

ECONOMIC COMMENTARY

Federal Reserve Bank of Cleveland

The Business Cycle, Investment, and a Wayward M2: A Midyear Review

by Michael F. Bryan and John J. Erceg

Following a string of small advances that began early last year, the pace of economic expansion, as measured by gross domestic product (GDP), picked up in the first quarter. Led by a huge \$43.1 billion increase in consumer spending, the annualized 2.4 percent GDP growth in 1992:IQ was the strongest rise in overall economic activity in three years and came despite another large liquidation of business inventories (down \$17.6 billion).¹

The economy's strength early in the year surprised most observers, including the members of the Fourth District Economists' Roundtable, whose consensus forecast of last January 24 had projected only a slight 0.5 percent gain in business activity during the first quarter. In fact, one-third of the 24 Roundtable forecasts offered at the January meeting projected no growth or even a small decline in the first three months of the year. And of the four Roundtable panelists expecting growth to exceed 1 percent in 1992:IIQ, none projected an advance higher than 2 percent.

Against this background, the midyear meeting of the Fourth District Economists' Roundtable was held at the Federal Reserve Bank of Cleveland on June 12. The 22 panelists again peered into the future, with full awareness that anyone's ability to do so is limited. But

if it accomplishes nothing else, the economic outlook provides a useful framework for discussing both the issues surrounding economic growth, particularly within the economists' respective industries, and developments relating to monetary policy.

■ The Outlook: Better than It Feels

The consensus forecast of the Roundtable shows the economy's first-quarter expansion continuing at a similar rate in the second quarter, with growth evenly distributed between an upturn in consumer spending and a restocking of business inventories. The panel projects real GDP growth to strengthen to a 3 percent rate in the second half of the year and to hold at that pace through 1993 (figure 1). While the Roundtable's projected 1992 expansion is mild compared with past recovery episodes, it is nevertheless expected to be a solid, broad-based advance, except for the government and commercial real estate sectors.

Every economic forecast is different, of course, employing alternative models and various indicators, so there is always more than a little disagreement within the panel. But the Roundtable is nearly uniform in its assessment of growth this year—23 percent of the economists project 1992 real GDP growth to be in the 1½ to 2 percent range, and 77 percent expect a slightly

After receiving surprisingly upbeat economic news for the first quarter, participants of the latest Fourth District Economists' Roundtable uniformly agreed that the economy is indeed on a higher growth path this year than in 1991. The June meeting generated varying opinions on business investment conditions, business cycle theory, and recent patterns of money growth, some of which are reproduced here. A central theme expressed by the economists is that we can expect steady and moderate growth in the economy, at least over the next year and a half.

higher 2 to 2½ percent increase. For 1993, the differences in view widen somewhat: While half of the panel projects real GDP growth between 3 and 3½ percent, the forecasts range from 1½ to 3¾ percent.

With respect to inflation, the Roundtable anticipates a 3.1 percent rise in the Consumer Price Index (CPI) this year—significantly less than the 4.2 percent increase in 1991. But much of the expected moderation in inflation is thought to have already occurred. As the recovery gains momentum, the panelists expect increases in the CPI to hover around 3½ percent (figure 2). Again, there is some disagreement on this matter, with estimates ranging between 2½ and 3½ percent this year, and widening to 2½ to 4¼ percent in 1993.

Most economic forecasts are produced using a bit of statistical analysis and a lot of judgment. As recent experience clearly demonstrates, however, even a good dose of judgment may not allow us to see very clearly into the future. Sometimes, economists prefer to let historical patterns in the data point the way, without agonizing over the theory that generates these movements. One such model was presented at the latest Roundtable meeting by Huntington Bank economist James Coons.

Speculating about Economic Growth in the Near Term:

An Atheoretical Approach

James Coons, Chief Economist, Huntington National Bank

I am going to take what I consider an atheoretical approach to analyzing the near-term prospects for the economy, in that this view does not depend on any particular theory of the business cycle. All that is required is the assumption that whatever drives the measures of economic activity we observe, there are some regular and reliable patterns.

With this in mind, I turn to indicators of economic activity that, at least statistically, have tended to lead changes in

FIGURE 1 MEDIAN REAL GDP FORECAST

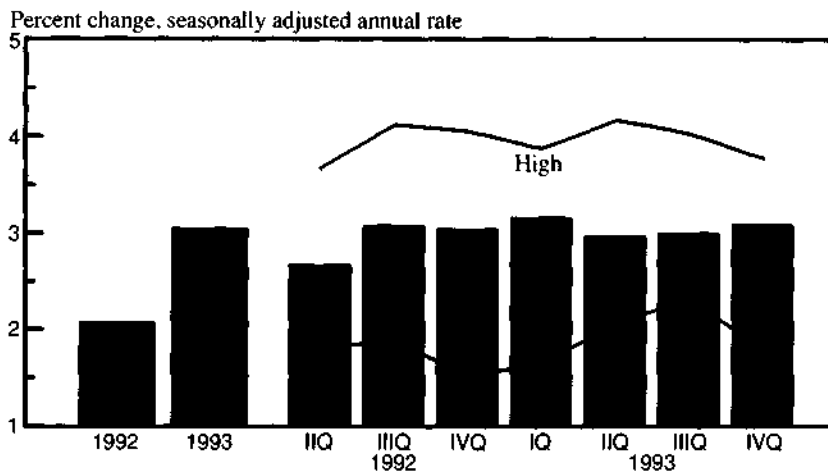
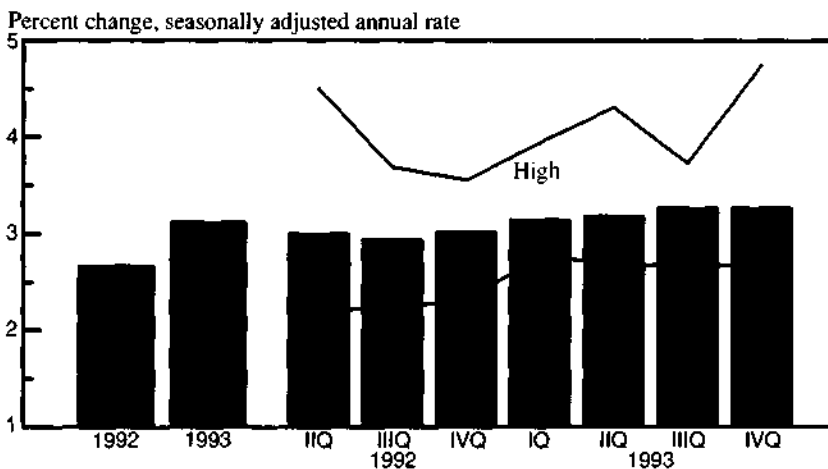


FIGURE 2 MEDIAN GDP IMPLICIT PRICE DEFLATOR FORECAST



NOTE: High and low are the average of the three highest and lowest forecasts, respectively.
SOURCE: Fourth District Economists' Roundtable, Federal Reserve Bank of Cleveland, June 12, 1992.

business activity. In fact, these leading properties can be exploited to produce a specific forecast of economic growth for the year. Based on the historical relationship between real GDP growth and the composite leading economic index (LEI), the recent pattern of the LEI is consistent with a 2½ percent increase in real GDP this year.² Given the economy's first-quarter performance, this translates into an annual growth rate of 3¾ percent over the next three quarters.

Unfortunately, a precise forecast is not the same thing as an accurate one. The LEI points to 3¾ percent as the most likely rate of growth over the balance of the year, but the index is

also consistent with other rates of expansion. As it turns out, the dispersion of possible growth paths is wide enough that we should not count too heavily on any one of them.

But if the question is not what the growth rate will be, but rather its likelihood of exceeding a certain threshold, this analysis does provide some guidance. By specifically incorporating the degree of uncertainty regarding the LEI-GDP relationship and by examining the many different potential futures that it implies, the odds that growth will top its long-run trend rate of 3 percent are approximately 2:1.

A chief objection to the solid-growth scenario is that M2 continues to expand too slowly to support a 4 percent recovery. Recent research at the Cleveland and Dallas Federal Reserve Banks shows that the closing of failed thrifts by the Resolution Trust Corporation (RTC) understates M2 by accelerating the move out of small time deposits at thrifts. This suggests that slow M2 growth is a measurement problem, not a policy problem. Finally, other gauges of monetary thrust, such as commodity prices, the foreign exchange value of the dollar, the slope of the yield curve, and growth of the narrower monetary aggregates, are consistent with sufficient liquidity to sustain economic growth of 4 percent.

■ Interpreting the Data: What Does This Picture Remind You of?

The nature of business cycles is one of the most important—and unresolved—issues in economics, and in the past 10 years the modeling of business cycle behavior has undergone a welcome reexamination. The substance of the recent debate extends beyond the narrow bounds of what method best predicts next quarter's real GDP increase. It reconsiders the process that underlies the irregular, and perhaps even erratic, patterns we see in the indicators of business activity. Is there a unifying theory that explains business cycles, and if so, can this theory be identified by movements in economic data? Or are these patterns the unpredictable wandering of an economy in a continual process of adjustment?

The Fourth District Roundtable invited the comments of two economists with different views on this subject. The first, Professor Victor Zarnowitz of the University of Chicago and a member of the Business Cycle Dating Committee of the National Bureau of Economic Research (NBER), defended the conventional interpretation of economic data and, implicitly, the Roundtable's expectation of a solid but moderate expansion. In his remarks, Professor Zarnowitz noted, "The NBER Business

Cycle Dating Committee, of which I am a member, has not yet determined when the recession that began around July 1990 ended. I believe that it is still too early to make this decision with the required degree of confidence. Employment remains essentially flat and so is real personal income, especially without the prop of transfer payments. The unemployment rate just jumped from 7.2 percent to 7.5 percent in April. But output and sales have clearly been recovering since the spring of 1991, and speaking for myself only, the months of March–May 1991 still look like good candidates for the business cycle trough at the present time."

Professor Zarnowitz further stated, "It is important to recognize that business cycles are influenced by real, monetary, and expectational factors. The old controversy about real versus monetary theories has been instructive, but prolonging it is likely to produce more heat than light. The mix of the forces varies over time, and the really important question is how they interact and why."

A provocative alternative to the conventional view of business cycles, referred to as real business cycle theory (RBC), was offered by Professor John Boschen of the College of William and Mary. The RBC view suggests that many of the movements in business statistics are responses to a wide variety of largely random events, such as droughts, energy shortages, and changes in technology—events that affect our capacity to produce goods and services. Consequently, comparing recent patterns in the data on business activity with previous recession/recovery episodes may not be as revealing or useful as conventional business cycle theory would lead us to believe.

Professor Boschen presented interpretations suggesting that patterns in the economic data being tracked from month to month or from quarter to quarter are much weaker than indicated by a normal business-cycle-oriented view. If this is true, the inability to accurately predict movements in the economy is

the result of experts being unable to predict the many random events to which the economy must adjust, as well as of the chaotic nature of the adjustments themselves. Certainly this is an issue we must weigh as we contemplate the Roundtable's June forecast of the economy.

■ The Outlook for Business Fixed Investment

According to conventional business cycle theory, spending on structures and equipment has traditionally been a pivotal force at and around turning points in business activity. With this in mind, we asked economists James Meil of the Eaton Corporation and Mark Coleman of McGraw-Hill/F.W. Dodge Division for their views on business investment conditions. Their appraisals of this important sector were guardedly upbeat.

The Capital Spending Outlook

James P. Meil, Economist,
The Eaton Corporation

Looking at the prospects for capital spending at midyear 1992, I am generally encouraged by what I see for the rest of this year and into 1993. To put it simply, the sectors that have been weak in the last few quarters should be stabilizing or even turning around; sectors that have been strong in the last two or three quarters should continue to progress and even gain momentum.

High-tech information processing equipment, particularly office and computing machines, is benefiting from a confluence of favorable technical and structural trends. The drive for labor productivity improvements, particularly in the service-producing sectors, has helped to boost budgets for this equipment.

Transportation equipment has behaved erratically over the past few quarters, but recent reports of stronger dealer traffic have been encouraging. At Eaton, we are pleased to note strength in a transportation equipment market

TABLE 1 MONEY STOCK (M2) ASSUMPTIONS OF FOURTH DISTRICT ECONOMISTS' ROUNDTABLE (percent of respondents)

1992			1993		
Growth Rates	Assumed Growth	Preferred Growth	Growth Rates	Assumed Growth	Preferred Growth
Above 6.5%	0	12	Above 6.5%	0	6
4.0% to 6.5%	11	59	4.0% to 6.5%	61	59
2.5% to 4.0%	78	23	2.5% to 4.0%	28	35
Below 2.5%	11	6	Below 2.5%	11	0

SOURCE: Fourth District Economists' Roundtable, Federal Reserve Bank of Cleveland, June 12, 1992.

important to us. Orders for class 8 trucks (semi-truck tractors) in the past three months are at their highest levels since the first quarter of 1989—their peak for the last expansion. Based on the industry's current plans, 135,000 heavy trucks will be built in North America in 1992, a 25 percent increase from 1991's 107,000 level. The question mark in transportation equipment is aircraft production. Airlines, particularly U.S. domestics, have stretched out their delivery schedules in light of reduced passenger traffic.

Industrial equipment shipments have been on a gradual, steady decline since the first quarter of 1989. Traditionally, an order turnaround for factory equipment lags the onset of recovery by about a year; if the typical pattern holds, we should see new orders improving now, leading to an increase in shipments by late summer or fall.

While a slow recovery will work against the momentum for an improvement in industrial equipment shipments, we do have the advantage of starting this upturn at a higher rate of capacity utilization than has ever been the case.

The low level of corporate profitability is occasionally cited as a factor that can put a brake on capital spending plans. I believe that the focus should be on corporate cash flows and that the current cash flow situation is quite favorable for investment spending now and in the foreseeable future.

The Commercial Construction Outlook

Mark S. Coleman, Economist,
McGraw-Hill Information Systems
Co., F.W. Dodge Division

Given the precipitous contraction of the commercial real estate market over the past several years, few would dispute that the unprecedented construction boom of the 1980s has left us with a legacy of excess in the property markets. In short, since 1987, we have witnessed an economic event not seen since 1929: the wholesale collapse of a major asset market. By virtually any accounting, the magnitude of the financial bust in commercial real estate is enormous. According to our calculations, the investment-grade property market has lost, peak to trough, on the order of \$500 billion in value, or about 10 percent of current GDP.

Despite the current state of the market, the news is not all bad—although this interpretation certainly depends on your perspective. Recent evidence suggests that the rate of decline in commercial construction has slowed, signaling in our view that the wrenching contraction in new construction over the past two years will soon reach bottom.

We expect a recovery to begin this year in many sectors of the construction market, although any substantial improvement is unlikely until 1993. This recovery, however, will be characterized by two features that distinguish it from past expansions. First, the composition of new activity will be much more heavily weighted toward residential and nonbuilding construction (such

as streets, highways, bridges, and waste treatment), and away from commercial construction. On the commercial side, the ongoing glut of space, combined with the apparent unwillingness or inability of lenders to finance new development, will deter any new construction considerably. On the nonbuilding side, the recent passage of the \$120 billion Intermodal Surface Transportation Efficiency Act will ensure stronger-than-average growth in infrastructure construction.

Second, the rebound in new construction will likely be far more restrained than it traditionally has been during this phase of a recovery. In particular, the large jumps in new commercial construction and planning that typically help drive the early phase of an upturn will not occur. This has both positive and negative effects. Since commercial real estate markets cannot absorb existing levels of space, much less any sizable new increases, this shortfall of new construction will help the struggling commercial property market to bounce back. Conversely, new commercial activity is extremely stimulative. With lower levels of new construction, the recovery will be less robust than it might otherwise be.

■ Is M2 M.I.A.?

Among the important issues that influence the current economic outlook is the growth of money—or in this instance, perhaps, the lack of it. M2, the Federal Reserve's most closely watched monetary aggregate, has been growing below its targeted rate this year. Moreover, there has recently been an apparent breakdown in the relationships between money (as measured by the M2 aggregate), interest rates, and nominal spending. Meanwhile, the narrower monetary aggregate, M1, has been growing briskly.

The majority of the Roundtable participants estimate that M2 growth for the year will be in the 2.5 to 4.0 percent range, though most would prefer to see a faster pace (table 1). Is M2's present sluggishness an indication that

monetary policy is a restraining influence on business activity, or is this aggregate no longer an accurate barometer of the thrust of monetary policy? We asked two Roundtable economists, Katherine Samolyk of the Federal Reserve Bank of Cleveland and Mickey Levy of CRT Government Securities, to comment on the factors responsible for the unusual behavior of M2.

The Case of the Missing Velocity

Katherine A. Samolyk, Economist,
Federal Reserve Bank of Cleveland

One explanation of the "missing money" is that investors are shifting their funds from depository institutions into higher-yielding nonbank investments, such as bond funds. Viewing intermediation by depositories in the context of broader credit flows can help to illustrate why the M2-nominal spending relationship appears to have broken down.

The decision to hold bank liabilities versus claims on other financial firms is related to their relative yields. These yields, however, ultimately reflect the relative returns on the assets being funded by the respective intermediaries. When the demand for the types of credit funded by banks (and thrifts) is low relative to the demand for nonbank credit, banks have less incentive to compete for investors' funds. Hence, the volume of deposit liabilities declines relative to the volume of nonbank claims, and the growth of M2 can slow compared to that of broader credit-market aggregates and nominal spending.

Indeed, the ratio of assets held by banks and thrifts to GDP has been declining since 1988. Alternatively, there has been a marked increase in assets held by bond and equity funds as a share of GDP. These trends, in part, reflect sluggish loan demand in the current economic environment as well as the high differentials between long-term yields and the shorter-term rates paid on bank deposits. However, they may also be indicative of a longer-term

decline in the importance of depository institutions as conduits of debt finance.

From this perspective, the seeming breakdown of the conventional M2 relationships may be due to a relatively anomalous combination of factors that suggest the missing money is merely being invested elsewhere. Hence, though the current situation merits policy prudence, it is not clear that M2 should be abandoned as an intermediate indicator of policy thrust.

The M2 Puzzle

Mickey D. Levy, Chief Economist,
CRT Government Securities

Virtually all of the slowdown in M2 growth has occurred as a consequence of a sharp decline in small time deposits, which fell \$176 billion (15.2 percent) from April 1991 to April 1992. Of that amount, \$124 billion, or 70 percent, was from thrift institutions. With the exception of broker/dealer money market funds, all other categories of M2 not included in M1 have risen, including savings deposits at thrifts.

There are three general explanations of the wide gap between M1 and M2 growth. First, banks and their clients have altered their portfolios in response to the sharp steepening of the yield curve, a change in opportunity costs, and a decline in loan demand. With bank loan demand shrinking, banks are not bidding aggressively for managed funds and are lowering offered yields on CDs; with the Fed pumping up reserves, banks are re-allocating their asset portfolios into U.S. Treasury securities and other financial assets not counted in M2.

Second, RTC procedures for closing failed thrifts have generated a decline in small time deposits. By either paying depositors at resolution or allowing the new thrifts to which the deposits have been transferred to reduce the yields on CDs, RTC activities have created reinvestment risk that has increased the opportunity cost of CDs not captured in standard money demand equations.

Third, there has been a movement of small time deposits into stock and bond funds, which in the past year have attracted \$135 billion in new assets. Most of these assets flow back into M2; however, to the extent that the proceeds of stock and bond sales are used to retire bank debt, M2 may be reduced.

Based on these alleged distortions, alternative measures of M2, excluding small time deposits, are being considered and tested. As a cautionary note, we must avoid experiments that are not sound conceptually but merely improve short-run empirical properties so as to "preserve" monetarism. On the other hand, I strongly believe M2 growth is understating the degree of monetary thrust and that a temporary (one-time) distortion of M2 demand must be considered in the conduct of monetary policy.

The Roundtable discussion concerning the wayward behavior of M2 was, at times, lively. One interpretation of the recent M2 path—and perhaps a warning to those ready to dismiss its economic significance—was presented by Paul Kasriel of The Northern Trust Company.

Supply-Side Constraints on M2

Paul Kasriel, Vice President
and Economist,
The Northern Trust Company

Generally, as the Fed engineers a rate decline, rates at which banks fund their earning assets fall relative to the rates that banks earn on these assets. Profit-maximization motives, therefore, induce banks to increase their earning assets and, thus, their liabilities, which account for the bulk of the more broadly defined monetary aggregates. Falling short-term interest rates, therefore, would be expected to have both a demand-side effect and a supply-side effect on transaction balances....

We believe that the normal positive supply-side effect on bank liability growth emanating from falling short-term interest rates is being overwhelmed by the contractionary effects

on liability growth stemming from depository institution closure activities of the RTC/FDIC and from real or perceived leverage capital constraints on the banking system's expansion of earning assets. We view these negative supply-side effects as having the same contractionary implications for economic activity as a deliberate Fed policy-induced slowing of M2 growth. By not pushing down short-term interest rates even more, the Fed may be inadvertently pursuing a more restrictive monetary policy than it realizes.

■ Conclusion

The Roundtable economists concurred that the economy is on the upswing and that output will continue to grow moderately, at least over the next 1½ years.

But is monetary policy supportive of an expanding economy? Some participants raised doubts about this issue in light of the below-par performance of M2 so far this year, arguing that the Federal Reserve should be more aggressive in restoring M2 growth to its targeted range. Others on the panel questioned whether M2 is the appropriate policy guide.

In any event, we suspect that the ½ percentage point reduction in the discount rate on July 2 was welcome news to the Roundtable group. This action may prove to be the spur that ultimately provides the added M2 growth most of the panelists recommend. No doubt this will be an issue when the Roundtable next convenes on October 2.

■ Footnotes

1. The first-quarter growth rate has since been revised upward to 2.7 percent (with consumer spending up \$40.2 billion and an inventory liquidation of \$16.6 billion).
2. The LEI is a combination of economic indicators that tend to move in advance of overall business activity. The index is compiled each month by the U.S. Department of Commerce, Bureau of Economic Analysis.

Michael F. Bryan is an economic advisor and John J. Erceg is an assistant vice president and economist at the Federal Reserve Bank of Cleveland. The authors thank Lydia Leovic for preparing and compiling the Roundtable forecast.

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