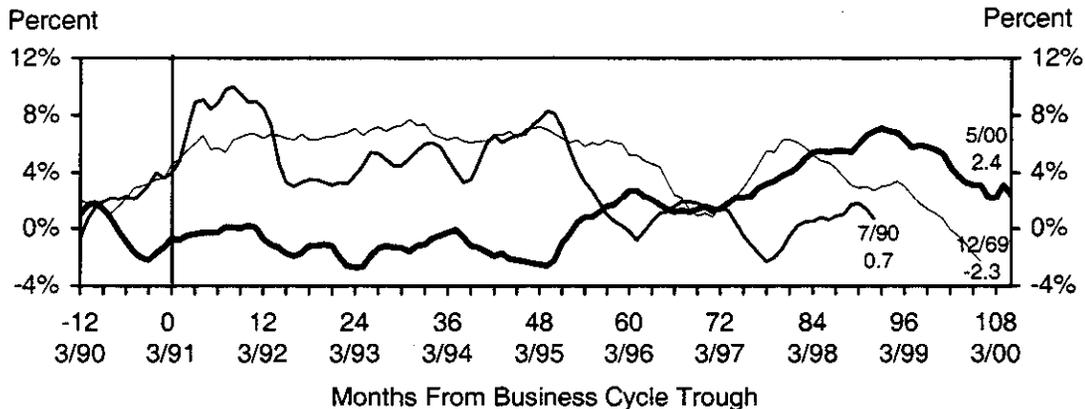


B. Money Supply (M3) Growth Rate

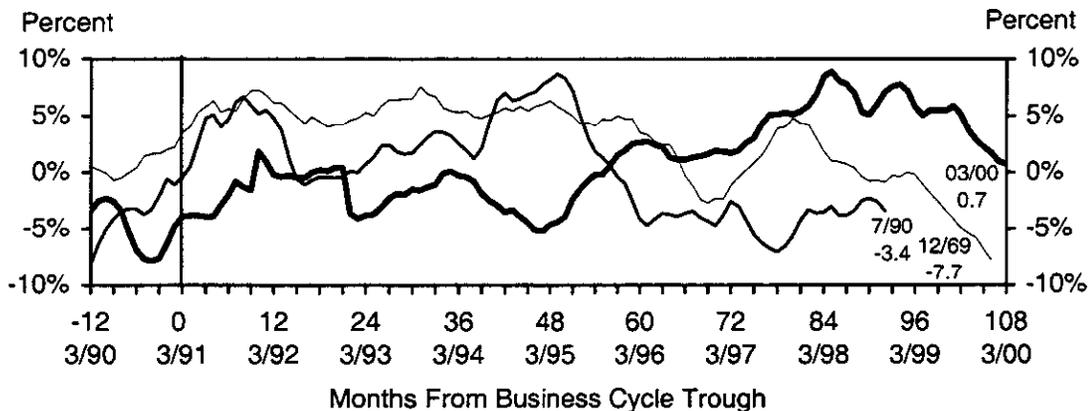


## Chart 12 Real Money Supply

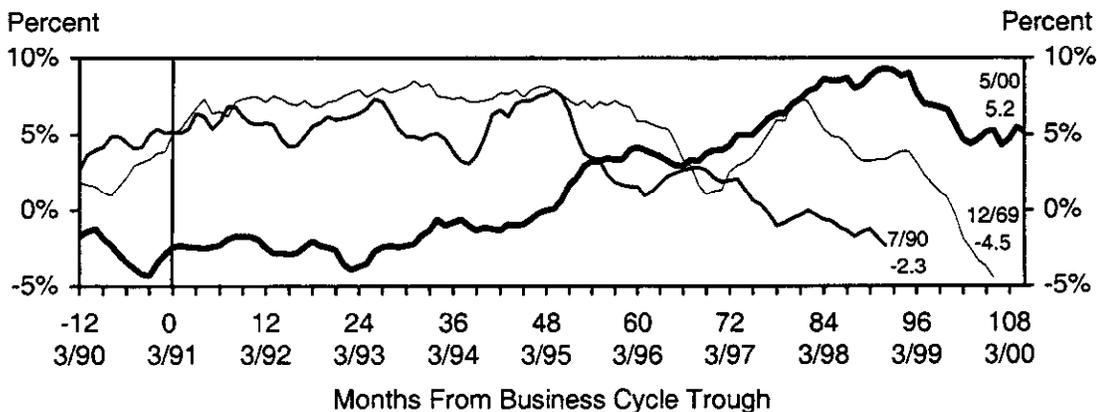
A. Deflated M2 Growth Rate



B. Deflated M2+ Growth Rate

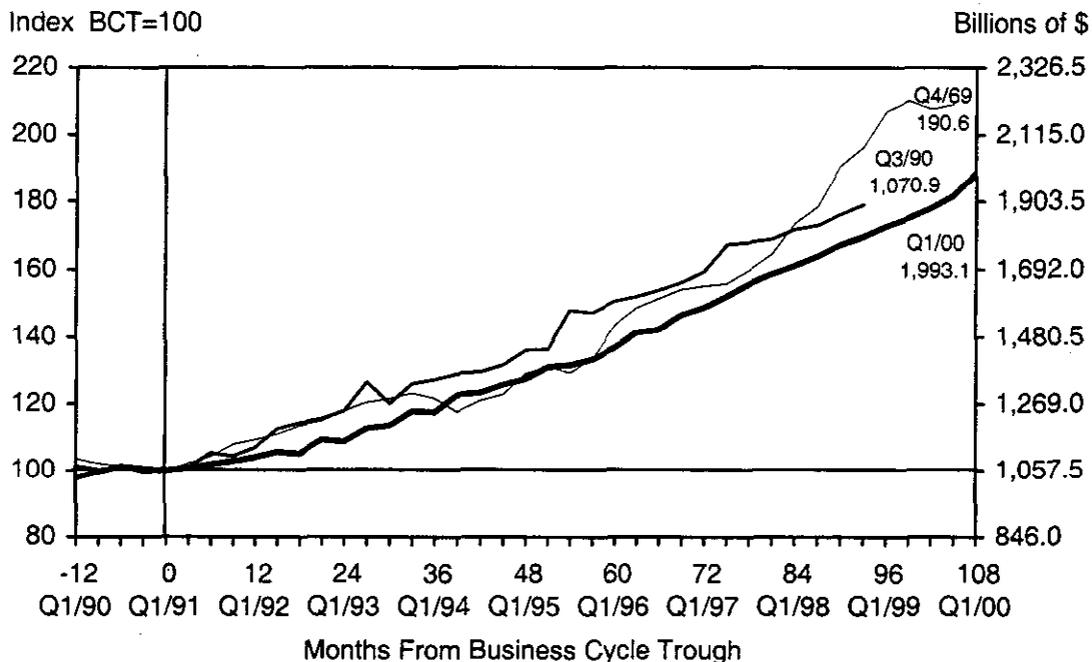


C. Deflated M3 Growth Rate



### Chart 13 Federal Receipts and Expenditures

A. Federal Receipts



B. Federal Expenditures

