

**SHADOW OPEN MARKET COMMITTEE  
(SOMC)**

Policy Statement and Position Papers

September 13-14, 1992

PPS 92-02

**BRADLEY POLICY  
RESEARCH  
CENTER**

**Public Policy Studies  
Working Paper Series**

## TABLE OF CONTENTS

	Page
Table of Contents. ....	i
SOMC Members. ....	ii
SOMC Policy Statement Summary. ....	1
Policy Statement. ....	3
NAFTA	
Jagdish Bhagwati. ....	11
Memo to the Shadow Open Market Committee	
H. Erich Heinemann. ....	17
Economic Outlook	
Mickey D. Levy. ....	41
Comparing the Candidates' Economic Platforms	
Mickey D. Levy. ....	59
Long Term Economic Growth	
Charles I. Plosser. ....	73
The Role of Inflation and Inflation Expectations in the Current Dismal Recovery	
William Poole. ....	87
Monetary Aggregates and Monetary Policy	
Robert H. Rasche. ....	97

## SHADOW OPEN MARKET COMMITTEE

The Shadow Open Market Committee met on Sunday, September 13, 1992 from 2:00 PM to 6:00 PM in Washington, D.C.

### *Members of the SOMC:*

**Professor Allan H. Meltzer**, Graduate School of Industrial Administration, Carnegie Mellon University, Pittsburgh, Pennsylvania 15213 (412-268-2283 phone, 412-268-6837 fax); and Visiting Scholar, American Enterprise Institute, Washington, DC (202-862-7150 phone)

**Professor Jagdish Bhagwati**, Department of Economics, Columbia University, New York, New York 10027 (212-854-6297 phone, 212-222-0522 fax)

**Mr. H. Erich Heinemann**, Chief Economist, Ladenburg, Thalmann & Co., Inc., 540 Madison Avenue-10th Floor, New York, New York 10022 (212-940-0250 phone, 212-751-3788 fax)

**Mr. W. Lee Hoskins**, Huntington National Bank, 41 S. High Street, Columbus, Ohio 43287 (614-463-4239 phone, 614-463-5485 fax)

**Dr. Mickey D. Levy**, Chief Economist, CRT Government Securities, Ltd., 7 Hanover Square, New York, New York 10004 (212-858-5545 phone, 212-858-5741 fax)

**Professor Charles I. Plosser**, William E. Simon Graduate School of Business Administration and Department of Economics, University of Rochester, Rochester, New York 14627 (716-275-3754 phone, 716-461-3309 fax)

**Professor William Poole**, Department of Economics, Brown University, Providence, Rhode Island 02912 (401-863-2697 phone, 401-863-1970 fax)

**Professor Robert H. Rasche**, Department of Economics, Michigan State University, East Lansing, Michigan 48823 (517-355-7755 phone, 517-336-1068 fax)

**Dr. Anna J. Schwartz**, National Bureau of Economic Research, 269 Mercer Street - 8th Floor, New York, New York 10003, (212-995-3451 phone, 212-995-4055 fax)

## SOMC POLICY STATEMENT SUMMARY

Washington, September 14—The Shadow Open Market Committee today called on the Federal Reserve, Congress and the Presidential candidates to adopt a five point program to assure sustainable, noninflationary growth in the American economy:

*ONE*, the Federal Reserve should limit growth in the monetary base over the next year to a range of 5 to 6 percent. This would boost investor confidence that current low rates of inflation will continue. It would reduce long-term rates.

*TWO*, the Administration should cease harassing the Federal Reserve to cut short-term rates to progressively lower levels. This, too, would help lower inflationary expectations.

*THREE*, the Treasury Department should end its witless and ineffective efforts to support the dollar abroad at the same time officials are pressing the Federal Reserve for more easy money at home.

*FOUR*, the Administration and Congress must address short- and long-term barriers to economic growth. Increased investment is essential, but only if it supports increased productivity.

*FIVE*, the Administration and Congress should take advantage of the coming debate on the North American Free Trade Agreement to open the door to an inclusive global system of free trade.

The Shadow Open Market Committee meets in March and September. It was founded in 1973 by Professor Allan H. Meltzer of Carnegie Mellon University and the late Professor Karl Brunner of the University of Rochester (see list of members).

In its statement, the SOMC charged that "the Bush Administration and the President's re-election campaign have contributed to skepticism about a return to price stability. The Secretary of the Treasury endorsed the principal feature of the misguided Sarbanes-Hamilton proposal that would eliminate the Federal Open Market Committee and reduce the independence of the Federal Reserve."

The SOMC said that while disinflation and defense cuts have held back the recovery, "they bring durable long-term benefits. Once the adjustment to lower defense spending is complete, the economy will produce more non-defense goods and services, export more, and invest more in civilian research and development. People will enjoy a higher living standard."

*September 13-14, 1992*

The SOMC added "economic policy needs to focus on factors influencing long-term growth. The Federal Reserve can make its contribution by locking in the gains from disinflation. The administration and Congress can contribute also by adopting programs to raise long-term productivity growth. These include reducing the growth of entitlements, reducing taxes on saving, indexing capital gains and improving the quality of education."

**SHADOW OPEN MARKET COMMITTEE**  
**Policy Statement**  
**September 14, 1992**

For three years, the Federal Reserve has attempted to stimulate the economy by lowering the most commonly watched measure of the Federal Reserve policy, the Federal funds rate, by 6 3/4 percentage points. Other short-term interest rates have fallen commensurately, but longer-term interest rates and money growth have responded much less. At the end of August, corporate long-term AAA bonds were only one percentage point lower than in August 1989. Market participants and politicians complain that growth of the most widely-watched measure of money, M2, has fallen. Quarterly or annual M2 growth is now lower than three years ago.

What has gone wrong? We believe there are three main problems.

*First*, as we have said many times, the Federal funds rate is an unreliable indicator of monetary policy. *Second*, the Federal Reserve has restated frequently its commitment to price stability (or low inflation), but its actions do not support its statements. This gap between actions and promises retards the decline in long-term interest rates. Pressures from Congress and the Administration for more expansive policies add to uncertainty. *Third*, while a more credible long-term monetary policy would contribute to the recovery, slow growth of money (M2) cannot be increased reliably by further lowering the Federal funds rate.

**Current Monetary Policy**

While there is often short-term uncertainty about the interpretation of particular money growth rates, we believe that monetary policy should seek to maintain a 5 to 6 percent growth rate for the monetary base, which is the sum of bank reserves and currency. This rate is consistent with the stated objectives of Federal Reserve policy, namely continued recovery and slower inflation.

Currently, there is a large gap between Federal Reserve statements and actions. The statements repeat the desirability of price stability. Yet, each time the monthly unemployment rate or the rate of new job creation suggests continued slow growth in the economy, the Federal Reserve responds by lowering short-term interest rates and attempting to expand money growth (particularly M2 growth).

These actions are counterproductive. They show that in practice the Federal Reserve puts much greater weight on short-term events than on its goal of stable prices. Federal Reserve actions suggest that officials believe they can reduce unemployment now and, if need be, slow inflation later. This is a return to the discredited, stop-and-go policy of the 1970s that produced high inflation.

Memories of inflation and prior policy mistakes linger. Buyers of long-term bonds demand a premium for inflation, or the risk of inflation, that reflects their belief that inflation will return to the 4 to 5 percentage range. (Some refer to this premium as a risk premium instead of an inflation premium. The effect is the same: the spread between long- and short-term interest rates remains historically high.)

Some observers argue that until M2 growth is within its target range, Federal Reserve actions cannot be deemed expansionary. They hold this view based on the relationship between the rate of change of the M2 measures of the money supply and nominal GDP. On this view, the sluggishness of nominal (and real) GDP growth since 1991 reflects the shortfall of M2 growth from its targets.

We agree that there is indeed a long-run relationship between M2 and nominal GDP. In the short-run, however, there is much variance in this relationship. From one quarter to another, large changes can occur in nominal GDP independent of changes in M2. A short period of slow M2 growth will not prevent expansion.

The large spread between long- and short-term interest rates is the main reason for the slow growth of M2. Holders of small time deposits are reluctant to invest for a year or more at current interest rates. Their behavior suggests that they believe that interest rates will rise. As a result, successively lower rates have failed to increase M2 growth. We anticipated this slack of response a year ago. We expect it will continue until the spread between long- and short-term rates narrows.

A reduced spread between long- and short-term rates can occur either because short-term rates rise or long-term rates fall. Since short-term rates, adjusted for inflation, are now zero, these rates are likely to rise. The Federal Reserve should lower long-term rates by reducing expectations of future inflation. The policy we urge the Federal Reserve to adopt—5 to 6 percent growth in the monetary base—would accomplish that result. It is consistent with economic recovery and lower inflation.

The Bush Administration and the President's re-election campaign have contributed to skepticism about a return to price stability. The Secretary of the Treasury endorsed the principal feature of the misguided Sarbanes-Hamilton proposal that would eliminate the Federal Open Market Committee and reduce the independence of the Federal Reserve.

The President, as part of his re-election campaign, announces new current or future spending proposals almost daily. The Republican and Democratic platforms talk about new spending or tax reduction but largely ignore the need to control the growth of spending, particularly spending on entitlements. No one should be surprised that participants in the bond market continue to reflect skepticism about future price stability.

## **The Dollar**

The recent decline of the dollar in part reflects international and domestic concerns about the spending promises made by both parties and the greater risk of inflation in the U.S. than in Europe or Japan. Federal Reserve policy contrasts sharply with monetary policy in Europe and Japan. The commitment to long-term price stability is noticeably weaker in the United States, particularly in Congress and the Administration.

Some urge the Federal Reserve to defend the dollar by intervening in exchange markets. The Treasury Department, as usual, encourages sporadic, witless and ineffective efforts of this kind. The Treasury does not yet understand that it is nonsensical at the same time to urge more expansive monetary policy and policies to prevent or slow the decline in the dollar.

The dollar decline does not appear to be a cyclical response to slow growth of the U.S. economy. Growth in Europe is declining relative to the U.S. The drop in the external value of the dollar is mainly a response to the differences in the outlook for price stability. The Federal Reserve should not use the modest drop in German interest rates as an excuse for additional monetary ease. The right policy, we believe, is to sustain price stability and leave the dollar alone.

## **Why the Recovery is Slow**

There are several reasons for the slow recovery. The principal reasons are real, so they are beyond the reach of monetary policy. Monetary policy is not impotent. Faster money growth would spur recovery but only at the cost of higher anticipated (and actual) inflation. As inflationary policy would squander the progress that has been made, at high cost, against entrenched inflation. Five reasons seem to us to explain why the recovery remains sluggish:

*First*, modest recessions are usually followed by modest recoveries. The 1990-1991 downturn was one of the mildest of the postwar period. Real output fell at an average annual rate of 3.5 percent for two quarters. The 1981-1982 recession was deeper and longer. Real output fell at an average rate of 5.5 percent for two quarters in 1981-1982, then recovered briefly for one quarter



before declining again. In the 1973-1975 recession, output fell at an annual rate of 5.1 percent for two quarters. During the first two quarters after the 1981-1982 recession, output rose at a 7 percent rate; in 1975 growth was 6.5 percent and in 1992 it was 2.2 percent.

*Second*, a more important cause of the slow recovery is the cutback in defense production and procurement. Most of the effect of defense cutbacks came in 1991 and 1992. Because of the war in the Persian Gulf, defense expenditure rose at an average annual rate of 10.7 percent during the recession, thereby contributing to the relatively mild contraction. Just as the economy began to recover, defense spending declined. For the four quarters ending June 1992, defense spending fell at an 8 percent annual rate. The fall was particularly rapid (13 percent annual rate) in 4th quarter 1991, giving rise to incorrect predictions that the economy would return to recession.

Lower defense spending has been particularly important for Southern California and New England. These regions are having great difficulty replacing the jobs and income that the Defense Department once supported. Experience after the Korean War and at the end of the Vietnam War suggests that the effects of lower defense spending will continue to slow the recovery for a year or more.

*Third*, disinflation also contributes to the sluggishness of the recovery. One reason is that land prices incorporate the anticipated future rate of inflation. When people believe that inflation will rise, they bid more for land, gold, platinum and other assets that are relatively fixed in supply. Rising inflation lets those who borrow to buy land and houses gain at the expense of lenders such as banks. When inflation is expected to fall, the process works in reverse. Land prices adjust downward until they reflect the lower expected average rate of inflation. Borrowers lose (or give up earlier gains.)

Land, building, and housing prices have fallen in many parts of the U.S. in the past three years. As prices fell, homeowners' wealth was reduced. Many people saved more to restore part of their lost wealth, so they bought fewer goods and services. Slower spending and higher saving influence the distribution of output between consumption and investment.

Slower inflation also lowers interest rates. Lower interest rates allow homeowners to rewrite their mortgages, lowering the cost of owning property. Because consumers are net creditors, personal income will fall. However, the net reduction is small. Once such adjustments are complete, land and housing prices will stabilize or resume their increase at a rate that reflects the economy's lower rate of inflation.

Disinflation also lowers the value of commercial property and contributes to a decline in rental prices on new and renewed leases. Falling property prices discourage speculative building and lending on commercial construction. Higher inflation would ease or eliminate these pressures for a time, but the stimulus would be temporary.

*Fourth*, disinflation is not limited to the United States. In Europe, particularly Britain, inflation has fallen. Housing values in many parts of Britain are below the value of mortgages and continue to fall. Tokyo and Seoul, Sydney and Singapore are also experiencing disinflation.

Growth of consumer spending is slow or negative in several of these countries. This lowers output within the country and the export of its trading partners. In the case of the United States, the rest of the world buys less from us. We buy less from them. Faster money growth would have a much larger effect on imports than on exports. It would contribute more to spending than to production.

Disinflation and defense cutbacks are painful, but they bring durable long-term benefits. Once the adjustment to lower defense spending is complete, the economy will produce more non-defense goods and services, export more, and invest more in civilian research and development. People will enjoy a higher living standard. Once disinflation is complete, the economy will be free of the uncertainty, distortions and transfers that inflation causes.

The *fifth* reason for the sluggish recovery—slower average growth in productivity—brings no long-term benefit. Expansion in output per hour was higher in the 1980s than the 1970s but lower than early postwar decades. Comparisons of the current recovery to the average postwar recovery that neglect the slower average productivity growth of the last 20 years overstate the normal or expected rate of recovery by about 1 percent.

A proper comparison would recognize that the cut in defense spending reduced GDP growth by about 1 percent in addition to the 1 percent cut for slower average productivity growth. Moreover, the impact of disinflation on household wealth lowered consumer spending by perhaps 1/2 to 1 percent. Together these factors have sliced at least 2 1/2 percent off the economy's growth during the first year of the currency recovery. Without them, growth would be 4 percent or higher, not 1.5 percent.

A 4 percent rate of recovery would have created more jobs. Concerns about the near-term outlook, job losses and wealth losses would be smaller or non-existent. Although these numerical estimates cannot be precise, they make an important point. Once the adjustments to lower inflation

and lower defense spending are over, the U.S. economy will expand more rapidly. The real peace dividend will be the more productive use of resources in an economy with stable prices or low inflation.

Economic policy needs to focus on the factors influencing long-term growth. The Federal Reserve can make its contribution by locking in the gains from disinflation. The administration and Congress can contribute also by adopting programs to raise long-term productivity growth. These include reducing the growth of entitlements, reducing taxes on saving, indexing capital gains and improving the quality of education.

### **Trade Negotiations**

The completion of the North American Free Trade Agreement, and the prospect of its ratification after the election, raise two major issues:

*One*, what will happen to the Uruguay Round of multilateral trade negotiations, and *two*, what should the U.S. do next to extend free trade areas (FTAs)?

### **The Uruguay Round**

The United States, having set the agenda, now has the advantage of a draft agreement that secures substantial benefits, particularly in the new areas of intellectual property protection and services. It is time to harvest these gains by closing the remaining gap between the positions of the European Community and the U.S. on agriculture. Further gains in trade liberalization can then be pursued in the next round of trade talks.

The Administration should seize the small window of opportunity between the French referendum on the Maastricht Treaty on September 20 and the U.S. election on November 3.

### **NAFTA**

We expect NAFTA to increase the incomes of all member countries. Mexico in particular should attract substantial investment through preferential access to the large North American market. The key question now is: Should the U.S. extend FTAs into just the Americas, making this policy initiative *regional*, or should it seek FTAs everywhere?

The former option, preferred by the Administration under the enterprise for Americas policy, creates fears in Asia of a hostile inward-looking Americas bloc. This could provoke the rest of the world to take defensive moves. An Asian bloc could fragment the world economy into three trading blocs. The latter option, on the other hand, would pen the Americas bloc explicitly to nonregional members around the world. This move would supplement the General Agreement on Tariffs and Trade (GATT) and would be consistent with GATT in rapidly expanding free trade everywhere. The Administration should vigorously embrace this nonregional approach to Free Trade Areas. At the same time, it should capitalize on the success of the Uruguay Round. Building a strong multilateral trade regime is central to a healthy world economy.

*September 13-14, 1992*

## NAFTA

**Jagdish BHAGWATI**  
**Columbia University**

1. The completion of the NAFTA negotiation is a major achievement.

2. It should enhance the incomes of all parties, (the U.S., Canada and Mexico), and provides major benefits in particular to Mexico through trade and induced inflow of foreign investments. The effect on jobs within the U.S. has been a source of worry to U.S. trade unions, in particular. But jobs are a macroeconomic issue; trade only reshuffles jobs from activities where Mexico specializes to activities where Mexico will import from the U.S. In *specific* industries, there should be some losses of jobs; but even here access to Mexico could improve the ability of an industry to survive through cheaper sourcing of components etc. Also, if incomes improve through trade, more tax revenue follow, increasing the ability to finance "fundamentals" such as education which, in turn, can only help improve labor incomes: this much is now agreed upon by both Republicans and Democrats as the way to reverse the 1980s phenomenon of stagnant real wages of the unskilled "high school" graduates and lesser educated: i.e. add human capital to improve income in a society and economy where technical changes has reduced the number of unskilled jobs per unit value added in most developed countries.

3. But if NAFTA is a plus in conventional economic logic, it still raises two broad issues of importance and concern:

- (i) what does it do to the Uruguay Round, still stalled?
- (ii) where do we go next in our (free trade agreement) FTA approach?

### **The Uruguay Round**

(i) There is a need to worry that the NAFTA and the positive extension of it to the Americas will direct energy and support to regional preferential trade liberalization where special deals can be struck at the expense of nonmembers in all kinds of ways, and more limited but compelling foreign policy objectives can be more transparently pursued and served than in the multilateral regulations with many more countries. The pursuit of broader rules governing world trade can often be compromised.

(ii) Far more ambitious demand may be made by the U.S. in the multilateral trade negotiation (MTN) than will be accommodated, simply because they are conceded by partners in NAFTA such as Mexico where the tradeoffs are very different. E.g. on intellectual property protection, Mexico has made very generous concessions, simply because Mexico expects to profit immensely from preferential access to a gigantic markets. But these concessions will not necessarily be made in the larger context of the MTN where other developing countries do not expect similar, large gains from the U.S. concessions on these or other issues.

(iii) For such reasons, regional approaches *and* instruments (such as Super 301, Special 301, etc.) of aggressive unilateralism are likely to appeal to politicians, policymakers and business interest more than multilateral negotiations. Their success in extracting greater concessions could undermine the success of MTN and multilateral approaches to constructing the architecture of a universal set of nondiscriminatory rules. The support for concluding the Uruguay Round is therefore likely to weaken with NAFTA and its prospective spread. The failure to conclude the Round at the last summit and the statement of Mrs. Hills that the conclusion of the Round would be a great "*backdrop*" to the conclusion of NAFTA negotiations (a Freudian slip, suggesting how the two are rank-ordered) are perhaps illustrative of the corrosive nature of the regional and unilateral approaches on the U.S. scene.

### **What Next after NAFTA, on FTAs**

The choice after NAFTA is: do we keep expanding; and, if so, do we confine ourselves to the Americas or do we go "nonregional," i.e. offerings/negotiating FTA's to everyone else, including Japan and Pacific nations.

In the attached 2-page excerpt from a recent paper, I propose the latter. Otherwise, we certainly will be seen in Asia as fragmenting the world economy into *geographic* blocs. My preferred alternative would be to stop at Mexico and to focus on the Uruguay Round and the GATT. But Chile is practically in, the politics of the Americas has taken root, and there is no way to restore sanity on the issue to Washington, D.C. So, my second-best recommendation is to go back to the mode of nonregional FTA's proposed by William Brock, the former U.S. Trade Representative.

## **The United States From "Piecemeal" to "Programmatic" Regionalism**

Let me conclude by considering more specifically the U.S. shift to regionalism for the Americas in the perspective of the objectives of arriving at (nondiscriminatory) free trade for all.

U.S. regionalism, when presided over by Ambassador William Brock, then the USTR, was *not* geographically-circumscribed regionalism. Rather, it was truly open-ended. Brock was known to have offered an FTA to Egypt (along with the one to Israel) and to the ASEAN countries; indeed, he would have offered it to the moon and Mars if only life had been discovered there with a government in place to negotiate with. This regionalism was evidently motivated by a vision, even if flawed,<sup>1</sup> that saw regionalism clearly as the route to multilateralism: it would go on expanding, eventually embracing many, preferably all.

By contrast, today's regionalism, confined to the Americas by President Bush's men, lacks the "vision thing." In fact, when allied with Secretary Baker's recently reported admonition to the Japanese not to encourage an Asian trade bloc, as suggested by Malaysia as a necessary response to the EC and U.S. regionalism, the U.S. policy appears to Asia also to be self-contradictory and self-serving: "regional blocks are good for us but not for you." And it simply won't wash, though Japan fearing further bashing, will be deterred for a while.

If America's regionalism is not to turn into a piecemeal, world-trading-system-fragmenting force, it is necessary to give to it a programmatic, world-trade-system-unifying format and agenda. One possibility is to encourage, not discourage, Japan to line up the Asian countries (all the way to the Indian subcontinent) into an Asian Free Trade Association (AFTA) with the U.S. lining up the Southern Americans into the NAFTA, on a schedule, say 10 years. Then, Japan and the U.S., the two "hubs," would meet and coagulate into a large FTA at that point,<sup>2</sup> finally negotiating with the EC and its associate countries to arrive at the Grand Finale of multilateral free trade for all in Geneva.

Only such "programmatic" regionalism, in one of possible variants, would ensure that U.S. regionalism was not perceived by Asia to be hostile and fragmenting.<sup>3</sup>



## NOTES

1. For reasons that I have already indicated above, regionalism is not quite the benign trade policy that it is now popularly believed to be.
2. This would require discarding the extreme Japanophobia that characterizes the so called "revisionists" who are really "regressionists" twice over: they use simple-minded regressions to condemn Japan for its "closed markets" (e.g. that Japan's manufactures import share is stagnant and/or low compared to others) and they also wish to return U.S. to the Japan-Obashing of the prewar period that had given way to sense and sensitivity in the postwar years. Cf. Bhagwati (1991a).
3. Gary Saxonhouse's (1992) excellent paper at this conference only complements and underlines what I argue here. While the United States signals a world-trading-system-fragmenting message to Asia through NAFTA, Mexico signals a pro-world-trade message by contrast. In joining in free trade and the colossus to its north, President Salinas boldly and effectively tells the developing countries that free trade is god and not be feared.

## The trouble with regionalism

Are regional free-trade agreements an expressway to liberal trade for the global economy? Or a dead end?

**I**F THE Uruguay round of trade talks fails, America has other trade-policy choices—a point it has been at pains to emphasise in recent negotiations with the European Community. One choice is, as it happens, modelled on an earlier incarnation of the ec: to build a regional trade block on the American continent. The United States has already negotiated a free-trade agreement (FTA) with Canada: an extension of that accord, to include Mexico, is under discussion. George Bush has suggested that, in the longer term, this North American FTA might spread southwards, eventually encompassing much if not all of Latin America.

What is a believer in free trade to make of such an initiative? At first sight it seems desirable. If free trade is a good thing, more of it, even if confined to a specific area, must be good, too. On top of that, "regionalism" might be the fastest way to create free trade worldwide. The GATT, as recent experience shows, is slow and unwieldy—the General Agreement to Talk and Talk, as its critics charge. Better to let like-minded groups of countries form free-trade areas where they can. As these areas expand and merge, the free-trade gospel will spread across the globe. Such thinking may be one reason why many of America's instinctive defenders of free trade have seemed unperturbed at the prospect of failure in the Uruguay round.

The case for regional FTAs is actually much weaker than it looks. A paper by Jagdish Bhagwati, one of the world's top trade theorists and adviser to Arthur Dunkel, GATT's director-general, sets out the issues with a new clarity\*. Mr Bhagwati examines the two arguments for regionalism in turn—first, that FTAs make economic sense in their own right and, second, that they are a good way to spread free trade worldwide. On both points, he is sceptical.

A free-trade area will make the world better off in the short term if, roughly speaking, the amount of trade it creates exceeds the amount it diverts. An FTA creates trade when low tariffs (or other barriers) encourage one member to buy from another member goods that it would previously have made for itself. This is good: comparative advantage at work. But an FTA can also divert trade, if one member buys imports from another that it previously bought from a supplier outside the FTA. This is bad: comparative advantage denied. Why? Because before the FTA was

### ECONOMICS FOCUS

established, the two exporters faced the same tariff, so the importing country chose its supplier on price and quality alone. With the FTA in place, the importer switched to the less efficient supplier.

It is wrong, therefore, to assume that regional FTAs make the world better off, even though a global move towards freer trade would undoubtedly do so. (The world is a closed economy, so trade diversion in a global FTA would necessarily be

### A NAFTA is born

America, Canada and Mexico in 1991:

GDP	\$6.45 trillion
Intra-NAFTA trade	\$243 billion
Extra-NAFTA trade	\$760 billion
Population	360 m

Source: OECD, IMF, ILO

zero.) Whether a particular FTA promotes global welfare is an empirical question: some do, some don't. As Mr Bhagwati explains, recent changes in trade policy make it more likely than ever before that FTAs will turn out to be trade-diverting.

To counter the risk of trade diversion, the GATT's rules allow FTAs to be formed only if the members set "duties and other regulations of commerce" that are not "higher or more restrictive" with respect to outsiders than the ones previously in effect. Even in principle, this is too weak. A better rule would be to insist that (a) members of an FTA set a common external tariff (and thus form a customs union) and (b) that the common tariff for any item should be set equal to the lowest tariff applied to that good by any member of the FTA before the union was formed.

However, a revision of that sort to the GATT's rules, though still desirable, would today be inadequate to guard against trade diversion. The reason is that governments no longer rely on tariffs to protect their industries. These days anti-dumping complaints, "voluntary export re-

straints" (VERs), countervailing-duty actions and other instruments of the "new protection" are preferred. Such measures can cause trade creation to degenerate into trade diversion.

Suppose, for instance, that America, Mexico and Taiwan compete in the production of a certain good. Further suppose that in this industry Taiwan's producers are the most efficient, America's come next, then Mexico's. America's FTA with Mexico would enable American producers to expand sales in Mexico. This is trade creation, which is fine. But what happens next? Mexico's producers might start an anti-dumping case against Taiwan's exporters, aiming to offset America's growing share of their market by reducing Taiwan's. That would be trade diversion. In other industries, American exporters might lose as a result of the FTA, and vent their anger on third parties in the same way. The EC's use of VERs and anti-dumping measures to defend itself against imports from East Asia illustrates the scope for such trade diversion.

To prevent FTAs turning sour, you need an outside agency to police the new forms of protection. In short, you need GATT. If the Uruguay round fails, and GATT's credibility is lost, the very means by which FTAs can be rendered servants of the common good will be lost. FTAs are not an alternative to GATT: a strong GATT is necessary if they are to succeed. How ironic it will be, therefore, if the FTA option proves to have undermined support for GATT at this critical hour.

What about the second argument—that FTAs will grow and eventually merge, creating global free trade faster than GATT could ever manage? Here, too, Mr Bhagwati smiles sadly. It is all too likely that regional trade blocks will advance the frontiers of liberal trade more slowly than the GATT, because governments will find it harder to resist the argument, put by protectionist lobbies, that "our market is already big enough." (It can hardly be coincidence that big countries are more inward-looking than small ones.)

Also, protectionists will be able to form alliances across the block, the better to resist imports from outside. Witness the demands of European car makers for protection from Japanese imports. Mr Bhagwati quotes Giovanni Agnelli, head of Fiat: "The single market must first offer an advantage to European companies. This is a message we must insist on without hesitation." It is, in addition, a message that believers in free trade through regionalism should ponder.

\* "Regionalism and Multilateralism: An Overview" Columbia University Discussion Paper No. 603. Obtainable from the Department of Economics, Columbia University, New York 10027, price \$5.

*September 13-14, 1992*

## **MEMO TO THE SHADOW OPEN MARKET COMMITTEE**

**H. Erich HEINEMANN  
Ladenburg Thalmann & Co., Inc.**

In the past year, the Federal Reserve System increased total reserves in the U.S. banking system by roughly 16 percent. Rapid growth of bank reserves—the high-powered funds that are raw material for the money supply—will contribute to an acceleration in economic activity in 1993.

Approximately 1.2 million more adult Americans should find jobs this year. In 1993, employment of individuals aged 20 or older will likely go up at least 2.4 million. Real gross domestic product should average about \$4.9 trillion in 1992, up less than 2 percent from 1991. Next year, goods and services produced by U.S. residents should rise about 4 percent. A powerful surge in corporate cash flow will finance a cyclical boom in business investment. These are key conclusions of our Baseline Forecast (see Table 1).

Barriers to expansion remain. Congress has created numerous blocks to new business formation. These include higher taxes on capital gains and sharp increases in implicit corporate taxes in the form of mandated outlays for health, safety and the environment. As a result, new business starts have dried up and net business investment dropped to 1.26 percent of net national product, the lowest in the postwar period. Newly-formed business concerns accounted for about 85 percent of the net new private jobs created in the 1980s.

Vacancy rates in commercial real estate and multifamily housing are high. Construction is down. Population growth has slowed. By historical standards, consumer debt services is high relative to income. Some people may restrain spending to cut debt. Defense cutbacks are widespread. State and local outlays face sharp budget constraints. These are some of the reasons why the pace of recovery from the 1990-1991 recession is painfully slow. Another factor is the erratic pattern of Federal Reserve policy.

For more than three years, from the second quarter of 1987 through the third quarter of 1990, the central bank pursued its goal of "zero inflation" by restricting the growth of bank reserves to an annual rate of less than nine-tenths of one percent. Lingering side effects of this squeeze continue to dampen aggregate activity today.

The goal of zero inflation is highly desirable. However, the Fed was not able to sustain the policy because its shift to restraint was so abrupt. Thus, the effort will probably not have a lasting impact on inflation. There is no long-term choice between inflation and growth. The nation cannot trade higher prices for more jobs except for very short periods. In the end, rising inflation always leads to falling output.

During the year ended in the third quarter of 1991, the Fed relaxed. Total reserves rose 5.9 percent. Over the last 12 months, the monetary authorities opened the flood gates. Reserves increased at a 16 percent annual rate in the fourth quarter of 1991, a 26 percent rate in the first quarter this year, 16 percent in the second and 6.5 percent this summer.

This episode of stop-go policy has hurt the economy and may come back to haunt the Federal Reserve itself. Tight money drove the economy into recession, and its aftermath has slowed the recovery. Subsequently, easy money has driven down the foreign exchange value of the dollar, and now threatens a revival of inflation in 1993 and 1994.

However desirable, the Federal Reserve's zero inflation policy has little support in Washington. A Congressional resolution that would make stable prices the Fed's primary goal has been languishing for years in the House of Representatives. According to its sponsor, Rep. Stephen L. Neal (D-NC), the bill has only a handful of supporters. Long before the recession, the Bush Administration pointedly refused to back the measure.

By trying to impose a fundamental change in national economic policy without a proper national political debate, the Federal Reserve placed itself at risk. Milton Friedman warned recently that the Fed has followed "a policy which may well precipitate political interference and destroy it as an effective institution. . . Five years down the line, we could have a very substantial inflation."

### **End to Recession**

The National Bureau of Economic Research, the official arbiter of whether the economy is expanding or contracting, has not yet declared an end to the recession. That does not mean recession is continuing. Rather, it suggests that professors, no less than ordinary citizens, want to avoid the cross fire in the Presidential campaign. The NBER will likely wait until after the election to make its statement.

The Bureau's business cycle dating committee will almost certainly place the trough of the recession between May 1991 and January 1991. The recession began in July 1990. Based on currently available data, the best bet for the end of the recession appeared to be November 1991. That is when total employment of civilian adults started to show a sustained increase. During the year ended August 1992, the number of adult workers increased by 1.3 million.

Thus far in 1992, the pace of recovery has been slow and uneven. Consumer spending and gross private domestic investment went up \$74 billion during the first half year, while net exports and government spending dropped \$22 billion (see charts). Imports went up more than exports because domestic consumer demands has risen at a time when many foreign economies have slowed. Pervasive cutbacks in defense have cut deeply into government outlays.

Over the longer run, however, the story is different. The economy cannot thrive without a big increase in investment to boost productivity and real incomes. Individual companies may prosper by cutting costs, but societies cannot. The Manufacturers' Alliance has it right: "Improvements in innovation, quality and productivity, rather than declining real wages, are preferred ways of achieving . . . advantages in global markets."

### **The Potential for a Dollar Crisis**

While a weak dollar and sluggish employment have clouded the outlook, prospects for the economy are improving. The devaluation has increased the price of imported products, and may lead to higher interest rates. However, the job market is not as soft as news reports have indicated.

Since April, the nominal trade-weighted value of the dollar dropped by more than 13 percent. The slide in the dollar should halt well short of a hurricane strength currency crisis. If it does not, the Fed may have to hike short-term rates, despite a subpar recovery, high unemployment and a raging national debate over economic policy. The extraordinary hike in the Swedish overnight lending rate to 75 percent is a grim reminder of what can happen when a currency goes into a free fall.

The domestic economy is stronger than Bill Clinton, or his acolytes in the fourth estate, would have you believe. That also suggests higher rates in the months ahead. The New York Times reported that "government figures showed . . . American business and industry lost 167,000 jobs in August." That was false.

Business and industry ADDED 99,000 jobs last month—85,000 in manufacturing, 33,000 in construction, partly offset by small drops in mining and services. Labor Department statisticians judged these increases to be less than normal. Therefore, the department said that on a SEASONALLY ADJUSTED basis, private jobs dropped 167,000. Businesses did not "lose jobs;" they hired fewer people than usual.

The White House and the Federal Reserve have themselves to blame for the turmoil in foreign exchange. The Fed's policy goal may be zero inflation, but its immediate objective is to restart the economy. To do this, the Fed has flooded the economy with high-powered money. Total bank reserves—raw material for the money supply—have risen at double-digit rates for more than two years. The exchange value of the dollar went down as expansion in reserves went up.

Easy money is key to the White House plan to devalue the dollar to stimulate exports for the election. However, higher exports won't show up until next year. That "benefit" will surely be temporary. Long-range, higher inflation will make U.S. products less competitive.

The combination of easy money at home and a devalued dollar abroad has already led to higher prices. Import prices rose at a rate of 9.2 percent in the second quarter, in contrast to a decline in the first period. Imports are more than 25 percent of goods consumed in the U.S.

The devaluation and the resulting upward pressure on import prices could be poisonous for U.S. bond prices. Interest rates are likely to rise faster than inflation. Bond prices will fall. Short- and long-term rates are now close to their lows for the current business cycle. The next MAJOR change in Fed policy will be a tightening.

At home, the August jobs report was unquestionably weak, despite the small drop in the unemployment rate. The main measures of employment—civilian workers, adult workers, full-time workers and payroll jobs—all posted modest SEASONALLY ADJUSTED declines last month. Even with the August drop, the number of nonfarm workers rose 1.3 million in the past year. Teenage jobs, by contrast, may continue to go down because of toxic side effects from the sharp increase in the minimum wage in 1989 and 1990.

### **Bias and Distortion**

Reporting of economic news is a complex affair. To track the daily activity of more than 250 million souls in the world's richest economy requires abstract measurements often far removed from the realities of daily life. As was the case with last month's job report, the alchemy of seasonal adjustment routinely transforms ups and downs and vice versa.

Opportunities for bias and distortion are endless. A slanted story is hard to detect, even by specialists. By sending a garbled message, news people have helped ensure inappropriate policy responses.

The Labor Department regularly publishes alternative statistics for nonfarm employment. The government bases one measure on the Census Bureau's monthly sampling of the nation's households. This survey tabulates the number of workers, and is the source of the figures the Labor Department uses to calculate the unemployment rate. It bases its second measure on a large sample of business establishments. The latter survey counts jobs, as opposed to workers.

The household survey was weaker than the establishment survey going into the recession and stronger coming out. This is a normal recession recovery pattern. In the year ended August 1992, the number of nonfarm workers rose 1.3 million on the basis of the household survey. Nonfarm jobs went up 250,000 on the establishment definition. It does not take much imagination to figure which number was fit to print.

Reporters regularly pay attention to weak numbers; they often ignore strong data. News organizations regularly focus on weekly changes in claims for unemployment insurance, which are mostly statistical noise. However, they fail to report the number of new jobs, which thus far in 1992 has been greater than the number of layoffs.

Seasonally adjusted, builders started construction on roughly 288,000 housing units this spring. That was down 8 percent from the winter, but up 24 percent from the cyclical low in 1991. Guess which item was "news." In broader perspective, the current annual construction rate of 1.1 to 1.2 million units in line with the underlying demand for housing. Since population growth is modest, so are needs for shelter.

Real contracts and orders for new plant and equipment (a leading indicator of business investment) totaled \$138 billion in the three months ended July. That was a 16 percent annual rate of increase from the comparable period ended eight months earlier in November 1991 and up 12 percent from a year earlier. New orders for durable goods, notorious as one of the most volatile business measures, fell 3.4 percent in July following a 2.8 percent jump in June. Guess which item was "news."

U.S. export growth has cooled in recent months. Here too reporting has been biased, incomplete and distorted. As measured in the national income accounts, the U.S. merchandise trade deficit (another notoriously volatile number) averaged \$8.6 billion in the second quarter, the highest



since fourth quarter 1990. Most of the merchandise deficit was offset by a surplus in services of \$5.5 billion. Reporters spilled gallons of ink on the merchandise deficit; they did not report the service surplus.

### **Media Mavens**

Media mavens say that America is not creating enough jobs. In a short-run sense, that is true. In the last two years, the number of adult Americans who say they looked for a job but could not find one rose by 2.5 million. By any definition, the pace of recovery from the 1990-1991 recession has been disappointing.

In historical context, however, the U.S. job market is robust. A record 112 million adult Americans are now working. Adult employment was 63 percent of the adult population last month. That was below the high of over 64 percent in the spring of 1990, but it was above any other period prior to mid-1987. It was far above the peak of 61.4 percent during the Carter Administration.

Slow as the recovery has been, the basic problem in America is not the number of jobs but rather how much U.S. workers produce. For the last 20 years, U.S. productivity (output per worker) has gone up at a rate of less than five-tenths of one percent, down sharply from the 1.7 percent growth trend over the prior 80 years. This is why real income has been stagnant in recent years. It explains why Americans are worried about a decline in living standards.

The cause of the slowdown is easy to find. A drop in profitability of U.S. firms has cut the incentive for business investment. Substandard levels of investment have deprived U.S. workers of tools they need to maintain their productivity and living standards. Stagnation will continue until disincentives to investment are eliminated. Investment is the key to growth. In turn, growth is the key to good jobs for Americans willing and able to work.

### **Deleveraging America**

The United States, which supposedly became the world's largest debtor during the Reagan Administration, is in far better shape than previously reported. New calculations by the Commerce Department (the second major revision in the data this year) show that the nation was a net creditor through almost all of Mr. Reagan's term, and that the current "debt" (net foreign investment in the U.S.) is a fraction of the earlier estimates.

Table 2 shows that gross foreign investment in the U.S. last year came to \$2.5 trillion, while U.S. assets overseas were \$2.1 trillion. The increase in U.S. "debt" in 1991 did not reflect flows of investment funds. Rather, it was due to the fact that common stock prices rose much more in the U.S. than overseas. The difference between foreign assets here and U.S. assets abroad was \$382 billion.

By contrast, only four months ago, the Federal Reserve claimed that U.S. net foreign debt was \$559 billion at the end of 1991, little changed from \$543 billion in 1989. According to the new figures, the U.S. had a net creditor position of almost \$400 billion in 1980, four times the amount the data previously showed. The real cost of servicing net foreign investment in the U.S. as a share of gross domestic product should drop steadily in years to come. Even so, the political backlash against the buildup of foreign assets in the U.S. is continuing. Mr. Clinton has proposed a punitive tax on foreign investment. This would be a mistake.

The influx of foreign direct investment has helped modernize key sectors of the economy—notably the auto industry. Moreover, this "borrowing" has been remarkably cheap. According to Commerce Department data, the yield on foreign assets in the U.S. last year was only 6.3 percent. If this is correct, then brighter days lie ahead. Borrowing so much, at such a cost, is quite an achievement.

### **Sterile Policy**

The Fed and other central banks have intervened in the exchange markets to slow the decline of the dollar. However, central banks have simultaneously executed offsetting transactions in their own money markets to "sterilize" the effect of the intervention on preexisting domestic monetary policies. This exercise was a silly waste of taxpayers' money.

To be effective, the intervention would have to slow the growth of U.S. money supply. But that would be opposite to the Fed's announced policy of encouraging recovery. If foreign exchange intervention is sterilized, then it becomes a meaningless exercise that risks taxpayers' money speculating on future foreign exchange rates.

Lurking behind the turmoil in foreign exchange is the battle over policy strategy. We warned in 1988 that Fed Chairman Alan Greenspan would not finance the growth required for Mr. Bush's plan to create 30 million jobs. Mr. Bush, we said, "must learn to read Mr. Greenspan's lips." We repeat that warning to Mr. Clinton.

Tension between the Fed's long-term drive for zero inflation and the desire elsewhere in Washington for short-run increases in employment will play a critical role in financial markets in the coming year, no matter who wins in November. Ultimately, the rate of inflation is a political, not an economic, issue. In the end, voters—not central bankers—set the basic thrust of monetary policy and the underlying rate of inflation.

As noted, Mr. Greenspan has almost no support for zero inflation inside the Beltway, and little more on Main Street. Years of misleading news reports have convinced voters that they can "trade" an increase in inflation for more jobs. This is wrong, but most voters disagree.

Despite Mr. Greenspan's good intentions and the Fed's insulation from the hurly-burly of partisan politics, there are limits to the central bank's power. The nation cannot have more than one economic strategy at a time. Tactical disagreements between the White House and the Fed are inevitable, but the basic strategy must be the President's—Republican or Democrat. He or she is the only person elected by everybody.

The threat of collision between the White House and the Fed may increase if Mr. Clinton is elected. Mr. Greenspan, a lifelong Republican, would be around for most of Mr. Clinton's term. His four-year appointment as Fed chairman will not end until March 1, 1996. He can only be removed for "cause." By contrast, former Fed chairman Arthur F. Burns had only a year left to serve when President Carter took office.

Mr. Burns talked in principle about the importance of an independent Fed. "The capacity of the Federal Reserve to maintain a meaningful anti-inflationary stance," he said in 1977, "is made possible by the considerable degree of independence it enjoys without our government. The reasons for this insulation is a very practical one."

"Governments throughout history have had a tendency to engage in activities that outstrip the taxes they are willing or able to collect. That tendency has . . . led to currency depreciation, achieved by stratagems ranging from clipping of gold or silver coins to excessive printing of paper money or to coercing central banks to expand credit unduly."

## **Appeasement**

In practice, Mr. Burns tried to appease the easy money bias in the Carter White House. The money supply rose at a rate of 4.4 percent in the third quarter of 1977, just before Mr. Carter's

election. It rose 8.9 percent in the fourth quarter of 1977. Nevertheless, Mr. Carter replaced him with G. William Miller, an industrialist with almost no experience in central banking. Mr. Miller lasted less than two years as Fed chairman.

Regardless of the electoral outcome, Mr. Greenspan will face similar pressures. In theory, the Fed is right that zero inflation is "a prerequisite for maximizing economic growth and standards of living over time." In practice neither the White House nor Congress support zero inflation as the Fed's principal goal. The Fed is independent WITHIN the government but not OF the government. It is a political institution, which cannot operate outside the national consensus.

Productivity may be the overriding issue in the election, but short-run changes in jobs get all the headlines. For all the hoopla, the parties have not come to grips with the structural problems that caused the great American job machine to stall in the past three years.

Rolling out the public works pork barrel would have little or no effect over the long run. Job growth has been concentrated in services since World War II. It will remain there. Pouring money into a bankrupt system of public education would have little effect. Real outlays per pupil rose four fold since the 1950s, but student performance sagged.

The U.S. added 18 million new workers in the 1980s—17.8 million in the private service sector and 2 million in government. These increases were partially offset by drops in mining, manufacturing and construction. However, the Great American job machine ground to virtual halt since 1990.

New business formation provided more than 13 million, or 85 percent, of the 15.1 million new jobs in the private sector during the 11 years from 1981 through 1991 (see chart). For practical purposes, the surge of new business formation has now stopped cold. New businesses added only 144,000 jobs in the year ended March 1991. Many factors account for the collapse in new businesses starts. To repeat, these include:

*ONE*, the sharp increase in capital gains tax rates in 1986. To no one's surprise, this cut deeply into the incentive for entrepreneurs to invest in risky new ventures. As Housing Secretary Jack Kemp says, employERS are an essential ingredient of employMENT.

*TWO*, a massive long-term escalation in federal mandates for spending for health, safety and environmental purposes. According to data compiled at the American Enterprise Institute, such mandates now add to more than \$350 billion in implicit federal corporate income taxes (in real 1990 dollars). As effective corporate tax rates went up, rates of return on equity fell. Net investment plunged as a share of net national product.

*THREE*, a growing reluctance of the nation's bankers to lend money to people who need to borrow. In part, this is due to new, punitive federal banking regulations that threaten bank directors (and their families) with widened personal responsibility if enough loans go sour to threaten the solvency of an institution.

At the same time, regional disparities in employment have widened. Ten of the largest states in population—including most of the nation's major cities—were hit hard by the recession. They have unemployment rates of 8.5 percent, a point over the national average. The big states gained 170,000 jobs thus far in the recovery. The 40 smaller states have an unemployment rate of 6.6 percent. Jobs in these states rose 830,000. Figure 4 contrasts employment rates in large and small states.

Politically, the 10 big states are crucial. California, Texas, New York, Florida, Illinois, Pennsylvania, Ohio, Michigan, New Jersey and Massachusetts account for about 55 percent of the voting age population. They are just shy of the electoral votes required to win the election.

### **Limits to Growth**

Instead of pump priming, the candidates should address the limits to the nation's long-term growth. Federal health, safety and environmental regulation is "absurdly inefficient," as Robert Crandall of the Brookings Institution has charged. Populist groups routinely use environmental policy as a device to cap economic expansion. The National Federation of Independent Business says taxes and increased regulation are now the biggest problems confronting entrepreneurs.

Plainly, the bulk of the burden falls on the business sector in the form of implicit corporate taxes. One result was a drop in profitability of U.S. firms to levels far below the norm of the last half century. The decline in profitability has undercut the incentive for business investment (see Figure 5). The substandard level of investment has deprived the U.S. workers of the tools they need to maintain living standards. This is the root cause of the slow motion syndrome.

Slow growth—which saddles families at the bottom of the income scale with a disproportionate load—has played the critical role. By taxing investment rather than consumption to fund health, safety and environmental regulation, the nation has burdened its economy. The threat of stagnation will remain until such investment disincentives are repealed. Growth may not be a panacea, but the U.S. is surely better with it than without.

## **Higher Ground**

To repeat, the stage is now set for a short-run acceleration in the economy. Monetary policy is extraordinarily easy—much too easy for our taste. Employment typically responds to changes in Federal Reserve policy with a lag of 12 to 18 months. On this criterion, more rapid expansion is just ahead.

The modest acceleration in business volume during the past six months led to exceptional gains in corporate profits. The rate of increase in pretax profits from current operations in the January-March period was roughly 20 times the rise in GDP. While business cannot maintain such spreads between sales and profits, favorable operating leverage should be an important feature of the economic landscape through most of 1993. Costs are under tight control. Thus relatively modest improvements in revenue result in big jumps in profits.

Rigorous, sometimes brutal, cost cutting has lowered the break even point of American industry. Cash flow from current operations will help trigger a boom in business investment in high-tech equipment. As noted, orders for plant and equipment have confirmed the Commerce Department's survey of capital spending plans. A strong surge is already gathering steam. Over time, such outlays will help to lower costs further, thus sparking more gains in profitability.

We believe consumer spending will continue to rise, but at moderate rates. Moderate gains in employment and income, together with high levels of individual debts, are likely to keep a damper on personal consumption for the immediate future. As we forecasted more than a year ago, consumers are likely to be relative underperformers for the foreseeable future.

Nonetheless, the Federal Reserve's current actions are fraught with long-term danger. Investors recognize the toxic side effects of easy money. We believe the upward pressure on the cost of imports (26 percent of total goods consumed in the U.S.) will lead to an increase in the general price level within six to nine months.

Much as the economy, the inflation process should gather momentum as time passes. The rate of inflation is now about as low as it is going to get. Producer prices, which were declining, are now rising. The rate of change in core consumer prices (CPI-U ex food and fuel) is steady at just under 4 percent, largely owing to steady pressure on service prices.

It is clear that central banks cannot lower long-term interest rates by speeding up their printing presses. Investors will protect the real value of their capital. The more the authorities add to the

supply of money, the faster the expected rate of inflation will go up. The higher expected inflation rises, the more interest rates rise to compensate. Sustained reductions in long-term interest rates are always associated with low rates of monetary growth.

### **Turning the Liviathan**

Even with a good recovery, the next president will have a tough time turning the leviathan that is the American economy. The trend to service jobs, usually low in productivity and pay, is long standing. Including government, services now account for 78 percent of nonfarm jobs.

Washington does have a role to play. America's leading export industries—capital goods, services, industrial materials and agriculture—run perennial trade surpluses. They have grown much faster than the overall economy. Government must not create barriers to trade by trying to protect losing sectors such as autos, consumer goods and oil.

Second, Washington must recognize the importance of new business formation. Congress must remove the disincentives to investment. This means shifting taxes from capital to consumption. This includes mandated environmental outlays that amount to implicit taxes. It means lower capital gains taxes, and an end to double or triple taxation of property income. These changes are not giveaways to the "rich." They are the only keys to jobs, income and growth.

## HEINEMANN ECONOMIC RESEARCH

Baseline Forecast - September 1992

	IV'91 A	I'92 A	II'92 A	III'92 F	IV'92 F	I'93 F	II'93 F	III'93 F	IV'93 F	1991 A	1992 F	1993 F
<b>THE ECONOMY:</b>												
Gross Domestic Product (\$B)	\$4,838.5	\$4,873.7	\$4,891.0	\$4,922.8	\$4,969.3	\$5,013.2	\$5,067.9	\$5,114.2	\$5,166.1	\$4,821.0	\$4,914.2	\$5,090.4
Pct Chg	0.6%	2.9%	1.4%	2.6%	3.8%	3.6%	4.4%	3.7%	4.1%	-1.2%	1.9%	3.6%
Personal Consumption (\$B)	\$3,249.0	\$3,289.3	\$3,287.4	\$3,302.4	\$3,324.9	\$3,344.2	\$3,374.1	\$3,400.0	\$3,427.2	\$3,240.8	\$3,301.0	\$3,386.4
Pct Chg	-0.3%	5.1%	-0.2%	1.8%	2.7%	2.3%	3.2%	3.1%	3.2%	-0.6%	1.9%	2.6%
Business Investment (\$B)	\$492.1	\$495.8	\$513.8	\$523.9	\$537.4	\$552.7	\$563.4	\$577.2	\$590.9	\$500.2	\$517.7	\$571.0
Pct Chg	-5.2%	3.0%	15.3%	8.1%	10.7%	11.9%	8.0%	10.1%	9.8%	-7.0%	3.5%	10.3%
Structures (\$B)	\$148.4	\$149.4	\$147.9	\$146.4	\$149.2	\$152.1	\$154.0	\$155.9	\$158.8	\$157.6	\$148.2	\$155.2
Prod. Dur. Equip. (\$B)	\$343.7	\$346.4	\$365.8	\$377.5	\$388.2	\$400.6	\$409.5	\$421.3	\$432.0	\$342.6	\$369.5	\$415.8
Residential Invest. (\$B)	\$177.3	\$185.6	\$189.6	\$192.8	\$199.6	\$206.7	\$210.9	\$208.8	\$210.5	\$170.2	\$191.9	\$209.2
Pct Chg	11.3%	20.1%	8.9%	6.9%	15.0%	15.0%	8.3%	-3.9%	3.2%	-12.6%	12.7%	9.0%
Change in Inventory (\$B)	\$7.5	(\$12.6)	\$9.2	\$14.2	\$24.2	\$29.2	\$36.2	\$37.2	\$43.2	(\$9.4)	\$8.8	\$36.5
Net Exports (\$B)	(\$20.5)	(\$21.5)	(\$44.7)	(\$50.6)	(\$60.8)	(\$65.9)	(\$66.3)	(\$59.8)	(\$61.6)	(\$21.9)	(\$44.4)	(\$63.4)
Government Purchases (\$B)	\$933.1	\$937.0	\$935.7	\$940.1	\$944.0	\$946.3	\$949.5	\$950.9	\$956.0	\$941.0	\$939.2	\$950.7
Pct Chg	-3.0%	1.7%	-0.6%	1.9%	1.7%	1.0%	1.4%	0.6%	2.2%	1.2%	-0.2%	1.2%
Final Domestic Sales (\$B)	\$4,851.5	\$4,907.8	\$4,926.5	\$4,959.2	\$5,005.9	\$5,049.8	\$5,098.0	\$5,136.8	\$5,184.6	\$4,852.2	\$4,949.9	\$5,117.3
Pct Chg	-0.9%	4.7%	1.5%	2.7%	3.8%	3.6%	3.9%	3.1%	3.8%	-1.4%	2.0%	3.4%
Gross Dom. Prod. (\$ Current)	\$5,753.3	\$5,840.2	\$5,898.6	\$5,973.5	\$6,071.5	\$6,180.5	\$6,303.4	\$6,430.1	\$6,565.1	\$5,677.5	\$5,945.9	\$6,369.8
Pct Chg	2.8%	6.2%	4.1%	5.2%	6.7%	7.4%	8.2%	8.3%	8.7%	2.8%	4.7%	7.1%
Disposable Income (\$B)	\$3,530.8	\$3,565.7	\$3,578.3	\$3,602.6	\$3,632.0	\$3,661.4	\$3,684.8	\$3,714.3	\$3,732.8	\$3,509.1	\$3,594.6	\$3,698.3
Pct Chg	2.2%	4.0%	1.4%	2.7%	3.3%	3.3%	3.2%	3.2%	2.0%	-0.2%	2.4%	2.9%
Savings Rate (Percent)	5.1%	4.9%	5.4%	5.6%	5.8%	5.9%	5.9%	5.9%	5.7%	4.8%	5.4%	5.8%
Operating Profits (\$ Current)	\$347.1	\$384.0	\$390.6	\$404.6	\$423.9	\$441.7	\$452.3	\$458.2	\$467.4	\$346.3	\$400.8	\$454.9
Pct Chg	7.1%	49.8%	7.1%	15.2%	20.5%	17.9%	10.0%	1.3%	8.2%	-4.3%	15.7%	13.5%
Industrial Prod. (1987=100)	108.0	107.1	108.5	110.2	112.4	114.6	117.1	119.3	121.4	107.1	109.6	118.1
Pct Chg	-0.7%	-3.1%	5.2%	6.6%	7.9%	8.2%	9.1%	7.8%	7.3%	-1.9%	2.3%	7.8%
Housing Starts (Mill. Units)	1.096	1.259	1.144	1.18	1.20	1.20	1.19	1.20	1.22	1.015	1.19	1.20
Pct Chg	22.4%	74.1%	-31.7%	11.3%	7.8%	1.7%	-4.3%	2.9%	9.1%	-15.9%	17.6%	0.8%
Total Vehicle Sales (Mill. Units)	12.264	12.370	12.992	12.8	13.1	13.3	13.5	13.7	14.0	12.303	12.8	13.6
Pct Chg	-9.8%	3.5%	21.7%	-4.3%	8.9%	4.0%	7.8%	6.3%	7.8%	-11.3%	4.3%	6.1%
Adult Employment (Millions)	111.278	111.732	112.341	112.5	112.9	113.7	114.2	114.7	115.3	111.246	112.4	114.5
Pct Chg	-0.2%	1.6%	2.2%	0.4%	1.7%	2.6%	2.0%	1.8%	2.1%	-0.4%	1.0%	1.9%
Unemployment Rate (Percent)	6.9%	7.2%	7.5%	7.4%	7.2%	7.1%	7.0%	6.7%	6.6%	6.7%	7.3%	6.9%
Comp. Per Hour Non-Farm Bus*	146.8	148.2	149.2	150.3	151.3	152.5	154.2	155.9	157.6	144.9	149.8	155.1
Pct Chg	3.1%	3.9%	2.7%	3.1%	2.7%	3.2%	4.4%	4.5%	4.6%	4.7%	3.4%	3.5%
Productivity Non-Farm Bus*	109.1	110.2	110.7	111.3	111.9	112.3	112.8	113.2	113.7	109.4	111.0	113.0
Pct Chg	-2.9%	4.1%	1.8%	2.2%	2.1%	1.4%	1.8%	1.6%	1.5%	1.1%	1.5%	1.8%
Unit Labor Cost Non-Farm Bus*	134.5	134.5	134.8	135.1	135.2	135.8	136.7	137.7	138.7	133.7	134.9	137.2
Pct Chg	0.6%	-0.1%	0.9%	0.8%	0.5%	1.7%	2.6%	2.9%	3.0%	4.5%	0.9%	1.7%
GDP Deflator (1987=100)	118.9	119.8	120.6	121.3	122.2	123.3	124.4	125.7	127.1	117.8	121.0	125.1
Pct Chg	2.4%	3.1%	2.6%	2.5%	2.8%	3.7%	3.6%	4.4%	4.4%	4.0%	2.7%	3.4%
CPI Less Energy (1982-84=100)	142.8	144.0	145.2	146.1	147.1	148.2	149.5	150.9	152.4	141.1	145.6	150.3
Pct Chg	3.3%	3.4%	3.3%	2.5%	2.8%	3.1%	3.6%	3.9%	4.0%	4.6%	3.2%	3.2%
Fed'l Deficit (\$ Current NIA)	(\$258.7)	(\$289.2)	(\$299.6)	(\$308.5)	(\$303.3)	(\$282.1)	(\$268.8)	(\$258.9)	(\$244.1)	(\$102.2)	(\$300.2)	(\$263.5)
<b>FINANCIAL MARKETS:</b>												
Federal Funds Rate	4.82%	4.02%	3.77%	3.3%	3.3%	4.1%	4.5%	4.9%	5.5%	5.69%	3.6%	4.8%
Three-month Bills (Discount)	4.58%	3.91%	3.72%	3.1%	3.2%	3.6%	4.0%	4.4%	4.9%	5.39%	3.5%	4.2%
Prime Rate, Major Banks	7.60%	6.50%	6.50%	6.0%	6.0%	6.2%	6.5%	6.8%	7.5%	8.46%	6.3%	6.8%
30-Year Treasury Bonds	7.85%	7.80%	7.90%	7.5%	7.6%	7.9%	8.2%	8.3%	8.6%	8.14%	7.7%	8.3%
Money Supply (M-1, \$ Current)	\$890.1	\$926.8	\$949.9	\$970.6	\$991.9	\$1,011.3	\$1,024.6	\$1,035.8	\$1,051.7	\$860.4	\$959.8	\$1,030.9
Pct Chg	11.5%	17.5%	10.3%	9.0%	9.1%	8.0%	5.4%	4.5%	6.3%	6.0%	11.6%	7.4%
Velocity (Ratio: GDP to M-1)	6.46	6.30	6.21	6.15	6.12	6.11	6.15	6.21	6.24	6.60	6.20	6.18
Trade-Weighted \$ (1973=100)	88.11	88.19	87.90	80.1	77.7	78.4	80.1	82.6	86.0	89.73	83.5	81.77

A=Actual F=Forecast Billions of dollars unless noted.

\*Compensation, productivity and unit labor costs are index numbers, 1982=100.

Source: Haver Analytics; Heinemann Economic Research



	I'91 A		II'91 A		III'91 A		IV'91 A		1991 A	
<b>THE ECONOMY:</b>	\$ Change	Pct Chg	\$ Change	Pct Chg	\$ Change	Pct Chg	\$ Change	Pct Chg	\$ Change	Pct Chg
Gross Domestic Product (\$B)	(\$37.1)	-3.03%	\$20.3	1.7%	\$14.7	1.2%	\$6.8	0.6%	(\$56.5)	-1.2%
Personal Consumption (\$B)	(\$24.5)	-2.00%	\$15.8	1.3%	\$11.9	1.0%	(\$2.2)	-0.2%	(\$19.6)	-0.4%
Business Investment (\$B)	(\$22.3)	-1.82%	(\$4.0)	-0.3%	(\$4.3)	-0.4%	(\$6.6)	-0.5%	(\$37.9)	-0.8%
Structures (\$B)	(\$6.4)	-0.52%	(\$4.6)	-0.4%	(\$9.2)	-0.8%	(\$4.6)	-0.4%	(\$0.1)	-0.0%
Prod. Dur. Equip. (\$B)	(\$15.9)	-1.30%	\$0.6	0.1%	\$5.0	0.4%	(\$2.1)	-0.2%	(\$21.5)	-0.4%
Residential Invest. (\$B)	(\$13.4)	-1.10%	\$2.8	0.2%	\$5.7	0.5%	\$4.7	0.4%	(\$24.6)	-0.5%
Change in Inventory (\$B)	\$1.7	0.14%	\$4.7	0.4%	\$21.0	1.8%	\$6.9	0.6%	(\$15.5)	-0.3%
Net Exports (\$B)	\$14.8	1.21%	\$0.5	0.0%	(\$14.2)	-1.2%	\$11.1	0.9%	\$30.0	0.6%
Government Purchases (\$B)	\$6.6	0.54%	\$0.5	0.0%	(\$5.4)	-0.5%	(\$7.1)	-0.6%	\$11.1	0.2%
Final Domestic Sales (\$B)	(\$53.6)	-4.38%	\$15.2	1.3%	\$7.9	0.7%	(\$11.3)	-0.9%	(\$70.9)	-1.5%
GDP (\$B) Four qtr chg (%)		-1.92%		-1.7%		-1.0%		0.1%		
	I'92 A		II'92 A		III'92 F		IV'92 F		1992 F	
<b>THE ECONOMY:</b>	\$ Change	Pct Chg	\$ Change	Pct Chg	\$ Change	Pct Chg	\$ Change	Pct Chg	\$ Change	Pct Chg
Gross Domestic Product (\$B)	\$35.1	2.9%	\$17.4	1.4%	\$31.8	2.6%	\$46.5	3.8%	\$93.2	1.9%
Personal Consumption (\$B)	\$40.3	3.4%	(\$1.9)	-0.2%	\$15.0	1.2%	\$22.5	1.9%	\$60.2	1.2%
Business Investment (\$B)	\$3.7	0.3%	\$18.0	1.5%	\$10.1	0.8%	\$13.5	1.1%	\$17.5	0.4%
Structures (\$B)	\$1.0	0.1%	(\$1.5)	-0.1%	(\$1.5)	-0.1%	\$2.8	0.2%	(\$9.4)	-0.2%
Prod. Dur. Equip. (\$B)	\$2.7	0.2%	\$19.4	1.6%	\$11.7	1.0%	\$10.7	0.9%	\$26.8	0.6%
Residential Invest. (\$B)	\$8.3	0.7%	\$4.0	0.3%	\$3.2	0.3%	\$6.9	0.6%	\$21.7	0.4%
Change in Inventory (\$B)	(\$20.1)	-1.7%	\$21.8	1.8%	\$5.0	0.4%	\$10.0	0.8%	\$18.1	0.4%
Net Exports (\$B)	(\$1.0)	-0.1%	(\$23.2)	-1.9%	(\$5.9)	-0.5%	(\$10.2)	-0.8%	(\$22.6)	-0.5%
Government Purchases (\$B)	\$3.9	0.3%	(\$1.3)	-0.1%	\$4.4	0.4%	\$3.9	0.3%	(\$1.8)	-0.0%
Final Domestic Sales (\$B)	\$56.3	4.7%	\$18.7	1.5%	\$32.7	2.7%	\$46.7	3.8%	\$97.6	2.0%
GDP (\$B) Four qtr chg (%)		1.6%		1.5%		1.9%		2.7%		
	I'93 F		II'93 F		III'93 F		IV'93 F		1993 F	
<b>THE ECONOMY:</b>	\$ Change	Pct Chg	\$ Change	Pct Chg	\$ Change	Pct Chg	\$ Change	Pct Chg	\$ Change	Pct Chg
Gross Domestic Product (\$B)	\$43.9	3.6%	\$54.7	4.4%	\$46.3	3.7%	\$51.9	4.1%	\$176.2	3.6%
Personal Consumption (\$B)	\$19.3	1.6%	\$30.0	2.4%	\$25.9	2.1%	\$27.2	2.2%	\$85.4	1.7%
Business Investment (\$B)	\$15.3	1.2%	\$10.8	0.9%	\$13.7	1.1%	\$13.7	1.1%	\$53.3	1.1%
Structures (\$B)	\$2.9	0.2%	\$1.9	0.2%	\$1.9	0.1%	\$3.0	0.2%	\$6.9	0.1%
Prod. Dur. Equip. (\$B)	\$12.4	1.0%	\$8.9	0.7%	\$11.8	0.9%	\$10.7	0.9%	\$46.4	0.9%
Residential Invest. (\$B)	\$7.1	0.6%	\$4.2	0.3%	(\$2.1)	-0.2%	\$1.7	0.1%	\$17.3	0.4%
Change in Inventory (\$B)	\$5.0	0.4%	\$7.0	0.6%	\$1.0	0.1%	\$6.0	0.5%	\$27.7	0.6%
Net Exports (\$B)	(\$5.1)	-0.4%	(\$0.4)	-0.0%	\$6.4	0.5%	(\$1.8)	-0.1%	(\$19.0)	-0.4%
Government Purchases (\$B)	\$2.3	0.2%	\$3.2	0.3%	\$1.4	0.1%	\$5.1	0.4%	\$11.4	0.2%
Final Domestic Sales (\$B)	\$43.9	3.6%	\$48.1	3.9%	\$38.9	3.1%	\$47.7	3.8%	\$167.4	3.4%
GDP (\$B) Four qtr chg (%)		2.9%		3.6%		3.9%		4.0%		

Table 2  
 UNITED STATES INTERNATIONAL BALANCE SHEET  
 (Billions of Dollars)

DATES	U.S. ASSETS OVERSEAS			FOREIGN ASSETS IN THE U.S.			Net Investment (Debt)	Income on Investment		Return on Investment	
	Total	Direct Investment	Pct of Total	Total	Direct Investment	Pct of Total		U.S.	Foreign	U.S.	Foreign
1960	\$67.5	\$31.9	47.2%	\$38.9	\$6.9	17.8%	\$28.6	\$5.0	\$1.8	7.3%	4.6%
1961	\$74.5	\$34.7	46.6%	\$43.5	\$7.4	17.0%	\$31.0	\$5.4	\$1.8	7.2%	4.1%
1962	\$78.8	\$37.3	47.3%	\$44.0	\$7.6	17.3%	\$34.8	\$6.0	\$1.9	7.7%	4.2%
1963	\$85.5	\$40.7	47.6%	\$49.6	\$7.9	16.0%	\$36.0	\$6.7	\$2.1	7.8%	4.1%
1964	\$96.8	\$44.5	46.0%	\$55.1	\$8.4	15.2%	\$41.6	\$7.4	\$2.4	7.6%	4.3%
1965	\$103.8	\$49.3	47.5%	\$57.3	\$8.8	15.4%	\$46.5	\$8.1	\$2.7	7.8%	4.6%
1966	\$110.3	\$51.0	46.2%	\$58.6	\$9.1	15.4%	\$51.7	\$8.3	\$3.1	7.5%	5.3%
1967	\$121.1	\$55.3	45.7%	\$77.8	\$9.9	12.7%	\$43.3	\$8.9	\$3.4	7.3%	4.3%
1968	\$132.5	\$58.5	44.2%	\$87.7	\$10.8	12.3%	\$44.7	\$10.3	\$4.1	7.8%	4.7%
1969	\$141.5	\$63.7	45.0%	\$94.1	\$11.8	12.6%	\$47.4	\$12.0	\$5.8	8.4%	6.1%
1970	\$147.1	\$70.3	47.8%	\$99.0	\$13.3	13.4%	\$48.1	\$13.0	\$6.6	8.8%	6.6%
1971	\$159.1	\$76.4	48.0%	\$127.4	\$13.9	10.9%	\$31.7	\$14.1	\$6.4	8.9%	5.0%
1972	\$173.6	\$81.5	46.9%	\$151.6	\$14.9	9.8%	\$22.1	\$16.4	\$7.8	9.5%	5.1%
1973	\$190.2	\$91.7	48.2%	\$158.0	\$20.6	13.0%	\$32.2	\$23.9	\$11.1	12.5%	7.0%
1974	\$215.6	\$100.4	46.5%	\$172.8	\$25.1	14.5%	\$42.8	\$30.3	\$14.5	14.0%	8.4%
1975	\$244.1	\$114.1	46.8%	\$183.8	\$27.7	15.0%	\$60.3	\$28.2	\$15.0	11.5%	8.1%
1976	\$368.7	\$212.7	57.7%	\$230.1	\$48.9	21.3%	\$138.6	\$32.8	\$15.7	8.9%	6.8%
1977*	\$519.0	\$252.8	48.7%	\$328.5	\$56.7	17.3%	\$190.5	\$37.7	\$17.2	7.3%	5.2%
1978	\$627.3	\$291.0	46.4%	\$398.8	\$69.6	17.4%	\$228.4	\$47.2	\$25.3	7.5%	6.3%
1979	\$792.9	\$343.9	43.4%	\$450.0	\$88.3	19.6%	\$342.9	\$69.7	\$37.6	8.8%	8.3%
1980	\$936.3	\$396.2	42.3%	\$543.7	\$125.9	23.2%	\$392.5	\$80.6	\$46.5	8.6%	8.6%
1981	\$1,004.2	\$412.4	41.1%	\$629.9	\$159.9	25.4%	\$374.3	\$94.1	\$60.9	9.4%	9.7%
1982**	\$958.6	\$226.6	23.6%	\$693.8	\$130.4	18.8%	\$264.8	\$97.3	\$67.1	10.2%	9.7%
1983	\$1,068.3	\$270.8	25.3%	\$800.7	\$153.3	19.1%	\$267.6	\$95.8	\$66.5	9.0%	8.3%
1984	\$1,081.8	\$265.8	24.6%	\$905.9	\$172.4	19.0%	\$175.9	\$108.1	\$83.8	10.0%	9.3%
1985	\$1,244.5	\$379.1	30.5%	\$1,102.3	\$220.0	20.0%	\$142.2	\$97.3	\$82.4	7.8%	7.5%
1986	\$1,507.7	\$518.7	34.4%	\$1,398.6	\$273.0	19.5%	\$109.1	\$96.0	\$86.9	6.4%	6.2%
1987	\$1,648.4	\$577.0	35.0%	\$1,594.1	\$316.2	19.8%	\$54.2	\$105.1	\$100.5	6.4%	6.3%
1988	\$1,817.5	\$678.6	37.3%	\$1,855.5	\$391.5	21.1%	(\$38.0)	\$128.7	\$120.9	7.1%	6.5%
1989	\$2,049.8	\$807.9	39.4%	\$2,208.6	\$534.7	24.2%	(\$158.8)	\$157.5	\$141.6	7.7%	6.4%
1990	\$1,977.1	\$716.4	36.2%	\$2,249.1	\$536.6	23.9%	(\$272.0)	\$160.6	\$139.9	8.1%	6.2%
1991	\$2,107.0	\$802.0	38.1%	\$2,488.9	\$654.1	26.3%	(\$381.8)	\$143.5	\$126.0	6.8%	5.1%
								Average Return		8.5%	6.3%

\* Break in series. Commerce Department data revised.

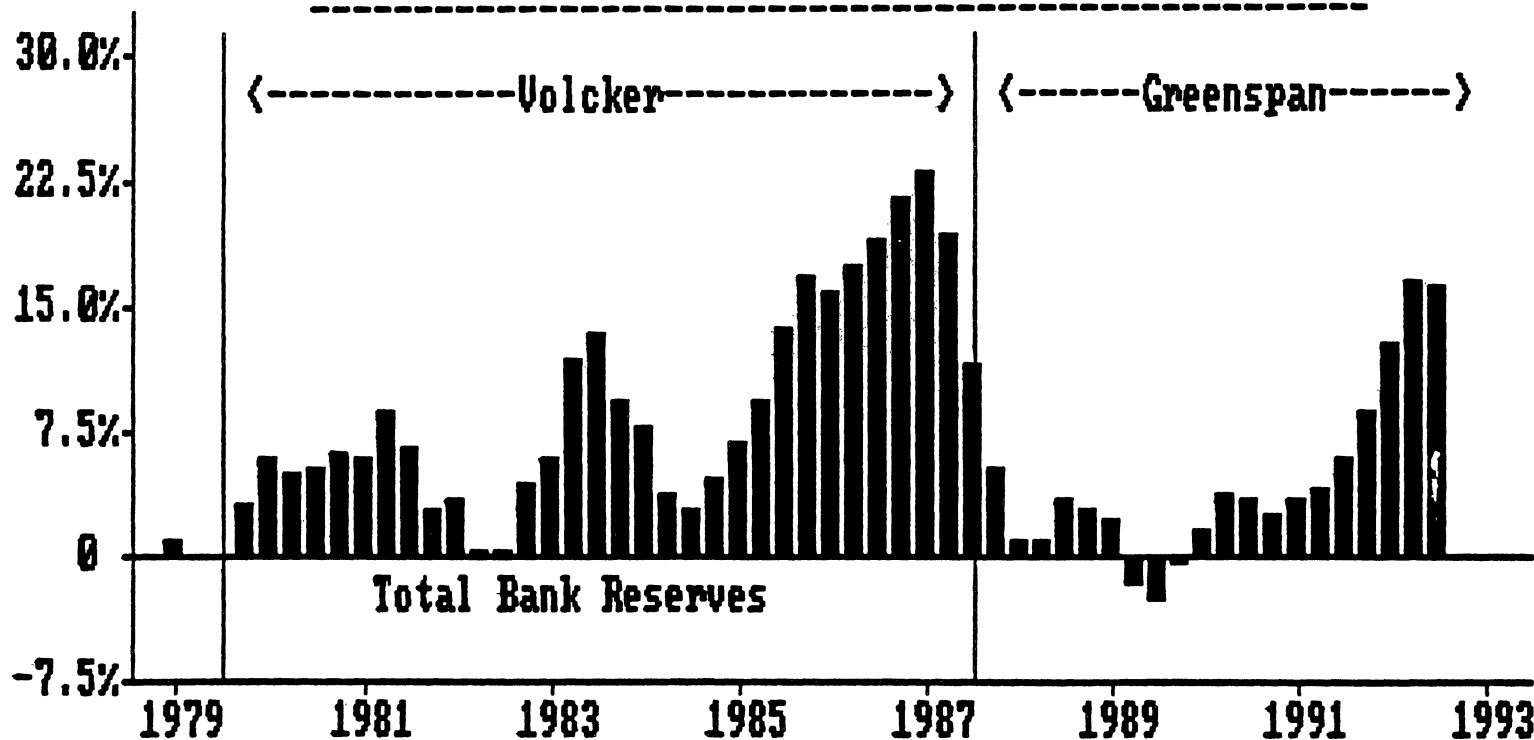
\*\* Break in series. Data prior to 1982 value direct investment at current cost. Subsequent figures show market values.

Sources: Federal Reserve Board; Commerce Department; Heinemann Economic Research

September 13-14, 1992

FOUR  
QUARTER  
CHANGE

### GO STOP GO - FED POLICY UNDER VOLCKER AND GREENSPAN

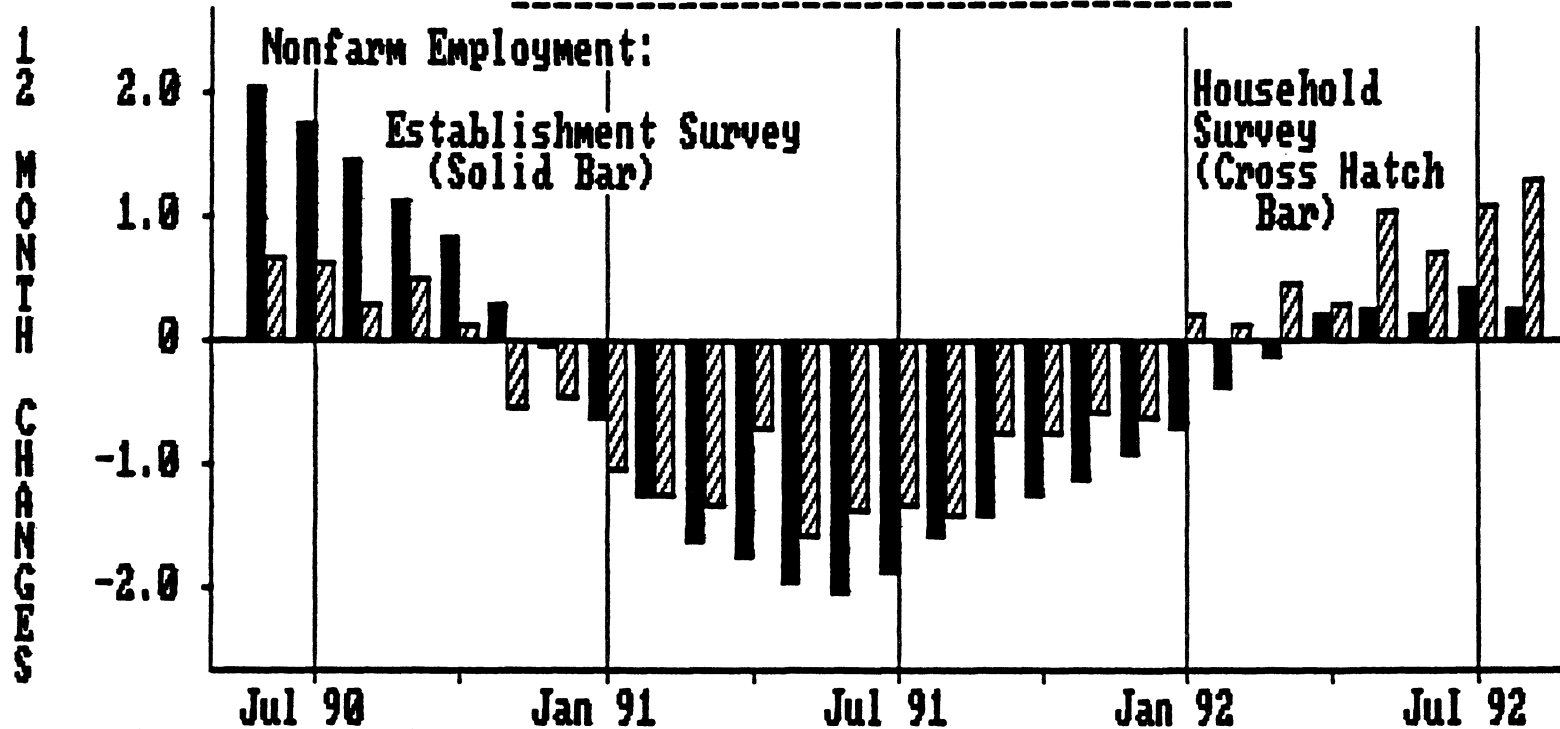


Notes: The chart shows annual changes in total bank reserves adjusted for shifts in legal reserve requirements, FRB concept. The vertical lines show the tenures of Paul Volcker and Alan Greenspan as Fed chairmen. Datum for third quarter 1992 estimated.

Sources: Haver Analytics; Heinemann Economic Research

## DIFFERENT VIEWS OF THE LABOR MARKET

---

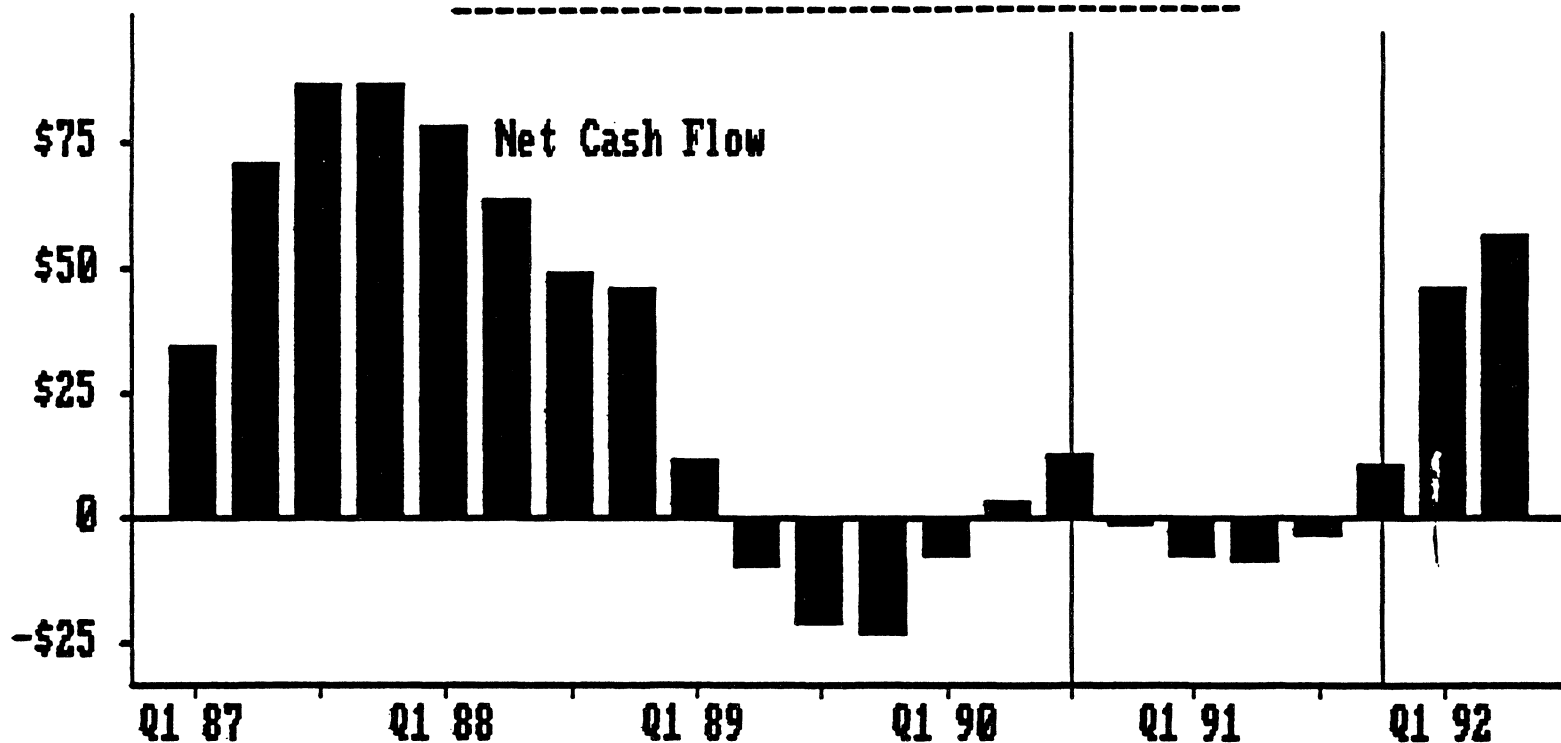


**Notes:** The chart shows year-over-year changes in the number of non-farm payroll jobs (solid bar) and in the number of workers in the nonfarm economy (cross hatch bar). The data are millions of jobs or workers.

**Sources:** Haver Analytics; Heinemann Economic Research

FOUR  
QUARTER  
CHANGES

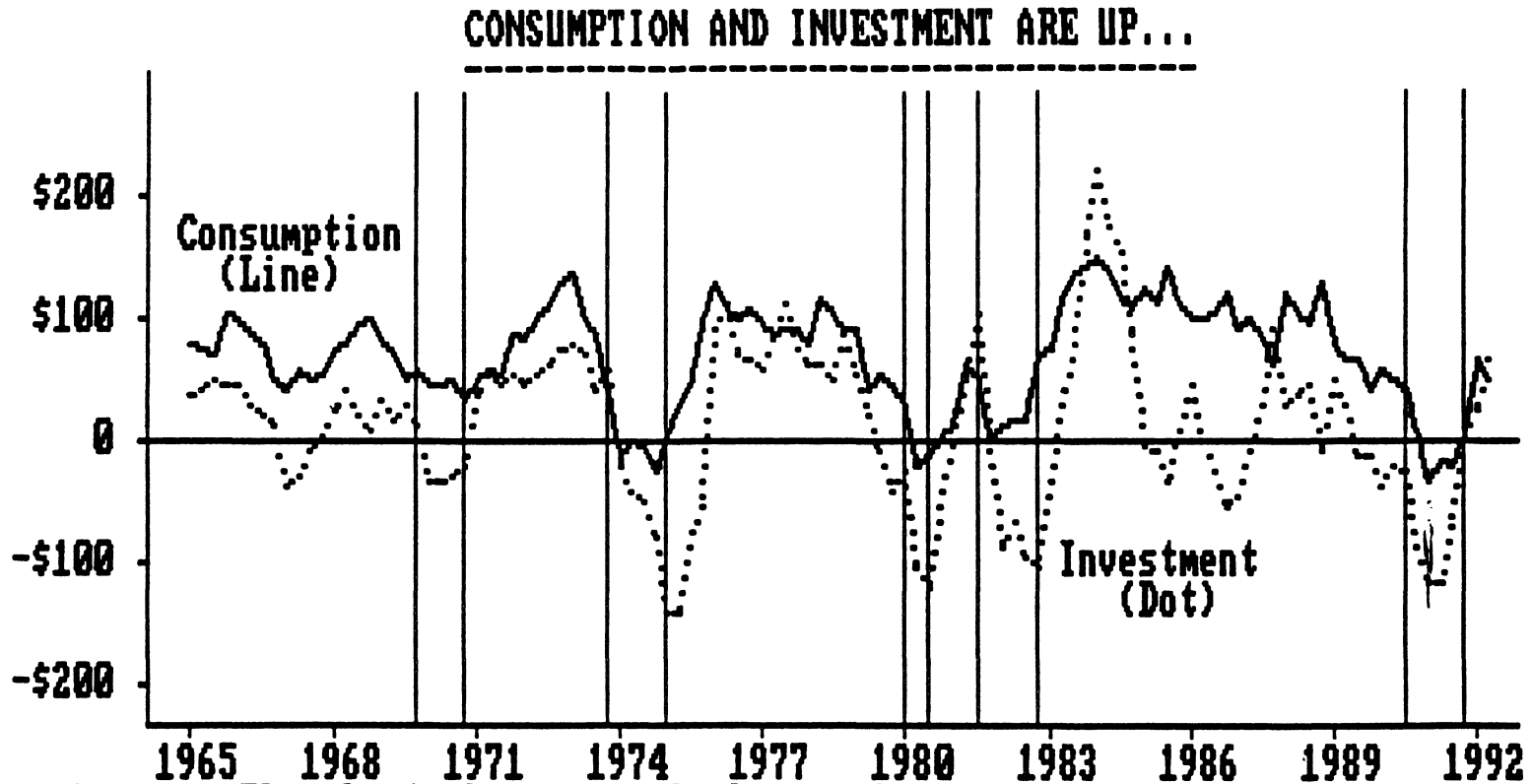
### THE BIG REBOUND IN CORPORATE CASH FLOW



Notes: The chart shows year-over-year changes in net corporate cash flow (retained earnings plus depreciation.) In billions of current dollars. The vertical lines show the recession.

Sources: Haver Analytics; Heinemann Economic Research

FOUR QUARTER CHANGES

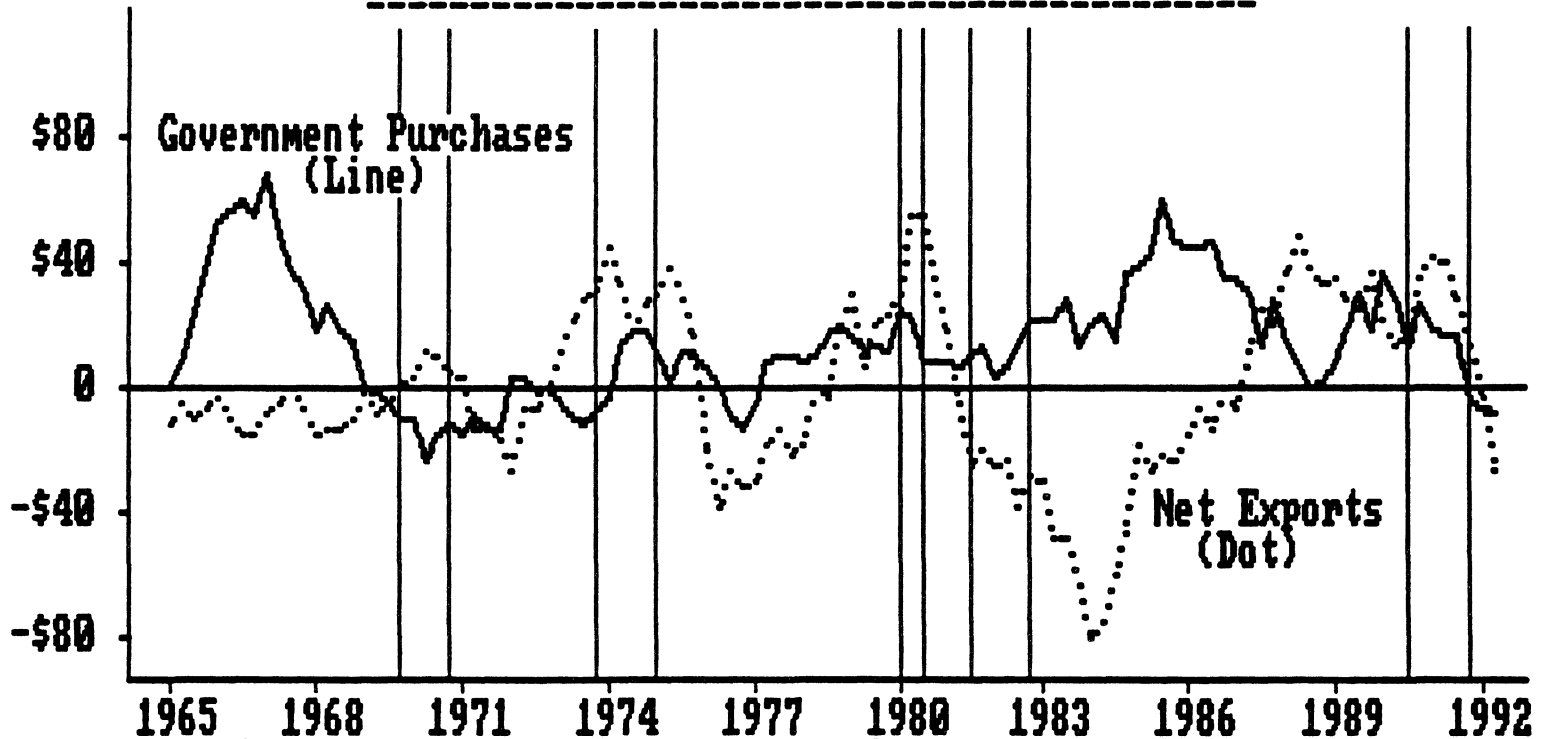


Notes: The chart shows annual changes in real personal consumption expenditures (line) and in real gross private domestic investment (dot). The data are in billions of 1987 dollars at seasonally adjusted annual rates. The vertical lines show recessions.

Sources: Haver Analytics; Heinemann Economic Research

FOUR QUARTER CHANGES

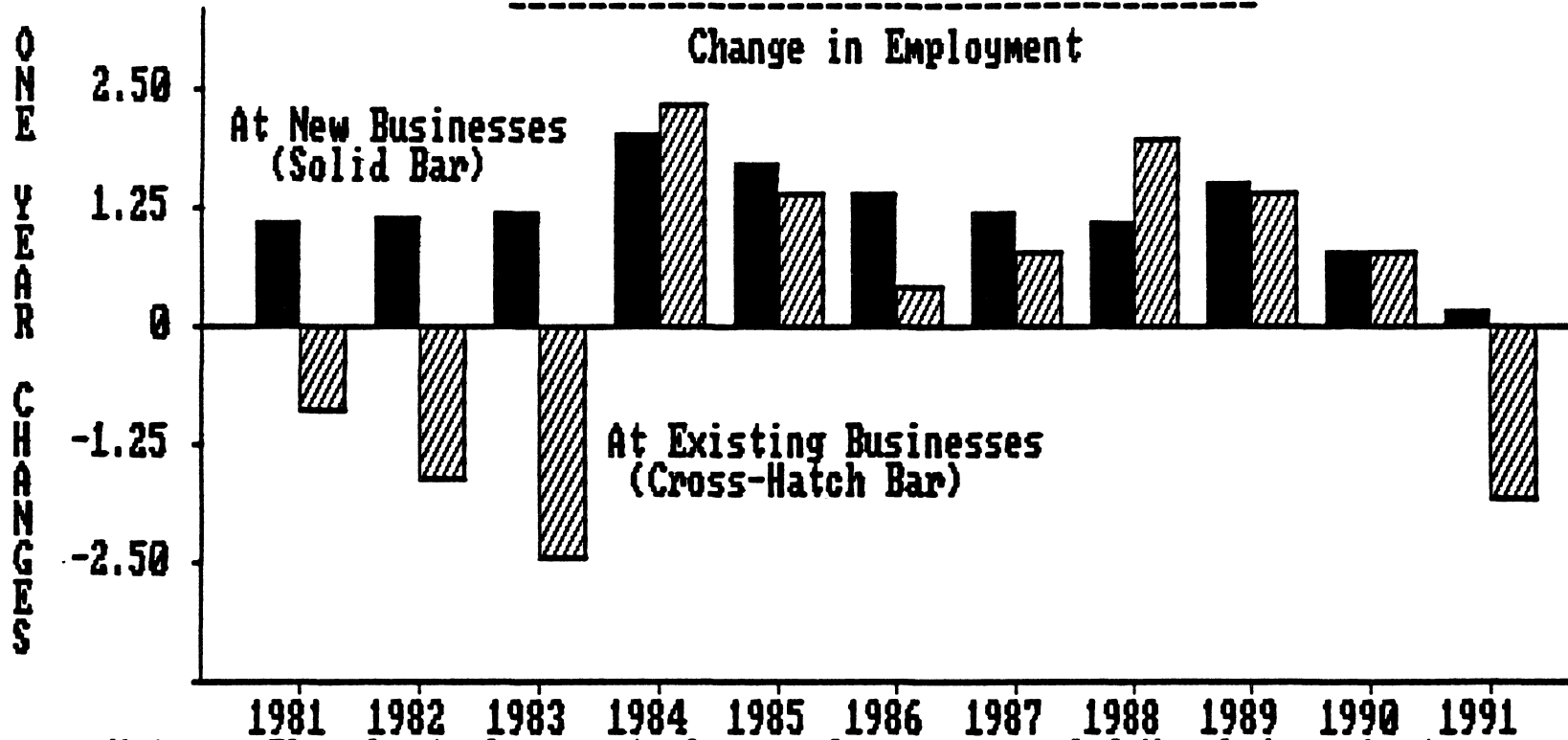
...GOVERNMENT SPENDING AND EXPORTS ARE DOWN



Notes: The chart shows annual changes in real government purchases of goods and services (line) and in real net exports (dot). The data are billions of 1987 dollars at seasonally adjusted annual rates. The vertical lines show recessions.

Sources: Haver Analytics; Heinemann Economic Research

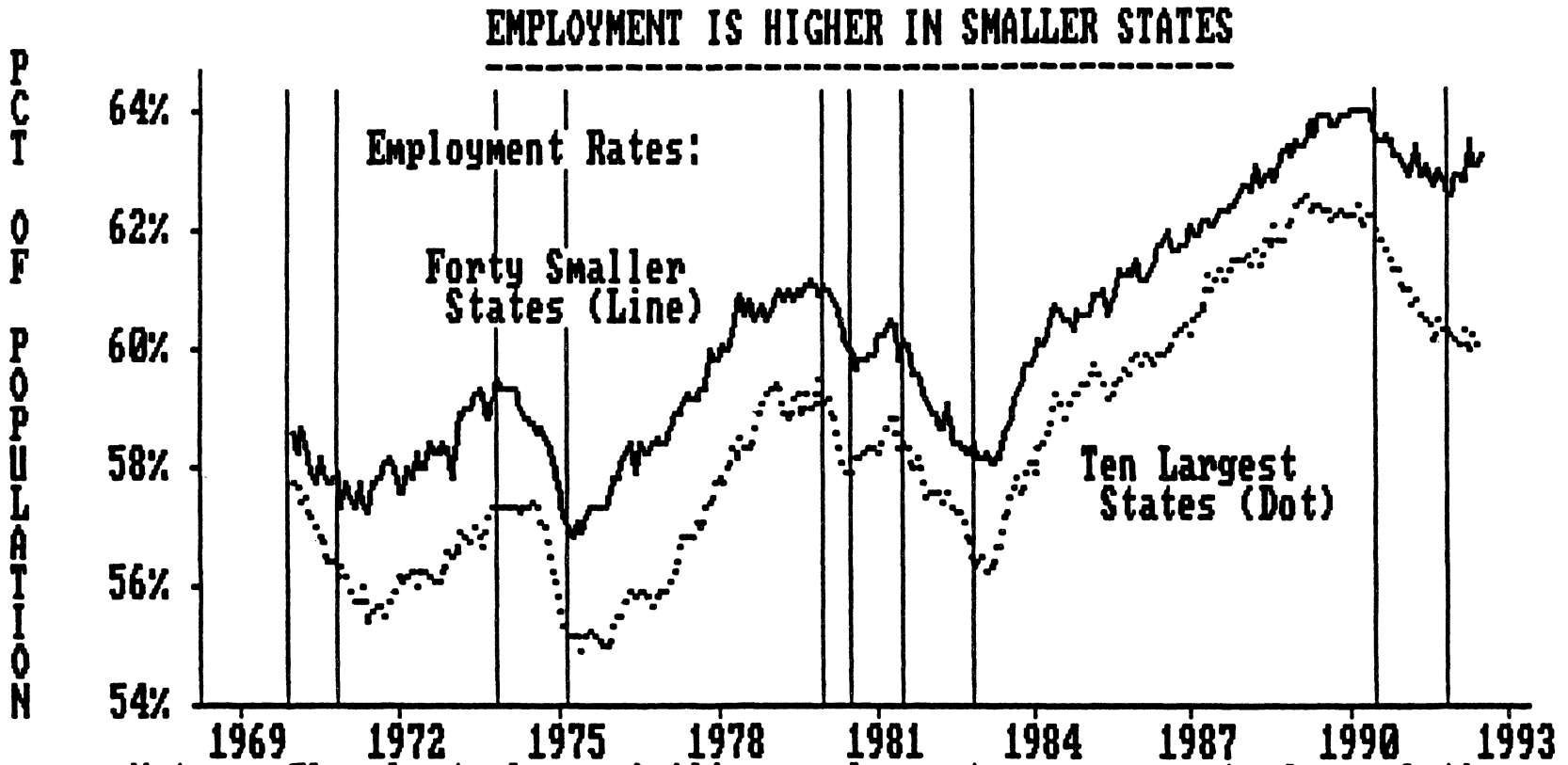
### NEW BUSINESS CREATES MOST PRIVATE JOBS



Notes: The chart shows net changes for years ended March in private non-farm jobs at new businesses (solid bar) and existing businesses (cross-hatch bar). Data are millions of nonfarm payroll jobs.

Sources: Bureau of Labor Statistics; Heinemann Economic Research



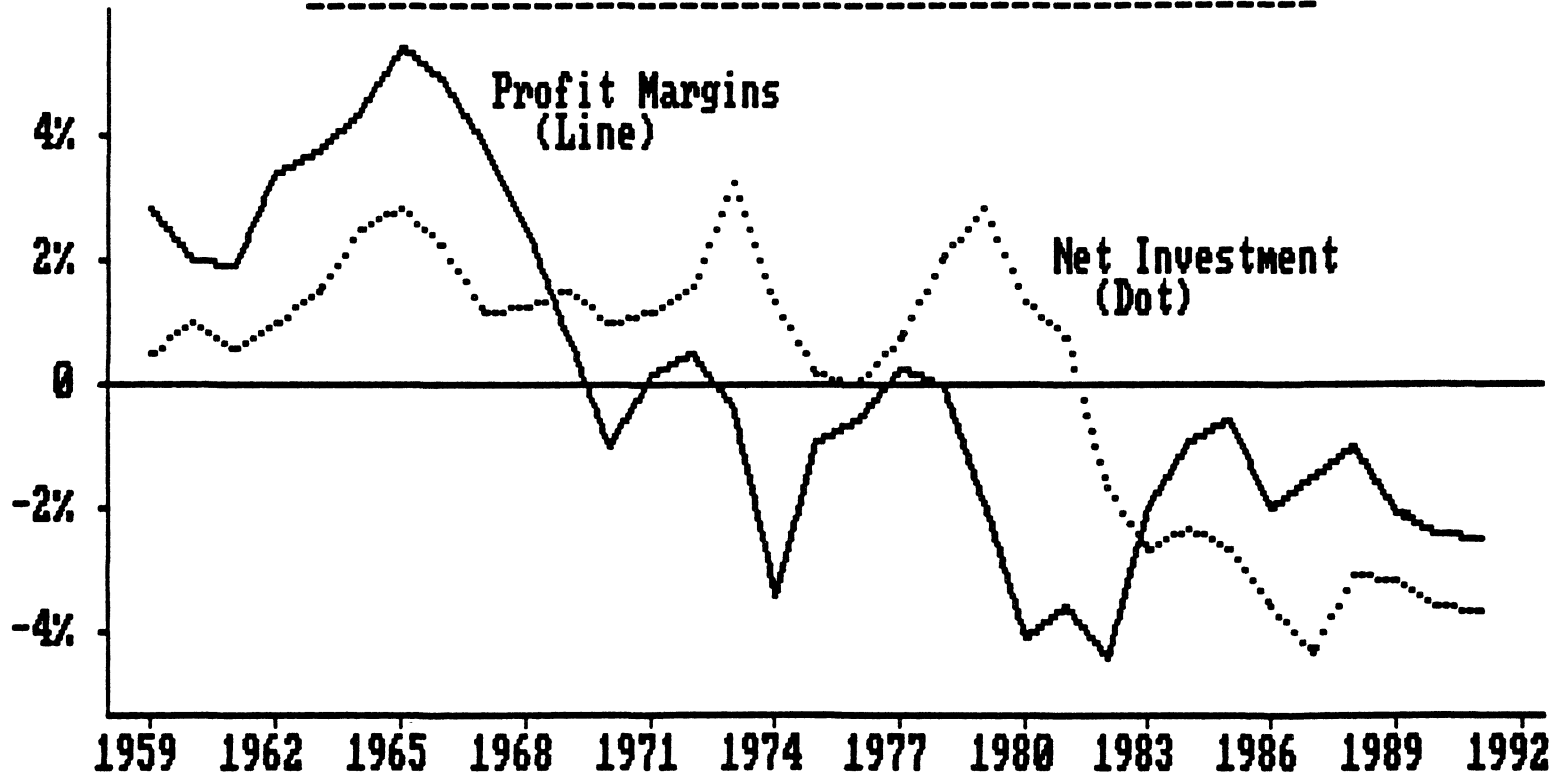


**Notes:** The chart shows civilian employment as a percent of population for the ten largest states (CA, FL, IL, MA, MI, NJ, NY, OH, PA, TX) (Dot) and for the forty smaller states (Line). The vertical lines show periods of recession.

**Sources:** Haver Analytics; Heinemann Economic Research

DEVIATION FROM NORM

**DECLINING PROFIT MARGINS DRAG NET INVESTMENT DOWN**



Notes: The chart shows after-tax profit margins of domestic business (line) and net fixed investment as a percent of net national product (dot) minus their respective means (8.5% and 6.0%). Annual data.

Sources: Haver Analytics; Heinemann Economic Research

*September 13-14, 1992*

## **ECONOMIC OUTLOOK**

**Mickey D. LEVY**  
**CRT Government Securities, Ltd.**

Although the foundations that traditionally generate a strong economic rebound are in place, the recovery will continue to be very gradual through year-end. Real GDP is projected to grow at an approximate 2.0 percent annualized rate, although Hurricane Andrew will adversely impact GDP in the third quarter. The probability of falling back into recession is very low. An acceleration of GDP growth to 3.0 percent is projected in 1993. Inflation pressures are projected to recede modestly further, but that trend will reverse in response to a pickup in economic growth. The anemic pattern of growth is attributable to the continuation of long-term structural adjustments that began before the cyclical recession, plus the adjustment to lower inflation, not any lack of monetary stimulus. Despite the adverse impact on economic conditions of these adjustments, they are necessary and are creating a healthier base for long-term sustainable growth. Policymakers must distinguish between the structural and cyclical factors that affect economic conditions, and focus on policies that raise long-term productivity and living standards, rather than costly short-term countercyclical initiatives.

### **Recent Economic Conditions**

Real GDP grew at a 2.2 percent annualized rate in the first half of 1992, modestly faster than its one-year trend, but significantly slower than recent recoveries. Final sales have risen only 1.5 percent in the last year, and declined 0.4 percent annualized in second quarter 1992 after robust first quarter growth. Through second quarter 1992, real GDP was still 0.2 percent below its second quarter 1990 cyclical peak, and employment is still below its October 1989 level. Not only is the pace of the rebound uniquely anemic, the unevenness of the improvement by sector is also distinctly different than recent recoveries. The sectors that have provided the biggest boost to previous recoveries have remained relatively muted. Residential investment has increased, but much slower than in recent recoveries, despite the lowest mortgage rates in 20 years. Business investment in producer durable goods equipment remains strong, but total business fixed investment lags, as business investment and structures continue to recede. Business inventory building has preceded at a sluggish pace, reflecting business expectations of continued weak product demand and lower desired levels of inventories. In addition to these large cyclical swing sectors, consumption continues

to grow slowly—1.5 percent in the last year—as sales of automobiles and durable goods are weak. Export growth remains generally firm (although it paused in the second quarter) and is rising as a percent of output, in sharp contrast to recent recoveries. However, a pick-up in imports has generated a modest deterioration in the merchandise trade deficit. Meanwhile, the structural trend of federal defense downsizing is accelerating, subtracting from economic output, in contrast to the stimulative fiscal policies in recent recoveries that involved rising government purchases.

Corporate profits and cash flow are rising rapidly (year-over-year 12.0 percent and 12.3 percent, respectively), despite lack of healthy growth of product demand. This reflects significant cost control and restructuring of production processes and finance. Wage pressures have abated and nonwage compensation increases have slowed, so the total compensation increases have fallen sharply to 3.5 percent from 6.0 percent in mid-1990. Unit labor costs have increased only 0.7 percent in the last year, their slowest rise since early 1984. With unit labor costs rising slower than product prices, profit margins have widened significantly. In addition, the lower U.S. dollar exchange rate has raised the dollar value of repatriated profits from foreign affiliates of multinational corporations. The resulting strong growth of profits and cash flow, coupled with gradually lower inflation and declining interest rates, have driven up trailing P/Es and provided support for the stock market.

### **Factors Underlying Stronger Growth**

The key factors that point toward a stronger rebound in economic growth include stimulative monetary policy and lower interest rates, receding inflation and unit labor costs, strong profit growth, and a boost to product demand from exports.

The Federal Reserve continues to lower interest rates and follow an expansive monetary policy. Lack of monetary ease is *not* one of the factors inhibiting growth. While bank reserve and narrower measures of money (M1) are growing rapidly (10 percent and 9 percent annualized in the last six months), M2 is declining (0.5 percent rate). This only reflects the steepness of the yield curve and responses by banks and households to the significant rise in opportunity costs of holding financial instruments counted in M2. All of the difference is due to a \$193 billion, 17 percent decline in small time deposits in the last year, of which approximately 70 percent has been from thrift institutions. In response to slack loan demand, depository institutions have lowered yields offered on CDs and purchased U.S. treasuries and other financial assets not counted in M2, while households have moved money out of CDs and into other financial instruments. Some of those funds flow back into M2, but some do not. Consequently, while M2 is understating the degree of

monetary thrust, M1 may be overstating it. M2 should begin growing and eventually the differentials between M1 and M2 growth should narrow, but only when a change in the term structure of rates (i.e., a rise in short-term rates) alters relative opportunity costs. In any case, both the narrow aggregates and anecdotal evidence strongly suggest that the banking system is flush with liquidity and the Fed has been sufficiently easy to generate faster economic growth.

The significant declines in interest rates provide a wide range of benefits. The lowest mortgage rates in 20 years increase the affordability of home purchase and reduce household debt burdens through refinancing and expiration of more expensive debt. Lower interest rates also reduce the debt service for businesses, a positive factor for corporate profits and cash flow. The real cost of short-term debt at commercial paper or LIBOR rates is negative in after-tax dollars. This contributes to business investment in producer durable goods equipment.

Gradually lower inflation contributes to lower inflation expectations and interest rates and also raises real disposable income, a key factor that fuels consumption. The CPI has increased 3.2 percent in the last year, while the PPI has increased 1.5 percent, compared to 5.4 percent and 4.9 percent in 1990.

In sharp contrast to a decline in real exports early in recent recoveries, exports have been the strongest sector in the economy. Although real exports declined 0.9 percent annualized in the second quarter, they have grown 5.2 percent year-over-year. While the economies of a number of U.S. industrialized trading partners have been mired in recession or are slumping, a rising portion of U.S. export growth has been to developing nations, particularly those in Latin America and the Pacific Rim. Based on the weak U.S. dollar, which is far below purchasing power parity, and expected continued demand for capital goods (excluding autos) and industrial materials from developing nations, U.S. exports are projected to continue rising in real terms and as a percent of GDP.

### **Factors Inhibiting Stronger Recovery**

A host of structural adjustments, which began to affect economic performance before the recession, along with the adjustment to lower inflation and asset prices, continues to inhibit stronger economic growth. These adjustments affect both the mix and level of demand, as well as production processes that affect supply. It is these structural adjustments that have made this recession-recovery episode so unique, and add a dimension of complexity that has confused policymakers.

Federal defense cuts, which began in the mid-1980s, are accelerating and reducing economic output. In Fiscal Year 1992, defense outlays will fall approximately \$15 billion or 5.0 percent. This downsizing is having a significant impact on private defense contractors as well as government military activities. The Bush Administration has proposed \$50.4 billion cuts in defense budget authority in FY1993-FY1997, while the Democratic platform proposes \$37.5 billion more cuts in outlays in FY1993-FY1996 than the Administration, extending and accelerating the recent trend.

Real estate activity and prices continue to be affected by noncyclical factors that took hold in the mid-1980s and a shift in expectations about inflation and asset prices. While business investment in structures continues to recede, residential construction is rising but much slower than previous recoveries despite the significant decline in mortgage rates. The tax advantages provided prior to the Tax Reform Act of 196 generated a large oversupply of office and industrial space. While price declines have contributed to the reduction in the inventory overhang, the adjustment process is being slowed by subdued demand for office space as the financial and business services industry restructures and consolidate. Business investment in structure is not projected to rise materially until the inventory overhang evaporates; look for continued declines through 1993. The weakness in residential real estate reflects the demographic trend of slower new family formation, the lesser tax advantages of home-ownership and investment in multifamily dwellings, and the shift in expectations about housing values. The demographic factors is dramatic: population of people in the age cohort 25-34, prime first-time home buyers, has begun a decline that will continue through the 1990s, following average annualized growth of 2.7 percent from 1965-1990. Declines in real estate values and adjustment of expectations is also very important; people are less willing to increase debt to buy houses now that they believe housing values may not rise. New housing starts are projected to rise in 1993, but average only 1.35 million units.

Consumption of durable and nondurable goods continues to grow sluggishly, reflecting both structural and cyclical factors. The rising trend of consumption as a percent of GDP peaked in 1986 with the elimination of tax advantages of debt financed consumption (the deductibility of sale tax and personal interest expenses) and the falling dollar, which sapped purchasing power. Those factors are still influential. More recently, consumption has been limited by weak growth in employment and disposable income; lack of consumer confidence in response to economic uncertainty; the adverse impact of declining real estate values and activity; and ongoing efforts by households to reduce high levels of indebtedness. The ratio of installment debt-to-personal income has retraced a portion of its dramatic rise from 12 percent in 1983 to a peak of 16 percent in 1989. The decline in interest rates accelerates the restructuring of household finances—in particular,

declining mortgage rates provide households the opportunity to refinance and pay down more expensive debt—but the adjustment in consumer balance sheets will likely need to proceed further before real consumption accelerates materially. In general, consumption is projected to keep pace with disposable income growth, rather than significantly exceed it, as it did in the early stages of recent recoveries.

Business adjustments to production processes and streamlining of operating costs, which is creating a healthy base for long-run economic performance, have some negative effects on present economic conditions as well as some positive ones. Businesses have lowered their *desired* level of inventories, and there has been a structural reduction in inventories as a percent of GDP. This trend has dampened the typical cyclical rebound in inventory building that has contributed so much to economic growth in the initial stage of recent recoveries. Business efforts to reduce business operating costs have contributed significantly to corporate profits and international competitiveness, but they have involved job layoffs, particularly in larger firms, and continued to constrain employment and income increases, and adversely affect consumer confidence.

Recently, these adjustments have offset the factors that would normally provide a stronger, more traditional cyclical rebound. Eventually, as the impact of these inhibiting factors abate, economic growth will accelerate, but in the near term, sluggish growth is projected to continue.

Inflation has receded in response to sustained economic weakness and sluggish product demand. Most positive for inflation has been the significant reduction in unit labor costs increases. In the near term, as long as economic weakness persists, inflation pressures will remain muted. However, inflation is a longer-run concern, particularly as the Federal Reserve pursues an aggressively stimulative monetary policy. Once some of the long-term structural adjustments that now inhibit faster economic growth unwind, an acceleration in nominal GDP growth may generate a quick rise in inflation. The steepness of the yield curve reflects that concern. As the economy picks up, the Fed must be willing to raise rates and drain the recent rapid growth of reserves in order to achieve its long-term objectives of low inflation as a means to sustained healthy economic growth.

### **Noncyclical Adjustments and Economic Policies**

Insofar as many of these factors inhibiting faster growth are structural in nature, traditional countercyclical macroeconomic policies are *not* effective or appropriate stimulative remedies. More monetary easing is incapable of altering the demographic factors affecting housing activity, and is



an inappropriate offset to the oversupply of business office space. Traditional fiscal stimulus is an equally inappropriate and potentially dangerous counter to the federal defense downsizing. The list goes on.

The most constructive government role is to recognize the nature of the structural adjustments and adopt policies that encourage a reallocation resources of productivity-enhancing activities. Attempts to stimulate demand but not productive capacity are shortsighted and costly.

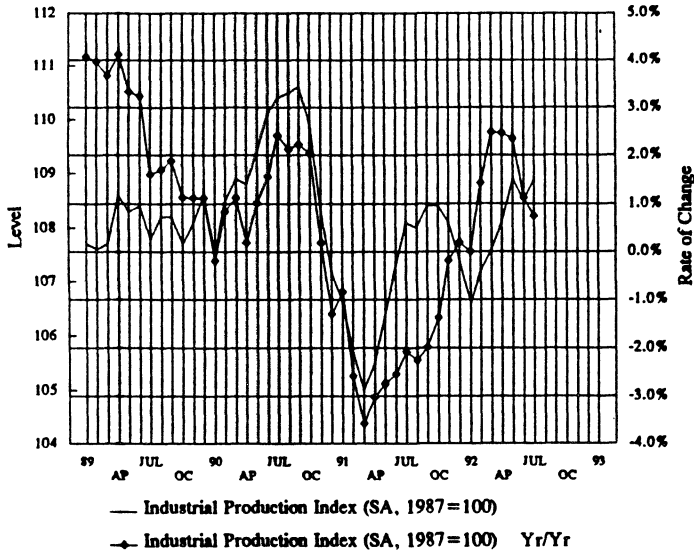
**SHADOW OPEN MARKET COMMITTEE**

**MICKEY D. LEVY**  
**CHIEF ECONOMIST & SENIOR VICE PRESIDENT**  
**CRT GOVERNMENT SECURITIES, LTD.**

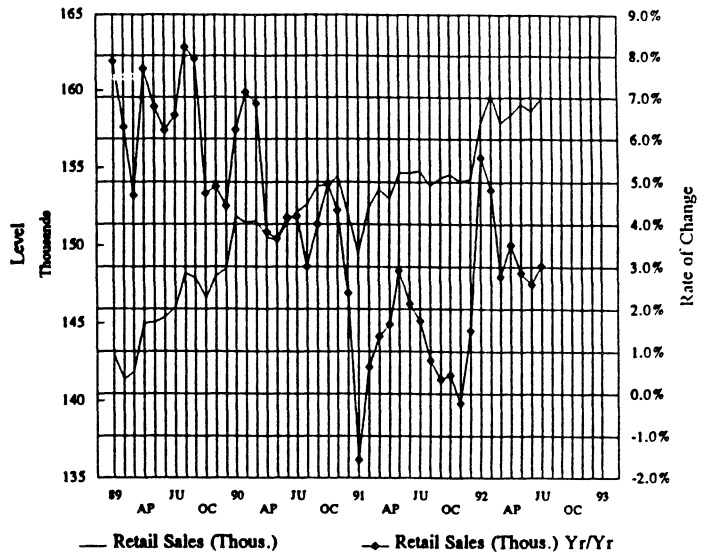
**SEPTEMBER 13, 1992**



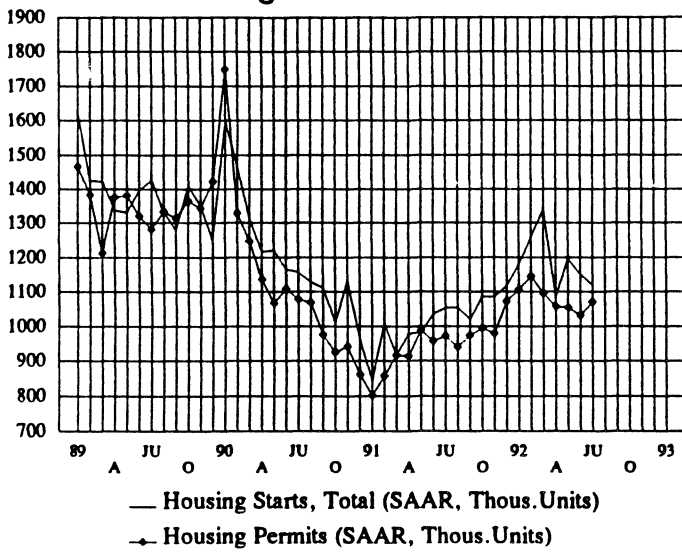
**Industrial Production**



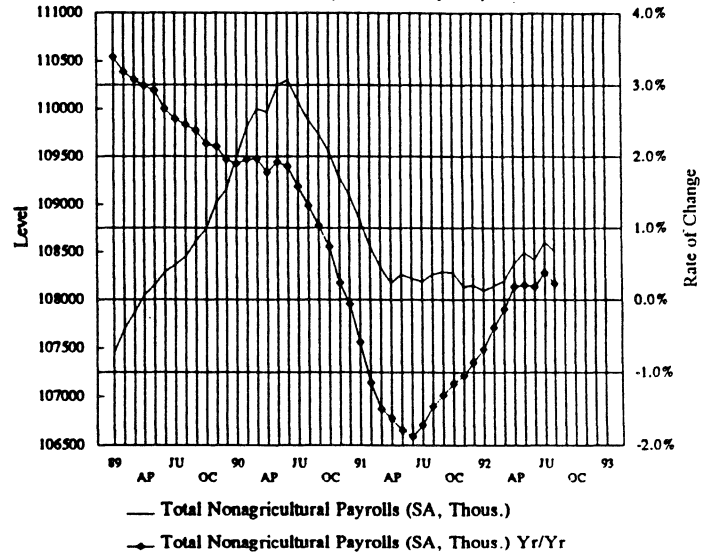
**Retail Sales**



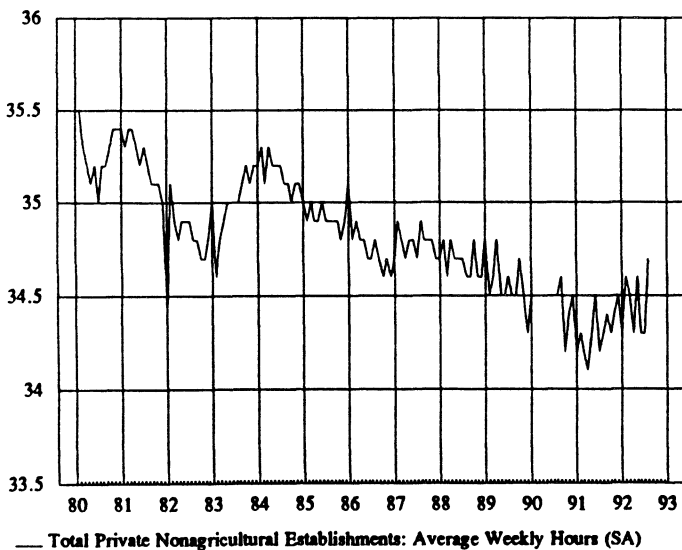
**Housing Starts and Permits**



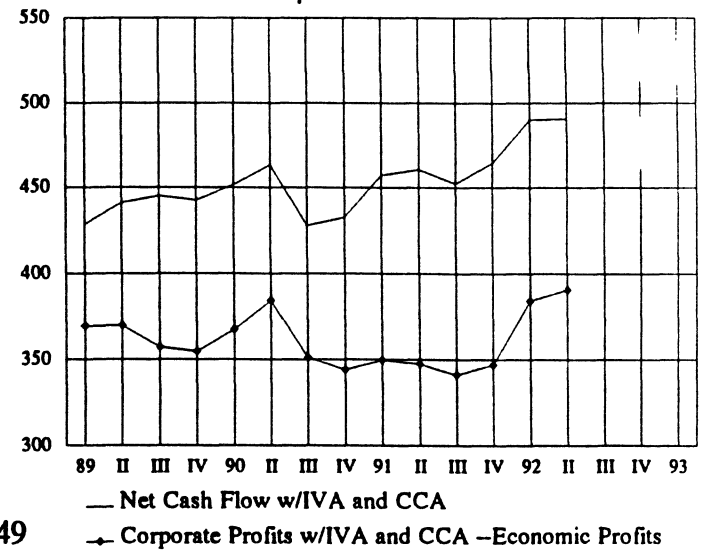
**Non-Farm Payroll Employment**



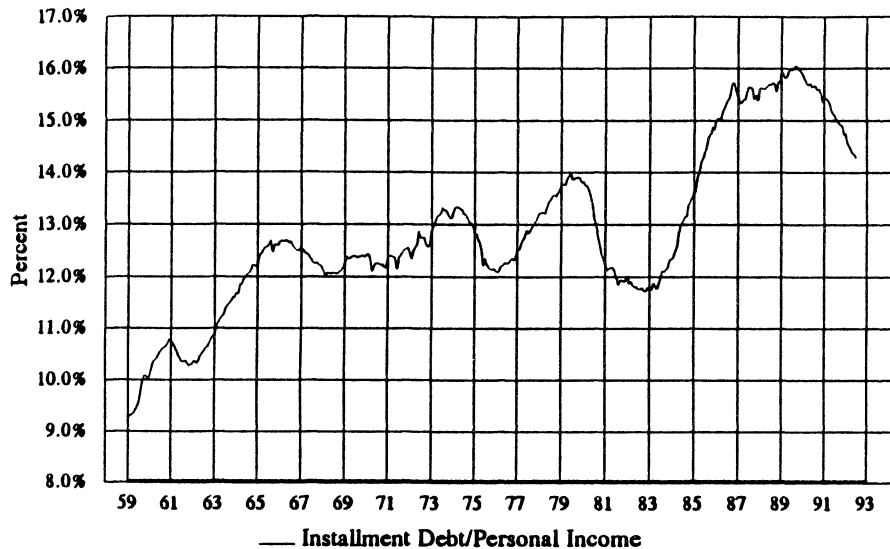
**Hours**



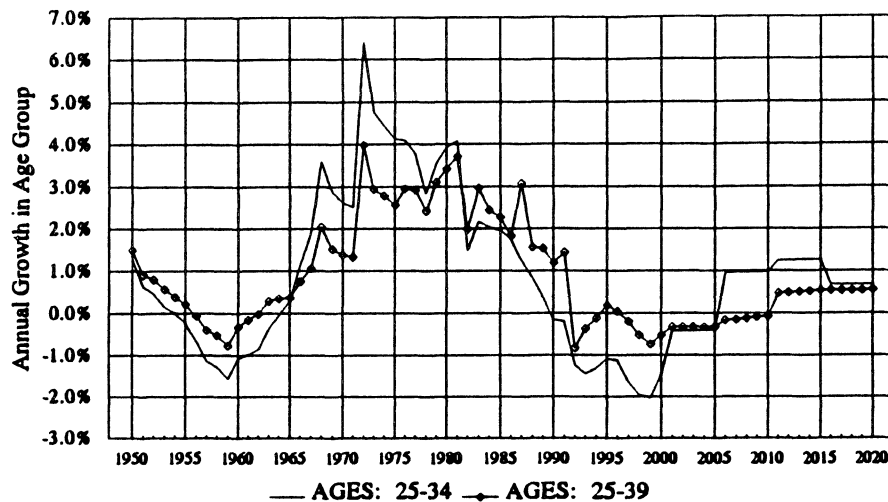
**Corporate Profits**



Installment Debt Burden

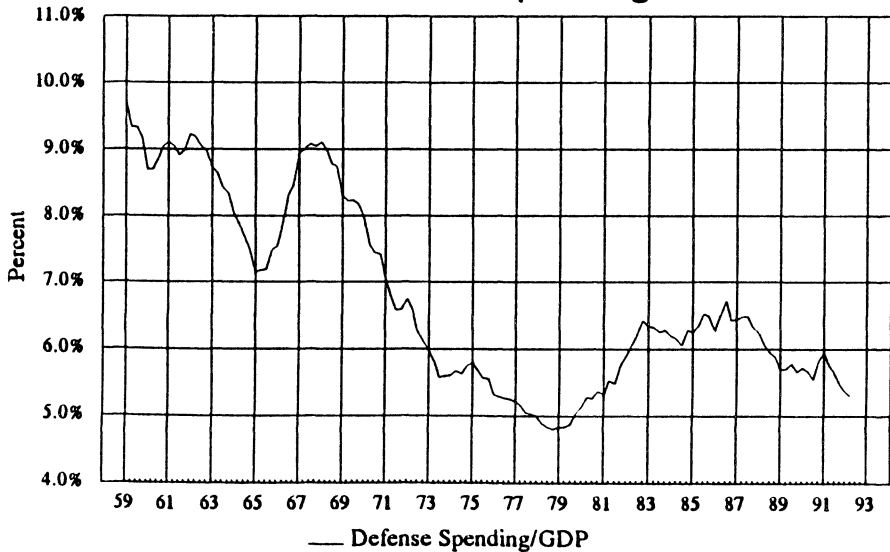


Estimated Population Growth  
1950-2020

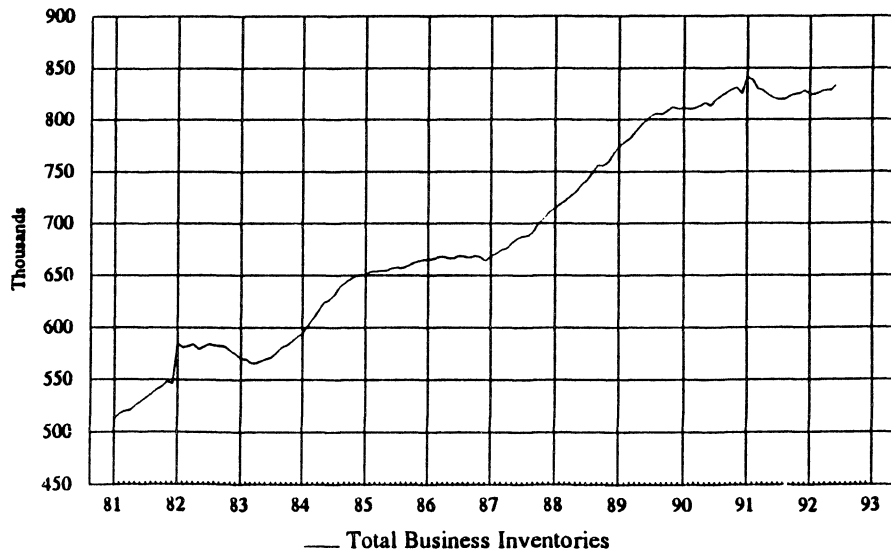


Source: Census Department

Defense Spending



Business Inventories



September 13-14, 1992

CHART 3

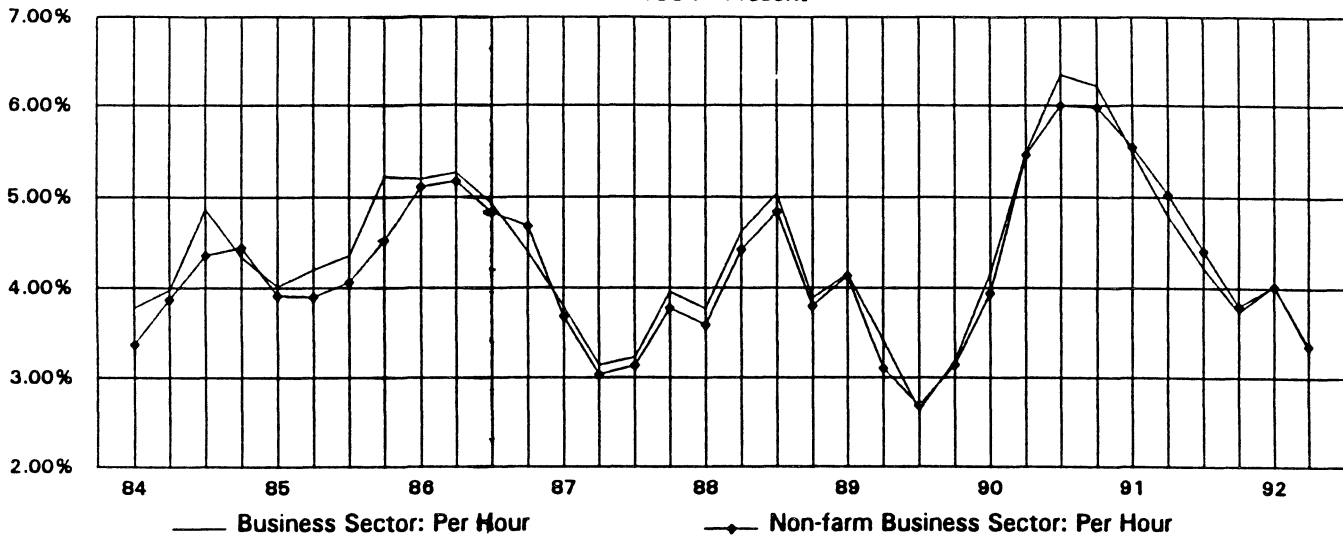
10-Sep-92

*Merchandise Trade by Region: 1988 to Present*

REGION	LEVELS					PERCENT CHANGE						LEVELS				
	12 months through June 1992					1991		1990		1989		1988				
	Exports	Imports	Balance			Exports	Imports	Exports	Imports	Exports	Imports	Exports	Imports	Balance		
<b>Developed</b>	\$265,324	61%	\$299,782	59%	\$34,458	3.3%	0.8%	9.4%	2.6%	13.4%	4.4%	\$206,805	64%	\$277,575	63%	\$70,770
Canada	88,235	20%	94,958	19%	-6,723	5.5%	3.9%	6.2%	3.9%	10.0%	8.1%	71,622	22%	81,398	18%	-9,776
Western Europe	117,933	27%	104,486	21%	\$13,448	4.3%	-4.2%	2.8%	7.1%	14.0%	1.3%	87,858	27%	100,443	23%	-12,585
Japan	47,490	11%	93,619	19%	-46,129	-2.2%	4.4%	9.2%	-4.1%	17.9%	4.5%	37,725	12%	89,519	20%	-51,794
Australia	8,703	2%	3,854	1%	\$4,849	1.9%	-13.3%	2.5%	14.8%	19.5%	9.4%	6,973	2%	3,541	1%	\$3,432
Other Developed	2,962	1%	2,866	1%	\$96	3.3%	-1.0%	3.2%	5.7%	5.7%	2.5%	2,627	1%	2,674	1%	-46
<b>Developing</b>	\$157,858	36%	\$181,842	36%	-\$23,984	24.0%	0.8%	8.1%	6.6%	10.3%	10.9%	\$106,727	33%	\$152,703	35%	-\$45,976
Mexico	36,272	8%	33,250	7%	\$3,022	28.3%	10.3%	13.2%	11.0%	21.1%	16.8%	20,629	6%	23,260	5%	-\$2,631
Brazil	6,341	1%	7,126	1%	-\$785	25.6%	-9.8%	5.1%	-6.1%	12.6%	-9.5%	4,266	1%	9,294	2%	-\$5,028
Asian Tigers	46,658	11%	61,344	12%	-\$14,686	14.5%	1.3%	6.0%	-3.5%	10.4%	-0.4%	34,816	11%	63,030	14%	-\$28,214
OPEC	21,552	5%	31,500	6%	-\$9,948	57.3%	-17.2%	3.8%	24.3%	-5.7%	33.3%	13,994	4%	22,962	5%	-\$8,968
Other	47,035	11%	48,621	10%	-\$1,587	18.9%	11.1%	8.8%	8.6%	10.1%	18.0%	33,022	10%	34,156	8%	-\$1,135
<b>Eastern Europe</b>	4,951	1%	1,805	0%	\$3,146	17.8%	-17.3%	-20.8%	5.7%	45.4%	-4.6%	3,650	1%	2,163	0%	\$1,487
<b>China</b>	6,825	2%	22,134	4%	-\$15,310	42.0%	45.3%	-16.5%	27.1%	14.6%	40.9%	5,022	2%	8,511	2%	-\$3,489
<b>Total</b>	\$434,957	100%	\$505,563	100%	-\$70,605	10.7%	2.1%	8.2%	4.7%	12.8%	7.3%	\$322,203	100%	\$440,951	100%	-\$118,748

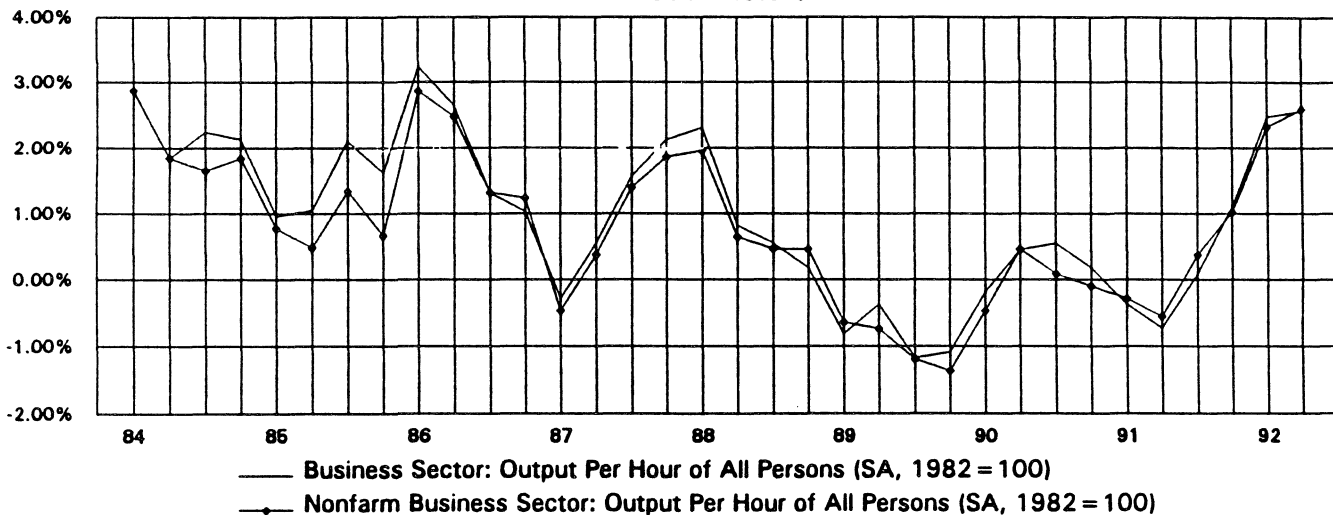
### Compensation

1984 - Present



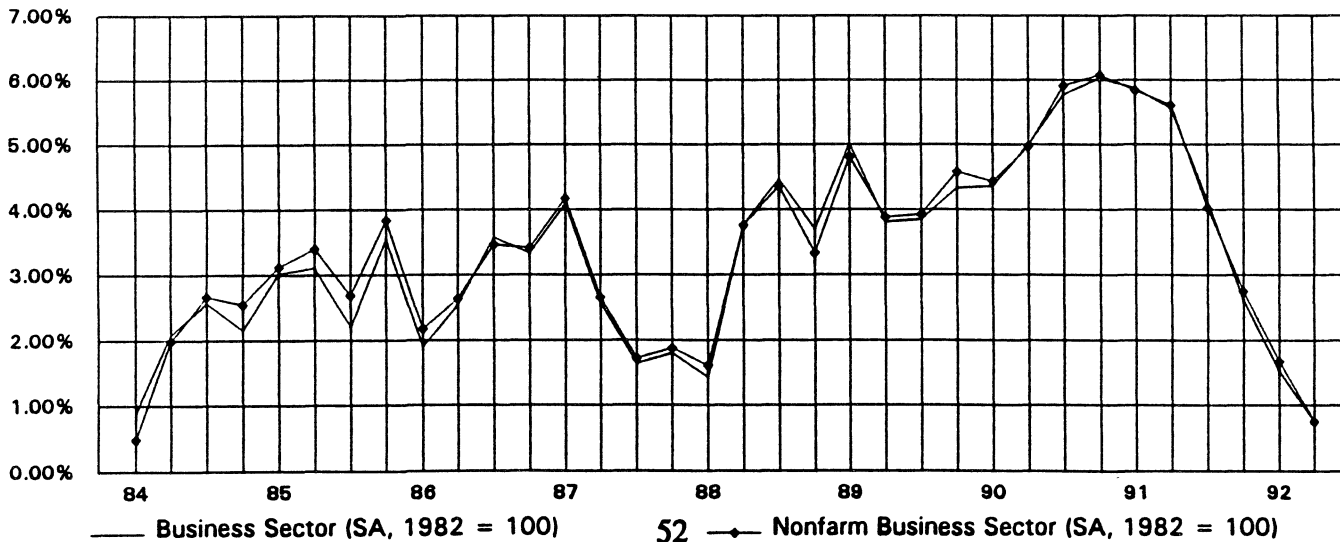
### Productivity

1984 - Present



### Unit Labor Cost

1984 - Present



**Table 1**  
**Trends in Selected Inflation Measures**  
**(Annualized % Changes)**

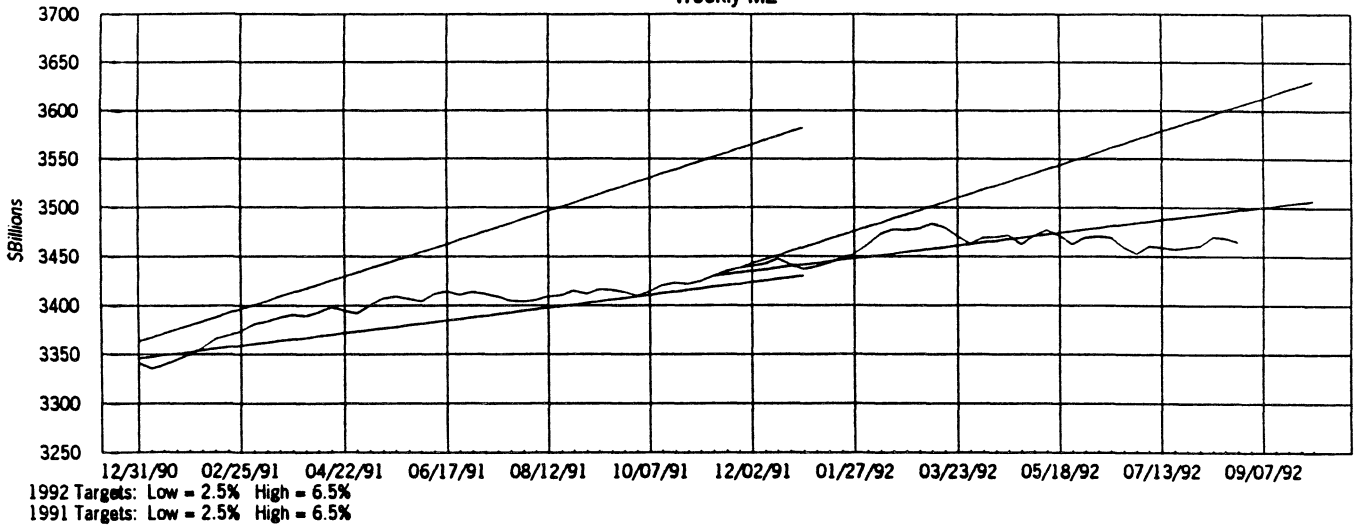
INFLATION MEASURES	1989	1990	1991	1991		1992	
				III	IV	I	II
CPI	4.8%	5.4%	4.2%	2.7%	3.6%	2.8%	3.4%
CPI EXCLUDING FOOD & ENERGY	4.5%	5.0%	4.9%	3.9%	3.8%	3.9%	3.8%
PPI	5.1%	4.9%	2.1%	-0.3%	1.7%	-0.1%	2.6%
PPI EXCLUDING FOOD & ENERGY	4.4%	3.7%	3.5%	2.0%	2.7%	3.5%	2.4%
GDP DEFLATOR	4.1%	4.0%	3.3%	3.2%	2.1%	2.8%	3.1%
AVERAGE HOURLY EARNINGS	4.0%	3.7%	3.1%	2.6%	2.2%	3.1%	1.8%
UNIT LABOR COSTS	4.2%	5.3%	4.5%	2.1%	0.0%	0.3%	0.6%



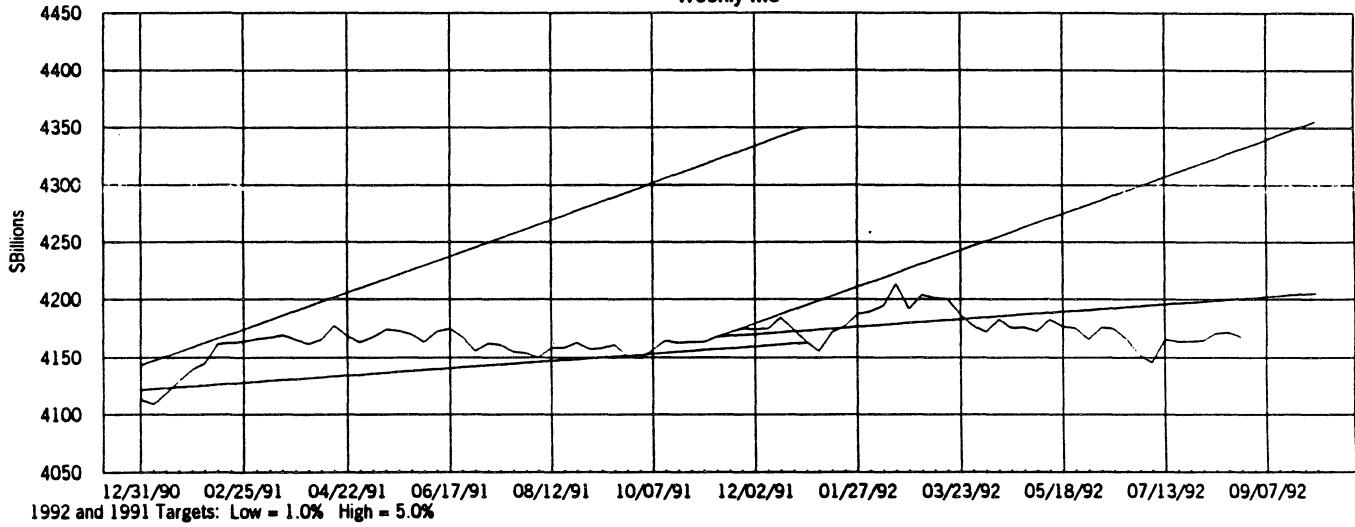
CHART 5

# Money Growth vs. the Fed's Target Ranges

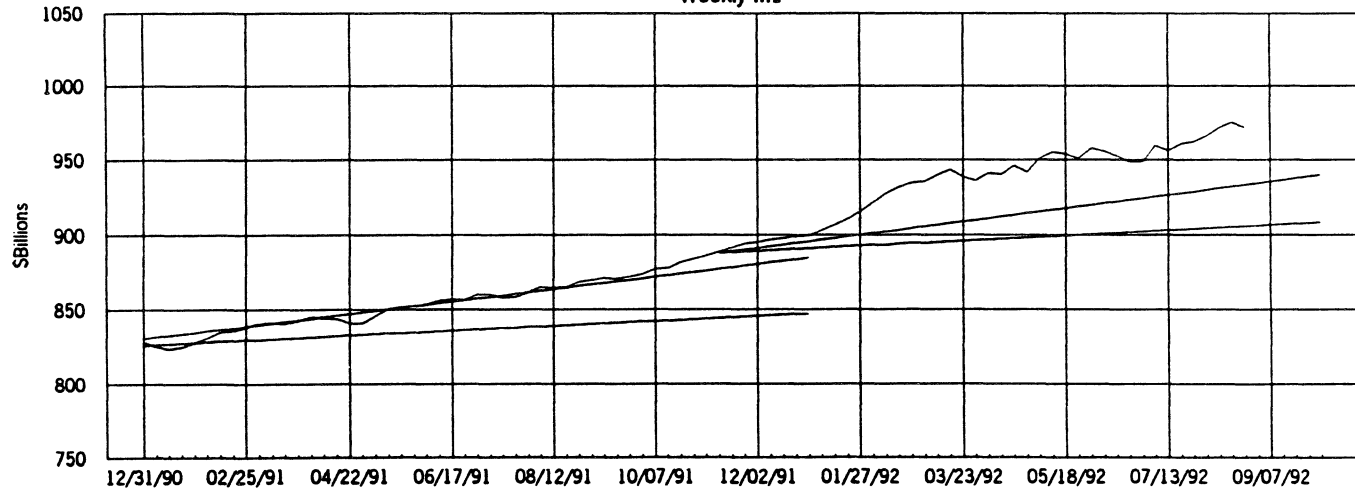
Weekly M2



Weekly M3



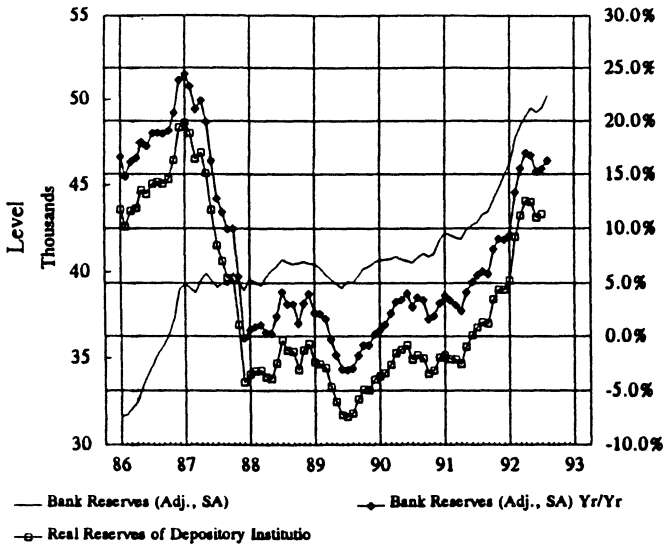
Weekly M1



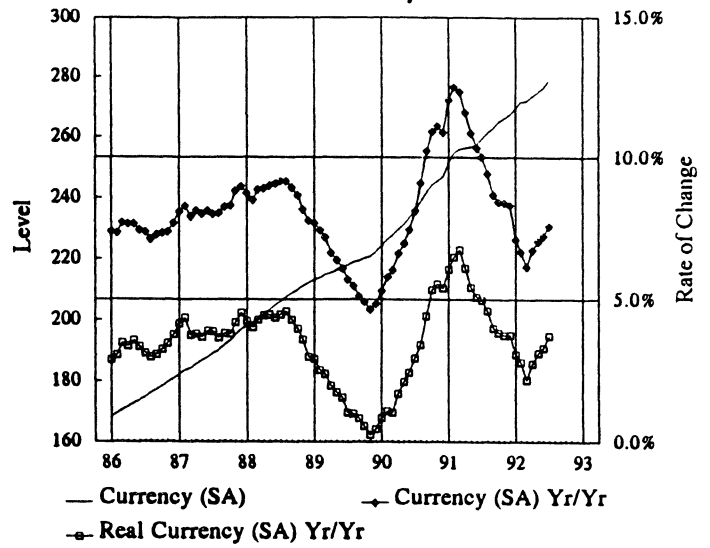
Note: The Fed does not currently maintain target ranges for M1.  
For comparison with M2 growth the range shown above is the M2 target 2.5%-6.5%.

Data Through 8/24/92

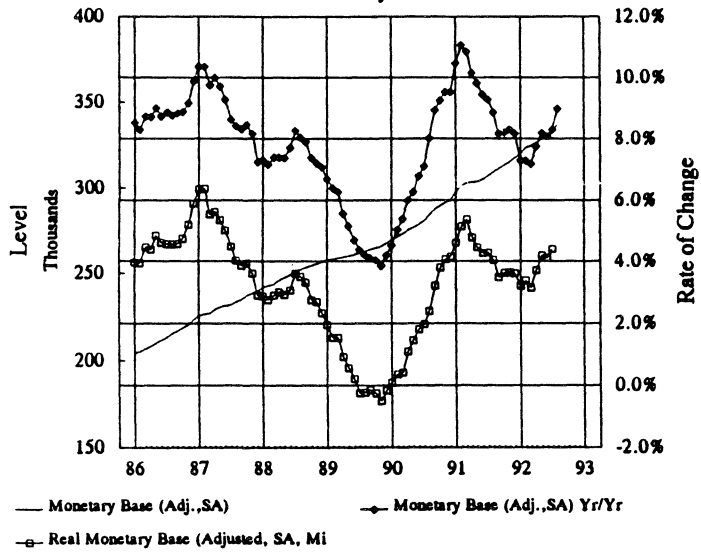
**Bank Reserves**



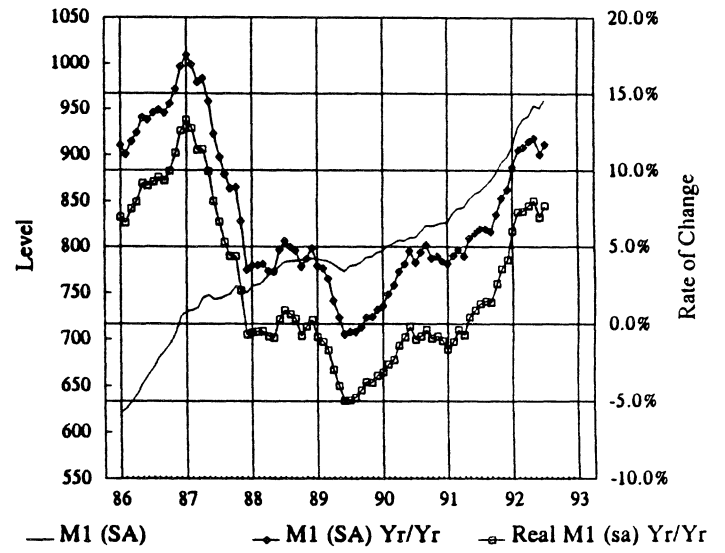
**Currency**



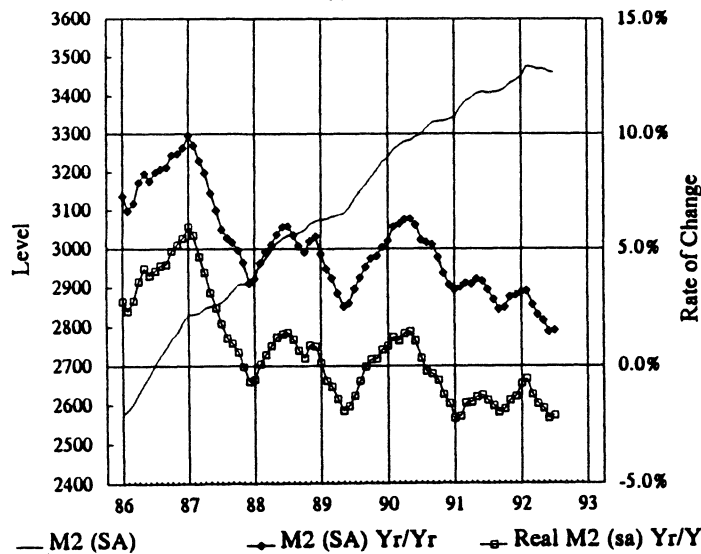
**Monetary Base**



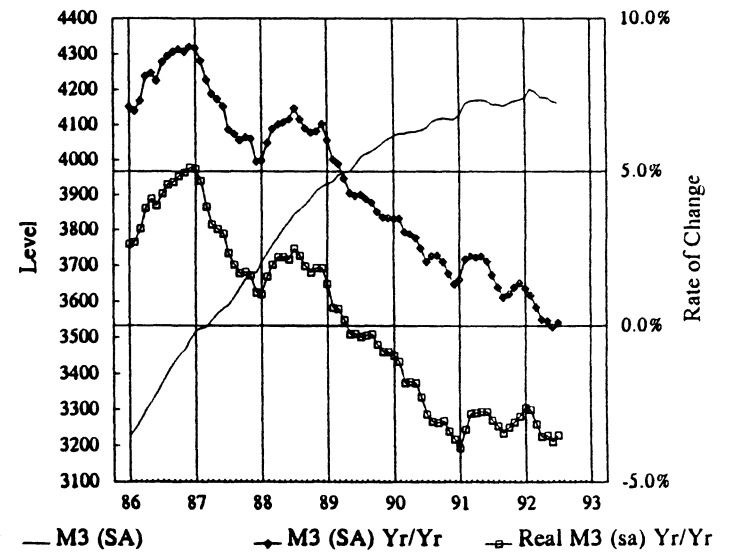
**M1**



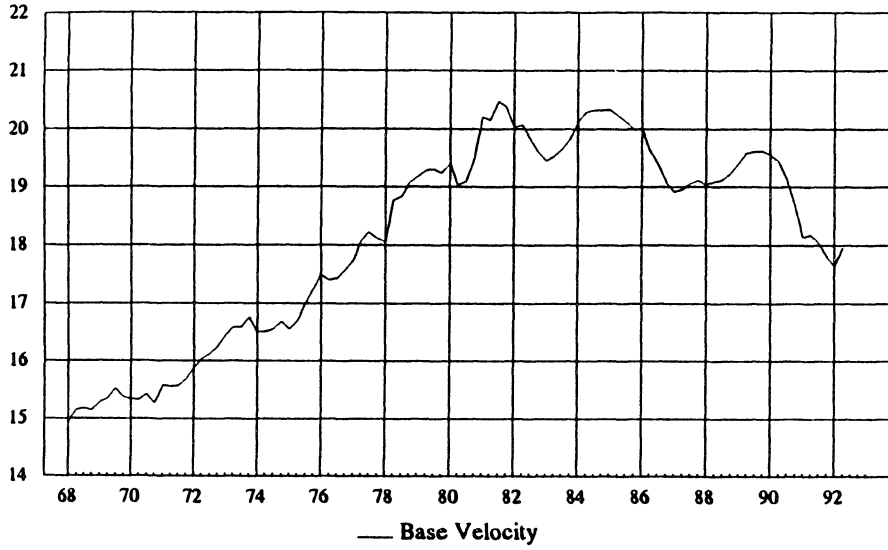
**M2**



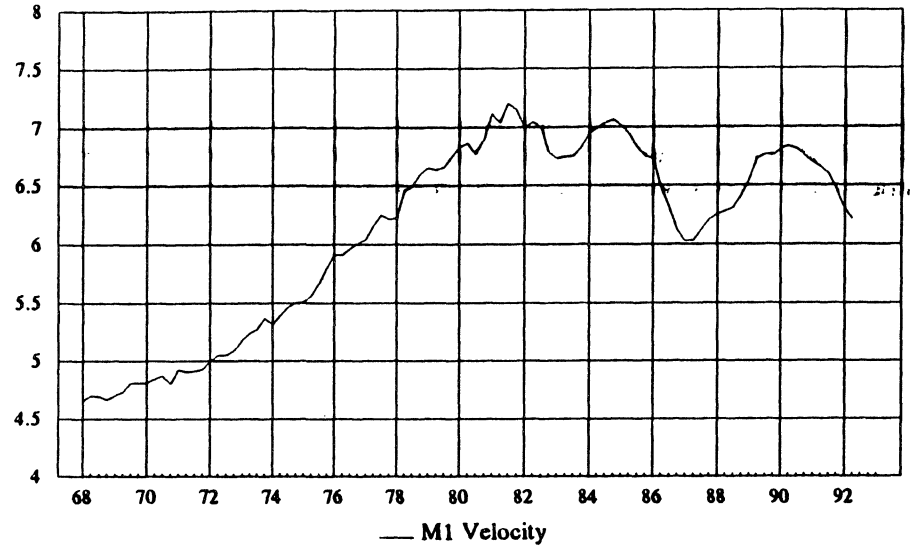
**M3**



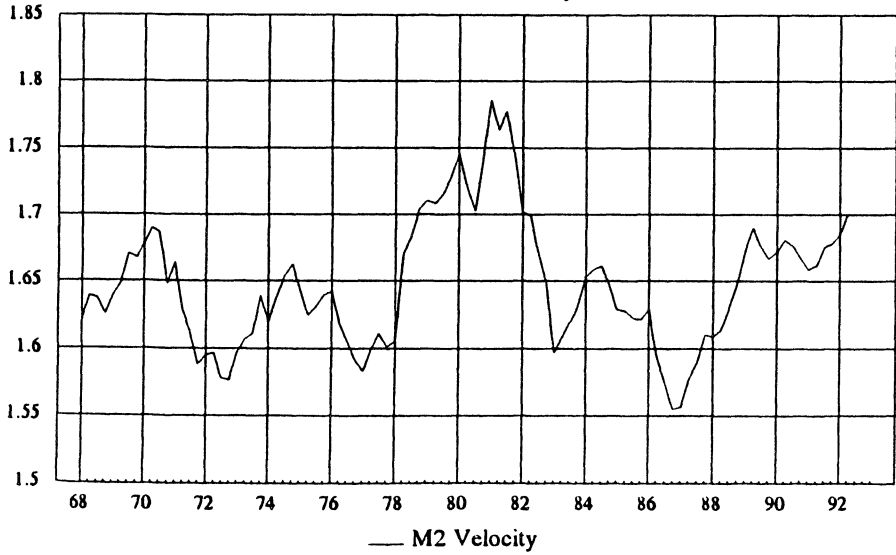
Monetary Base Velocity



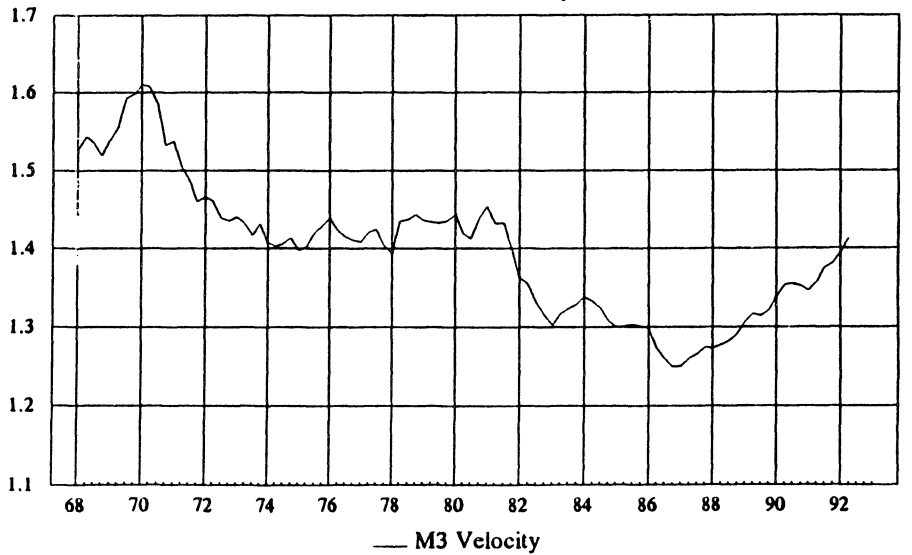
M1 Velocity



M2 Velocity



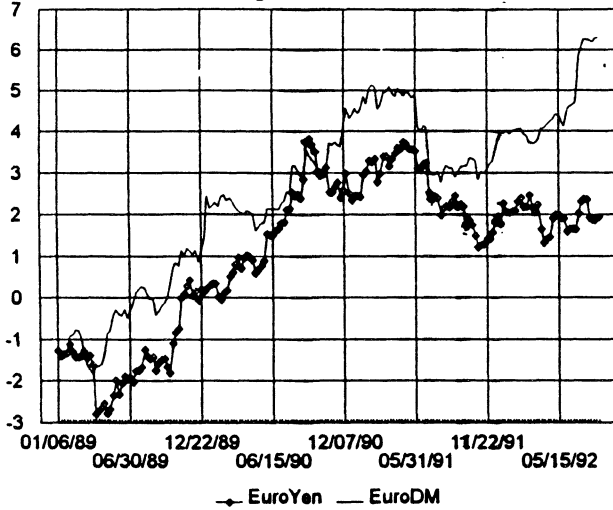
M3 Velocity



September 13-14, 1992

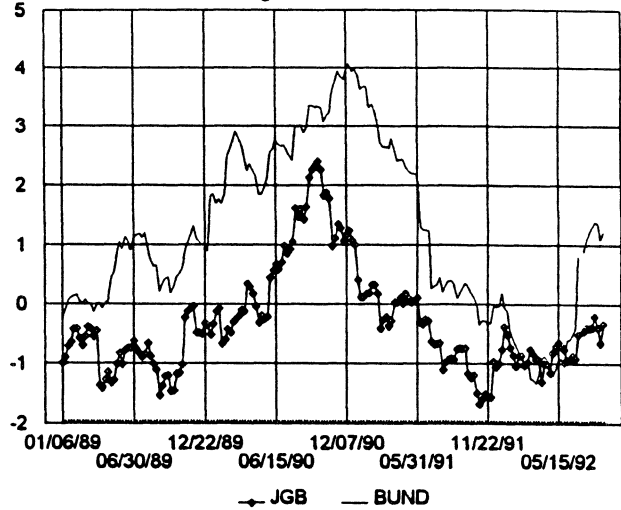
CHART 8

Real One Month Eurocurrency Rate Differentials  
Foreign Rate minus U.S. Rate



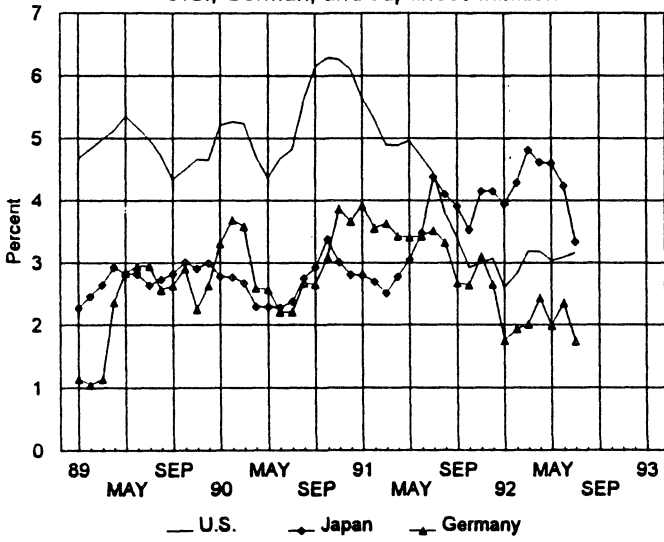
Nominal rates deflated by the most recent year-to-year CPI inflation rate

Real Ten Year Year Note Rate Differentials  
Foreign Rate minus U.S. Rate



Nominal rates deflated by the most recent year-to-year CPI inflation rate

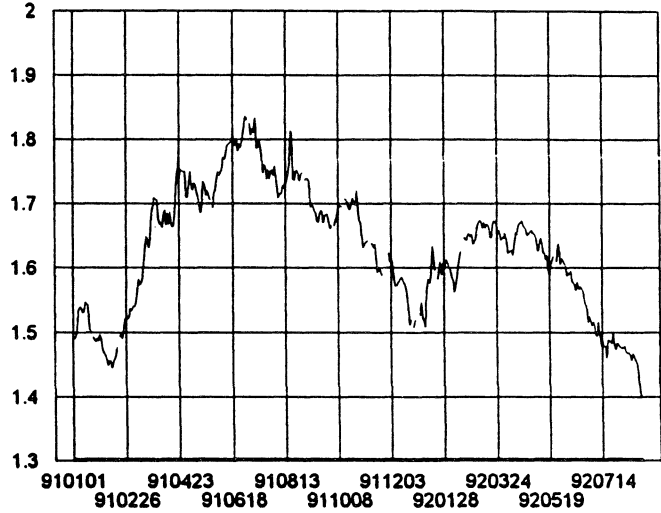
U.S., German, and Japanese Inflation



Year-to-year percent change in consumer prices.

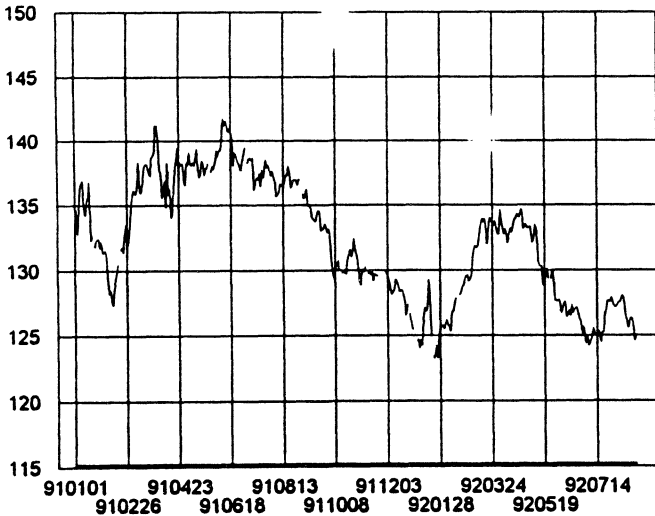
DM/\$

1991 to Present



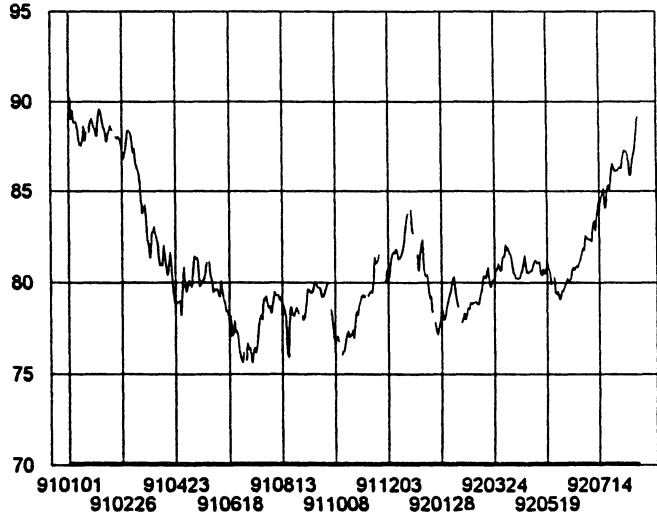
Yen/\$

1991 to Present



Yen/DM

1991 to Present



*September 13-14, 1992*

## **COMPARING THE CANDIDATES' ECONOMIC PLATFORMS**

**Mickey D. LEVY**  
**CRT Government Securities, Ltd.**

With the Presidential election campaign now in full swing, political rhetoric overwhelms the actual contents of the candidates' platforms. In this report, the primary proposal of the candidates are compared, based on official public documents. Key observations are as follows:

- Viewed from the broadest perspective, in terms of allocation of national resources within a budget context, the Bush and Clinton economic platforms have as many similarities as dissimilarities. Neither proposes to cut deficits through legislation; both propose lower outlays for defense and more spending for public investment; tax subsidies for private research and development and selected investment; improvements in our educational system and more funds for job training; more spending and subsidies for health; and no changes—that is—ever more spending on social security and the retirement programs.
- Strictly in terms of their publicly-stated economic platforms, the most dramatic change since 1988 has been the move toward the center by the Democratic platform, which now includes incentives for private investment and more outlays for public investment, as well as the traditional Democratic proposals to spending more on social programs and raise taxes on high income individuals.
- A closer view reveals the sharp differences the economic platforms offer the electorate in specific tax and spending policies and the general role of government. The Bush platform propose selected modest tax reductions for individuals, tax subsidies for business investment, and reallocation of federal defense resources toward civilian spending. The Democratic platform proposes substantial tax increases on high income taxpayers for redistributive purposes and to finance higher spending (on infrastructure, job training and social programs) and increases in excise taxes and user fees to finance a sizable increase in public sector investment; more aggressive cuts in defense spending; plus a major new initiative guaranteeing universal access to basic medical care and universal health insurance under a "pay-or-pay" scheme. In general, the Democratic platform proposes a dramatically enlarged role of direct government involvement and administration in a wide range of economic activities.
- President Bush has responded to the Democratic platform with several new initiatives in addition to the budget package the Administration has already presented to Congress: one in which taxpayers may allocate up to 10 percent of tax payments into a trust fund to reduce the public debt, matched by spending cuts; a pledge to propose substantial new cuts in taxes and spending in early 1993; and a new five year, \$10 billion job training program.
- Although the general thrust of both economic platforms and their differences are clear, their lack of program and budgetary specifics are noteworthy. Both candidates leave unclear the net cost of their new health care programs in their respective budget proposals; neither provides specifics on how cost containment and other initiatives will generate savings. This is particularly true of Clinton, in light of the scope and magnitude of his health care proposals. Bush's proposal to significantly cut taxes and spending is wholly unspecified, as is the

financing of his new jobs training proposal, and the legislative mechanism for spending cuts to match the proposed tax box check-off in order to reduce the federal debt is not apparent. Clinton's platform provides insufficient detail on what user fees will be raised to help finance his proposed \$80 billion spending increase on public infrastructure. Moreover, the budgeting impact of Clinton's economic package is wildly optimistic and includes many illusory savings. Undoubtedly, the candidates purposely omit these details for political reasons. While such omissions reflect the candidates' choices to effectively ignore the extreme seriousness of the budget situation and focus on broader concepts rather than policy details, they inhibit the public policy debate and heighten economic and financial market uncertainty.

### **The Election Environment**

Lackluster economic performance, further deterioration in the federal budget, and general electorate dissatisfaction with policymakers provide the backdrop for the candidate's economic platforms. The recovery from recession has been very gradual—following a 2.2 percent decline in real GDP, by second quarter 1992, the level of activity was still 0.2 percent below its second quarter 1990 cyclical peak. Employment remains below its October 1989 level, and the unemployment rate has risen to 7.6 percent. Although most indicators suggest gradual improvement, many sectors of the economy continue to experience "recessionary-type conditions." Growth in exports and business investment in producer durable goods equipment have been healthy, but in contrast to recent economic recoveries, consumption remains passive, and several of the most visible sectors of the economy—autos and retail trade—remain weak. Much of the anemic pace and industrial mix of the economic recovery, and the weakness in job creation, reflect the ongoing impact of significant structural and noncyclical adjustments in key sectors of the economy. Superseding the "cycle," these long-term structural adjustments are clearly offsetting the Fed's aggressive countercyclical monetary easing.

Meanwhile, the federal budget situation has deteriorated significantly. Despite the tax increases and spending constraints imposed by the Budget Accord of 1990, the deficit has increased rapidly to record levels—approximately \$315 billion in fiscal year 1992, following \$269 billion in 1991. The primary source of the higher deficits has been accelerating spending: while the recession suppressed tax revenues, taxes have remained relatively unchanged as a percent of GDP; meanwhile, from fiscal year 1989 to 1992, spending has risen an estimated 7.5 percent annually. While the outlays for Desert Storm and the government's costs of the savings and loan restructuring contributed significantly to the rise, the most persistent source of the faster spending has been for medical care—Medicare and Medicaid. Combined, they have grown 15.5 percent annually and, under present

law, that trend will continue. Furthermore, the budget outlook has deteriorated: under the current law, the structural deficit is no longer expected to fall, and the ratio of federal debt-to-GDP is projected to rise rapidly.

Public disaffection stems from the struggling economy and the lack of confidence in policymakers. Certainly, this dissatisfaction is easy to understand. Yet, in reality, some of it is misplaced. The public has the tendency to blame policymakers for any undesirable economic outcome, whatever the reason. The recent anemic economic recovery, weak jobs market and declining real wages reflect primarily long-term structural adjustments rather than a lack of countercyclical macroeconomic policy actions, but policymakers take the rap for short-run economic outcomes that are beyond their control. Yet this is the environment in which electorate evaluates the candidates' platforms.

### **Similarities**

While both candidates publicly strive to portray their differences, from a broad perspective, the similar themes of their economic platforms are striking. Insofar as the federal budget and budget proposals establish and reflect national priorities, consider the following general thrusts of the platforms:

- **Neither platform recommends legislation to cut the record-breaking deficit.** Both candidates propose significant new spending initiatives. Bush proposes cutting defense and raising nondefense outlays to stay within the bounds of the spending and deficit caps of the Budget Accord of 1990, but does not propose legislation to slow the rapid growth of spending or lower the structural deficit. Neither does Clinton. Clinton's proposals add up on paper to a lower deficit only through illusory savings, substantial tax increases, and very aggressive (unrealistic?) defense cuts. Both candidates omit their respective health care programs from their budget proposals; this practice is highly deceptive in light of the magnitude and scope of their initiatives. Also, like Bush, Clinton relies on strong economic growth to reduce deficit projections. Realistically, Clinton proposes significantly higher spending and taxes; the deficit impacts of the candidates' programs are uncertain, but clearly not optimistic.
- **Neither candidate recommends any legislative changes to social security or any material changes to the other retirement programs, in effect advocating their continued rapid growth rates.** Over the last two decades, growth of spending in these programs have been dramatic; they now constitute 25 percent of total budget outlays, involves many glaring intra- and intergenerational inequities, and are the primary obstacle to materially reducing the deficit. Nor do the candidates recommend substantive changes to federal agricultural subsidies. Although we have become used to policymakers avoiding these programs, the costs of avoidance—in terms of either lowering the deficit, reducing inefficiencies, or reallocating budget resources to other programs—continue to mount.



- **Both candidates propose substantial reductions in defense in real terms and as a percent of GDP.** President Bush proposes \$50.4 billion cut in budget authority in FY 1993-1997. According to the Administration's assumptions, this would reduce defense outlays to 5.1 percent of GDP, compared to 5.7 percent in 1991 and 6.5 percent in 1986. Clinton is more aggressive, proposed \$37.5 billion larger cuts in defense outlays than Bush in 1993-1996. Both candidates effectively reallocate these defense resources into other spending programs rather than deficit reduction. Since the planned defense downsizing may involve temporary job losses, political pressures suggest that the actual speed of the cuts may be slower than the candidates propose.
- **Both candidates propose tax incentives to encourage more private investment, although President Bush's recommendations are significantly more generous and less targeting than are Clinton's.** For example, Clinton's proposed capital gains tax cuts and other tax incentives for business investment are narrower in scope than Bush's, and would be offset by the elimination of certain tax deductions for selected multinational businesses and pharmaceutical companies, and the imposition of higher mandated business expenses. Nevertheless, the fact that the Clinton platform includes any tax incentives for business investment is a marked shift from Democratic platforms in the 1970-1980s.
- **Both candidates also propose allocating more resources toward public infrastructure; Clinton's plan is significantly more aggressive than Bush's.** Both candidates express the need to rebuild and modernize highways, airports, weather satellites, and water and waste treatment facilities, and to subsidize selected "fashionable" high tech initiatives. As with Clinton's proposed tax incentives for private investment, his massive four year, \$80 billion per year infrastructure rebuilding program represents a shift for the Democratic party, away from its 1970-1980's focus on more spending on social programs.
- **Both candidates would allocate more resources toward community investment, through the establishment of enterprise zones, tax subsidies and direct funds for certain types of inner-city activity.**
- **Both candidates stress the need to allocate more resources to improve education systems, to provide more choice to parents in an attempt to encourage higher quality education, and to spend more on job training.** Clinton's job training program would represent a dramatic expansion.
- **Both candidates propose substantial federal subsidies for health insurance, although Clinton's health care proposal goes significantly beyond the President's.** Moreover, both allude to and rely heavily on cost containment initiatives—particularly Clinton—but neither presents any specific proposal for how the cost savings would be achieved. Both candidates are elusive about the costs of their health proposals, and do not include them in their proposed budgets. Accordingly, a realistic assessment of the platforms is that both candidates recommend that higher shares of federal outlays and national output go for medical services.

## The Differences

Beyond these general similarities, the candidates' economic platforms are sufficiently different to provide clear choices to the electorate. The areas where the differences are the largest are tax policy, investment in public infrastructure and community development, job training and health care. *In addition, a general theme that distinguishes the candidates' platforms is the significantly larger and more direct role for the government prescribed by Clinton.*

**Tax policy.** In general, while Bush recommends modest selected tax reductions for individuals in addition to investment tax incentives for businesses, highlighted by the Administration's capital gains tax cut proposal, the Clinton platform proposes substantial tax increases to high income individuals, lower tax burdens for middle and lower income households, and more modest and targeted investment tax incentives for businesses.

Bush proposes no changes in marginal tax rates, but lower effective taxes rates on households through a \$500 per child increase in the personal income tax exemption; tax deductibility of interest paid on student loans; and a new flexible IRA with penalty-free withdrawals for medical and educational expenses and new home purchases. Bush also proposes new tax subsidies to the housing market: a \$5,000 tax credit on first home purchases, a loss deduction for personal residences, and extension of tax preferences for mortgage revenue bonds and low income housing. Bush has also announced that he will propose significant new cuts in taxes and spending, but no program specifics have been provided.

In contrast, Clinton proposes substantial individual tax increase (\$82.9 billion in 1993-1996) through higher marginal rates on high income taxpayers, higher revenues from the Alternative Minimum Tax (AMT), and a surtax on millionaires. Clinton would collect an additional \$8 billion in four years from unearned income of the wealthy. Clinton would use these proceeds to finance lower taxes for middle income taxpayers (the choice of lower marginal rates or a children's tax credit), an expansion of the Earned Income Tax Credit for lower income workers, and higher proposed spending. In addition to these increases in individual taxes, implicit in Clinton's budget package are substantial hikes in user fees and excise taxes to finance the proposed \$80 billion increase in infrastructure rebuilding.

President Bush adheres to the Administration's proposal to cut the capital gains tax rate to 15 percent, allow an additional 15 percent investment tax allowance, and liberalize the treatment of depreciation in the AMT. Clinton's proposed business investment incentives would be smaller and narrower in scope: cuts in capital gains would be available only for "small businesses and

entrepreneurs" for long-term investment in new businesses; and a targeted Investment Tax Credit (ITC) would be available for investment in new plant and equipment in domestic activities. Not only are Clinton's investment tax incentives more selective, the government would play a more active role in targeting them for selected investments. Both candidates recommend extension and permanence of the tax credit for research and development.

Clinton would reduce tax deductions (raise taxes) for multinational businesses that move jobs overseas or invest in overseas plants, and would raise taxes on pharmaceutical firms that raise drug prices faster than average household income. In addition, to these higher taxes, Clinton would mandate higher business expenses to finance selected programs. Most notably, Clinton would mandate that every employer allocate 1.5 percent of payroll for continuing education and retraining. Clinton also endorses the Family and Medical Leave Act, which gives workers the right to 12 weeks of unpaid leave to care for a newborn child or sick family member. If implemented, some of these taxes and mandated business expenses may offset some of the intended incentives provided by other provisions.

**Investment in Public Infrastructure.** While President Bush has been advocating a series of bills that provide more funding for infrastructure rebuilding and modernizing highways, airports, weather satellites, and water resources, and has proposed an expansive new enterprise zone system, Clinton proposes a dramatically larger infrastructure rebuilding program that would raise spending by \$80 billion over four years, to be allocated and administered through a newly-created Rebuild America Fund. Bush's proposals would not require additional taxes to stay within existing budget caps. In contrast, Clinton's would be funded—at least in part—by new user fees and excise taxes, "leveraged" by local government and private sector contributions, although the platform leaves unclear what this means. In addition to focusing on transportation systems information networks, and environmental technology—much the same as Bush's initiatives, but to a larger magnitude—Clinton's package would significantly enlarge the role of the government's involvement in the conversion of defense personnel and resources to civilian uses.

**Investment in Communities.** While the Bush Administration has proposed a extensive new enterprise zone system in which subsidies (direct and tax incentives) would be provided to both businesses and individuals in 150 designated areas, Clinton also proposes enterprise zones and a series of other initiatives that would raise public subsidies and enlarge the government's role in the revitalization of inner cities. This would include Community Development Block Grants and targeted funds to companies that set up and employ inner-city residents, the creation of a nationwide

network of government-sponsored community development banks, and a more "progressive" Community Reinvestment Act. In addition, Clinton would create a National Police Corps of 100,000 persons to be staffed in part by former military personnel.

**Job Training.** Clinton's massive Lifetime Learning Program (cost, \$63.2 billion in 1993-1996) is also significantly larger in scope and very different in character than the Administration's existing job training programs, and presumably President Bush's recently announced (but unspecified) five year, \$10 billion job training proposal. Clinton's program involves direct government involvement in the establishment of a National Apprenticeship Program, Youth Opportunity Corps, safe school initiative, and National Service Trust Fund.

**Medical Care.** The Bush Administration's Plan for Comprehensive Health Care Reform guarantees access to health insurance and provides significant tax subsidies to lower and middle income households, an expansion of medical services to undeserved areas, and reform in the provision of health insurance, pooled medical care, and malpractice liability. Bush's subsidies for health insurance—a transferable \$3,750 tax credit for poor families and a tax deduction of up to \$3,750 for middle-income households with incomes up to \$80,000—are themselves dramatic. Nevertheless, they have been overshadowed by Clinton's significantly more "comprehensive" health care package that Clinton terms "revolutionary in scope." It would provide universal access to basic medical coverage through employer or public programs, and would involve guaranteed national health insurance through large government subsidies and a "play-or-pay" scheme for all employers (firms not presently offering any health insurance would be required to contribute 7 percent of payroll toward purchase of employee insurance.) It would create a new system of government-sponsored "managed care networks," and a new national standards board—made up of consumers, providers, business, labor and government—that would establish annual health budget targets and a core benefits package. In the plan, the government would also become involved in streamlining of insurance claims administration and set standards for health insurance underwriting practices. In addition, the plan would raise taxes on pharmaceutical companies that raise drug prices faster than average household income.

Clinton's health plan proposes that the savings from strict cost containment, streamlined insurance administration, and incentives for medical providers to reduce costs and will phase in his comprehensive health care package as cost savings are realized. Accordingly, Clinton's health care proposal does not even appear as a line item in his budget. Similarly, but to a lesser extent—reflecting the smaller scope of its plan—the Republican platform relies on cost containment and market reforms (i.e., reforming malpractice insurance) to neutralize the net costs of its health care

package on the federal budget. **While both candidates rely on savings from cost containment to an unprecedented extent to avoid larger projected budget deficits, neither clearly specifies the sources of the cost containment or how the savings would be achieved.** Without these unspecified savings, both programs would involve significantly more spending for health services.

**The Size and Role of Government.** Two general themes differentiate the platforms. First, while neither proposes legislation to reduce structural deficits and both provide budget figures that on paper stay within the spending caps imposed by the Budget Accord of 1990, a realistic assessment of their proposed costs and savings strongly suggests that Clinton's package would generate significantly higher spending and higher taxes than Bush's. *Second, while both propose more spending and tax subsidies in many of the same areas, Clinton recommends an enlarged role for the federal government, with a dramatic expansion of direct government involvement in a number of activities, while Bush's proposals continue to rely primarily on market-oriented solutions. These thematic differences reflect the wide gap between the candidates' approaches to improving economic performance and raising productive capacity.*

The Clinton package "achieves" projected deficit reduction primarily through substantial tax increases on individuals (\$91.7 billion in four years); closing of "corporate loopholes" (\$58.3 billion over four years); massive projected savings through more efficient government management and selected legislated spending cuts; assumptions of strong economic growth; and the omission of his sizable health care program from budget impact. The anticipated savings from eliminating tax avoidance by foreign corporations (\$45 billion in four years) is unrealistically high. The majority of the projected spending savings is from "improved government management" (i.e., \$17.1 billion from RTC management reform) that seems too much like the failed promises of "savings" by previous administrations to achieve budget goals. It assumes no negative feedback effects of the higher tax rates or mandated business expenses. Unless the proposed "savings" are more than "smoke and mirrors" and health cost containment generated savings as advertised, the Clinton package would raise deficits.

If fully implemented, all of Bush's proposals—those specified in the Republican platform and more recently announced initiatives—also would likely raise deficits above current law projections. The Bush Administration does not clearly specify how its comprehensive health care package would be financed. The same is true of Bush's recently proposed five year, \$10 billion job training program. Bush's tax box check-off proposal and his to-be-announced additional tax and spending cuts presumably would be deficit-neutral; presently, there is insufficient information to analyze them.

**The enlarged direct role for the federal government prescribed by Clinton is evident in a number of his program initiatives, including health care, public infrastructure and community development, job training, federal defense reduction and international trade.** Clinton's health care package calls for government involvement in insurance claims administration, a newly created national medical standards board, government-sponsored managed care networks, and significantly tighter scrutiny over the pharmaceutical industry. In contrast, the major thrust of Bush's health care proposal is tax subsidies for health insurance and market-driven reforms, rather than direct government involvement.

At the center of Clinton's public infrastructure rebuilding initiative is a newly established Rebuild American Fund from which the federal government would allocate and administer public projects, and coordinate financing from federal sources, and state and local, private sector, and pension fund contributions. Crucial to this rebuilding program is the government's central role in the conversion of federal defense personnel (and resources) into these expanded public civilian activities. The same is true of Clinton's community investment program. A newly created National Policy Corps would be filled in part by dislocated military personnel. Target funding and a newly created, government-sponsored nationwide network of community development banks would involve a direct role in the allocation of mix of projects. In contrast, the Bush Administration proposes significant defense cutbacks, but does not recommend any specific conversion process, with the exception of a government-funded job training program.

Clinton's proposal for education and training costing \$63.2 billion over four years, is another example of direct government involvement, including the establishment of a National Apprenticeship Program and Youth Opportunity Corps, and close federal government supervision of public schools. In contrast, Bush's education package relies primarily on market-oriented reforms.

This same general theme is also apparent in issues involving international trade. In addition to the proposal of a more aggressive favored-nation (Super 301) trading bill and retaliatory measures against trading partners that employ "unfair" trade practices, Clinton recommends elimination of tax deductions for multinational firms that invest or move jobs overseas. Each of these initiatives would involve more government supervisory control of these activities.

To monitor and administer this heightened government control, Clinton proposes the establishment of a new National Economic Council, analogous to the National Security Council.

## Sorting Out Their Economic Effects

Assessing the macroeconomic impacts of these proposals is very difficult because each platform contains a wide array of newly funded proposals plus a reallocation of funds among different programs (some with offsetting economic effects); many of their important details are missing; some of their proposed cost savings are highly suspect; it is uncertain how the programs would be financed and how financial markets would react; and it is impossible to assess whether Clinton's proposals for a greatly expanded size and role of government would succeed or merely be new costly expenses that fail to raise productive capacity. Moreover, it is unlikely that either economic platform would be adopted in its entirety, and the ultimate economic policies are uncertain. Some of the microeconomic, industry-specific affects of various proposals are easier to analyze.

There are a host of difficult issues that must be sorted out before any reliable quantitative assessment of the short- or long-run affects of either platform can be determined. *Neither set of proposals would provide a significant short-run boost to the economy.* Traditional countercyclical stimulus would not be effective in the face of the long-run structural adjustments that impede faster growth. Moreover, each platform has specific provisions (i.e., defense cutbacks) that would offset any short-run stimulus provided by other proposals. In any case, the attempt to raise productive capacity is a long-run proposition.

Cuts in federal defense would lower the level of economic activity by reducing government purchases and output of private defense contractors, while proposed increases in investment in public infrastructure would raise the level of output. The magnitude and timing of these potentially offsetting influences are highly uncertain. A crucial issue is the conversion of defense resources to civilian uses. Clinton recommends direct government involvement in the conversion process, including providing jobs to former military personnel and creating civilian uses for military facilities and private defense contractors. New jobs would be created in Clinton's public infrastructure rebuilding and community investment projects, including a new 100,000 person national police corps. Clinton's conversion program may limit any losses of employment and provide a temporary boost to output if the absorption of military personnel into private industry is elongated by sluggish economic activity. This impact is uncertain, however, depending on a host of factors, including monetary policy and the economic and financial responses to any new tax and spending initiatives.

What is more important for longer-run economic growth and living standards—presumably, the defense cuts are permanent—is the **efficient** reallocation of defense resources into their most productive uses. Under normal circumstances, the discipline of the private marketplace generates a more efficient allocation of scarce resources than does the government. The success of the Clinton

program hinges on the ability of the government not just to create temporary new jobs (some portion of which would be deficit financed), or minimize the transition costs in terms of unemployment, but that these jobs and activities are more productive than a market-determined allocation of the resources or the economic activities they may displace. The same is true of increased spending on job training, regardless of whether it is financed from public funds (taxes or debt) or mandated business expenses: its net impact in terms of jobs and economic performance depend on the value-added it generates relative to its costs.

Recent economic history is littered with a list of well-intentioned government managed activities that failed. Whether Clinton's initiatives in infrastructure rebuilding and job training would add to productive capacity or merely be costly expenditures is a critical issue. Realistically, any quantitative assessment of their impact is driven by its assumptions.

In general, government spending for investment raises productive capacity more than spending for consumption-oriented transfer payments. In this regard, the general thrust of the Democratic platform is a step forward from recent decades. Yet the potential positive economic impact of the platforms' proposals for more public investment is diluted insofar as they are not funded from reductions in non-investment spending programs. Moreover, the simulative impact of Clinton's package may be diluted by proposed tax hikes and mandated business expenses.

President Bush's tax investment incentives would lower the cost of capital and raise investment, although the investment response would not likely be as large as the Administration projects. Clinton's tax incentives would also stimulate investment; while they may provide more "bang for the buck" than Bush's proposal because they only apply to selected new capital, their aggregate impact on investment may be smaller. Moreover, removing tax deductions for certain business activity and raising business mandated expenses, as Clinton proposes, would offset—perhaps entirely—his business investment incentives. The bottom line is that while tax investment incentives are important ingredients to lifting long-run economic growth, the individual and corporate tax system would remain biased against saving and investment, even with enactment of either candidates' proposals.

Bush's proposals to reduce effective tax rates on individuals are relatively minor and would not significantly boost economic activity, while his proposals to subsidize housing would likely have a modest positive impact on home sales, but not offset other factors (i.e., demographic) that constrain housing activity. The impact of Clinton's higher marginal tax rates and redistributive tax scheme are highly uncertain, depending on differing propensities to consume by income level, and negative economic responses to the higher marginal rates.



Table 1

Summary of Major Economic Proposals  
in Bush and Clinton Platforms

	Bush	Clinton
I. Taxes on Individuals	<ul style="list-style-type: none"> <li>• Increase personal child exemption by \$500.</li> <li>• Deductibility of student loan interest.</li> <li>• Flexible IRAs (penalty free withdrawal for health/education/first home purchase).</li> <li>• \$5,000 tax credit for first home purchase; modified passive loss rule and loss deduction for personal residences; and extension of tax preferences for mortgage revenue bonds and low income housing.</li> <li>• Tax check-off to pay down federal debt, matched by spending cuts.</li> <li>• Substantial but unspecified new cuts in taxes and spending.</li> </ul>	<ul style="list-style-type: none"> <li>• Higher tax rates for high income taxpayers; raise Alternative Minimum Tax (AMT) and surtax on millionaires (four year sum, \$82.9 bil.).</li> <li>• Raise Medicare-B premiums for higher income individuals.</li> <li>• Lower tax for middle class (lower marginal rates or children's tax credit).</li> <li>• Expand Earned Income Tax Credit</li> <li>• Higher tax on unearned income of the wealthy</li> </ul>
II. Business Taxes	<ul style="list-style-type: none"> <li>• Capital gains tax cut.</li> <li>• 15% investment tax allowance.</li> <li>• Modified AMT (liberalized treatment of depreciation).</li> <li>• Permanent R&amp;D tax credit.</li> </ul>	<ul style="list-style-type: none"> <li>• Targeted Investment Tax Credit (ITC) for new investment in domestic activities.</li> <li>• 50% tax exclusion for longer-term investment in new businesses.</li> <li>• Raise AMT.</li> <li>• Raise taxes for multinational businesses that move jobs overseas and raise taxes on drug companies that raise drug prices rapidly.</li> <li>• Permanent R&amp;D tax credit.</li> </ul>
III. Infrastructure Spending	<ul style="list-style-type: none"> <li>• Infrastructure rebuilding: \$2.6 bil. in 1993 for highways, FAA modernization, weather satellites, and water resources.</li> <li>• Enterprise zones.</li> </ul>	<ul style="list-style-type: none"> <li>• Four year, \$80 bil. increased spending on public infrastructure financed in part by user fees and excise taxes.</li> <li>• Urban enterprise zones.</li> <li>• Active government involvement in conversion of defense resources into civilian use.</li> <li>• New civilian research and development agency.</li> </ul>

## Summary of Major Economic Proposals in Bush and Clinton Platforms

	Bush	Clinton
<b>IV. Investment in Community</b>	<ul style="list-style-type: none"> <li>• Head Start.</li> <li>• Weed and seed-links, law enforcement and social services.</li> <li>• HOPE.</li> <li>• Anti-crime/drug abuse.</li> </ul>	<ul style="list-style-type: none"> <li>• Target funding and Community Development Block grants.</li> <li>• Network of community development banks.</li> <li>• Creation of 100,000 National Police Corps staffed in part with U.S. military personnel.</li> <li>• More "progressive" Community Reinvestment Act.</li> </ul>
<b>V. Education and Training</b>	<ul style="list-style-type: none"> <li>• America 2000 Excellence in Education Act.</li> <li>• Summer youth jobs plus other education/training programs.</li> <li>• Educational choice initiative, including private schools.</li> <li>• Five year, \$10 bil. job training program.</li> </ul>	<ul style="list-style-type: none"> <li>• Lifetime Learning Program (\$63.2 bil. in 1993-1996) to establish National Apprenticeship Program, Youth Opportunity Corps, safe school initiative, public schools improvement, and National Service Trust Fund.</li> <li>• Require employers to allocate 1.5% of payrolls to job training.</li> </ul>
<b>VI. Health</b>	<ul style="list-style-type: none"> <li>• Guarantee and subsidize health insurance for all poor families (up to \$3,750/family).</li> <li>• Tax deduction up to \$3,750 for health insurance costs for families with incomes up to \$80,000.</li> <li>• Cost-effectiveness and cost containment; market efficiencies in provision, insurance and administration.</li> <li>• Malpractice liability reform.</li> </ul>	<ul style="list-style-type: none"> <li>• Guaranteed universal health insurance, imposed through "play-or-pay" insurance scheme.</li> <li>• Creation of national health standards board to establish benefits package and health budget.</li> <li>• Nationally administered accounting procedures and billing system.</li> <li>• Raise taxes on drug companies that raise prices faster than average income.</li> </ul>
<b>VII. International Trade</b>	<ul style="list-style-type: none"> <li>• Trade liberalization through GATT.</li> <li>• Uphold GATT rules on use of safeguards, antidumping actions, and countervailing duty actions.</li> </ul>	<ul style="list-style-type: none"> <li>• Sharper "Super 301" trade bill.</li> <li>• Ban U.S. trade negotiators from becoming lobbyists for foreign governments or corporations.</li> <li>• Retaliation against trade partners with unfair trade subsidies and practices.</li> <li>• Create new Economic Security Council.</li> </ul>

*September 13-14, 1992*

## **LONG TERM ECONOMIC GROWTH**

**Charles I. PLOSSER**  
**William E. Simon Graduate School**  
**of Business Administration**  
**University of Rochester**

### **Introduction**

We frequently hear claims in the U.S. that for the first time in many decades the current generation fears that their standard of living is likely to be lower than that of their parents. The evidence for such claims is the slow growth in the 1980s of about 1.6 percent per annum in per capita GDP. More generally observers frequently refer to the productivity slowdown that has occurred since the early 1970s. Yet it is not clear if the recent performance of many of the major economies is abnormally slow or is simply a return to the more normal rates of growth experienced during the first half of the twentieth century.

Table 1 suggests that the abnormal behavior may be the 1950-1973 period rather than the more recent two decades. It shows that the average productivity growth for six major economies was 1.3 percent from 1913-1950 and almost 1.2 percent from 1973-1984. During the period 1950-1973 productivity growth increased by a factor of almost three. Nevertheless, the relatively slow productivity growth in the U.S. of 0.52 percent in the recent period compared to its high growth of 1.99 percent relative to the other countries during the early part of the century remains of some concern.

Regardless of whether growth is unusually low today or it was unusually high between 1950 and 1970, the key to sustaining increases in our standard of living from one generation to the next depends on our ability to sustain real economic growth over the coming decades.

We are also confronted with a world where there exists extraordinary diversity in living standards across countries. By some measures, real income per capita in 1989 in such countries as Bangladesh, Ethiopia, Haiti and Bolivia was less than 5% of U.S. per capita income.

Growth rates of real per capita incomes across countries also show great diversity. The result is that some countries rise out of poverty while others slip even further away from the industrialized world. Countries such as Botswana and Korea had per capita incomes of less than 10 percent of that in the U.S. in 1960 and by any standard would have been classified as very poor. Yet by 1989,

Botswana had increased its per capita income by almost eight-fold; growing at an annual rate of about 7.0 percent. Korea grew at an annual rate of about 6.0 percent, resulting in an almost six-fold increase in per capita income over the three decades.

Other countries experiencing sustained growth over the last thirty years include the well-known countries of the Pacific Rim such as Japan with an average annual growth rate of 5.6 percent; Singapore at 6.4 percent and Hong Kong at 6.0 percent. Some countries outside of the far east that achieved significant growth include Portugal at 4.1 percent per annum; Greece at 4.3 percent; Cyprus at 4.7 percent and Malta at 6.0 percent.

At the other end of the spectrum there are countries that experienced almost no growth over the same thirty year period. Why did Ethiopia, Bangladesh and Bolivia all grow at less than one half of one percent per year? Why did New Zealand and the Philippines grow at less than 1.5 percent per annum over the past three decades while Malaysia and Thailand grow in excess of 4.0 percent?

While we all might cite special reasons for each of these economic miracles or debacles, it is important that we try to look for the common elements and ask if there are actions or policies that could be adopted that might raise the chances for the economic miracle and lower the risks of stagnation. The reason, of course, is that the differences in welfare levels produced by these differential growth rates is staggering. For example, Figure 1 shows the magnitude of the consequences from being among the fast growers rather than the slow growers over the past 30 years. Those countries with growth rates among the top 25 percent over the 1960-1989 period grew at an average annual rate of about 4.1 percent and their per capita GDP increased from just under \$2000 per year to over \$6000 per year. By contrast, those countries in the bottom quartile of growth over the period grew at a rate that was indistinguishable from 0 percent.

There is simply no question that sustained long-term economic growth is the single most important factor determining living standards. For the U.S. increasing the average growth rate by 2 percent over the next decade could add 22 percent, or about \$3500, to real per capita GDP, and over 80 percent or \$12,800 over thirty years. By comparison, eliminating a recession, where the economy may lose 2.0 - 3.0 percent of GDP for a brief period of time, seems hardly worth worrying about.

## **Economic Growth in a Cross-Section of Countries**

Table 2 summarizes some of the facts surrounding the growth experiences for a broad cross-section of countries for the period 1960-1989. The variables are ones that are frequently found in empirical studies of economic growth. The 97 countries had an average growth rate over the period of just over 2.0 percent. Of the 97 countries I have arbitrarily classified the 23 that grew on average less than 0.5 percent per annum as slow growth countries and they grew at an average annual rate of about -0.3 percent. The fourteen countries that grew faster the 3.5 percent are classified as fast growth countries.<sup>1</sup>

There are several interesting aspects to these data. First, countries that grow faster typically devote a larger share of GDP to investment. They have sharply lower inflation rates and thus resort to inflation as a source of tax revenue to a lesser degree than the countries that grow slowly. Fast growing countries also are engaged in trade with other countries to a greater degree than slow growing countries. Moreover, it is not just export trade that is associated with fast growing countries, but imports also constitute a larger share of GDP. Both secondary and primary school enrollment rates are higher in faster growing economies. These enrollment rates have been used by some researchers as proxies for investment in human capital. Population growth in the slow growth countries is 1.3 percent higher than in the faster growing economies. The average number of revolutions or coups is a variable intended to capture the political (in)stability of a country and is clearly larger for the sample of slow growth economies.

Some studies have presented evidence that government consumption to GDP is negatively related to growth in some samples. The measure used in Table 2 indicates that slow growing economies have more government consumption to GDP than fast growing countries, but the correlation is weak. The measure used in Table 2 does not correspond to the nonproductive government spending emphasized in some theoretical models. For a smaller sample of countries, Robert Barro has constructed a measure of government consumption that omits spending on education and national defense. He argues that these expenditures are more like public investment than consumption. He finds that measured appropriately, government consumption has significantly negative association with average growth rates. Another important finding that is not apparent in the data set above is that public investment is largely unrelated to economic growth especially for a given level of private investment.

I have also reported the simple correlation of each variable with the real per capita growth rate. These correlations point to investment, trade and school enrollments as the activities most correlated with growth. The school enrollment rates are of particular interest since they are strongly correlated with real income growth as investment.

Finally, many authors have noted that in broad sample of countries initial income levels are not correlated with subsequent economic growth. Traditional views of economic growth predict that poor countries should grow faster than rich ones so the correlation should be negative. In this sample the correlation is positive rather than negative. Figures 2-5 visually depict several of these associations summarized in the table. In Figure 2 the 97 countries are divided into quartiles based on their income per capita in 1960. The average growth rate of the countries in each quartile for the subsequent 29 years is then plotted. In this sample, this simple chart shows that richer countries on average grew faster during the period than poor countries.

Figures 3-5 divide the countries according to their growth rate rather than income. Figure 3 shows the positive association between investment shares and growth. This is one of the most robust correlations in the table. Figure 4 highlights the association between school enrollment rates in 1960 and growth. The more rapid growing countries appear to have been investing more in human capital. This result is particularly important given the significant role played by human capital accumulation in the new models of long-term growth. Finally, Figure 5 breaks down the relation between the volume of trade and growth. The fastest growing countries engaged in more trade in relation to the size of the economy than slower growing nations.

While these comparisons are interesting and instructive, the sample contains a very wide variety of countries whose experiences, endowments and forms of government are quite different. It is helpful to break out a subsample of countries that are potentially more similar to see if the relations observed previously are robust. Table 3 replicates the previous table for twenty-four countries of the OECD. Compared to the larger sample this is a fairly homogeneous group of countries which were generally among the richest nations in 1960, if not always the fastest growing.

It is instructive to note the features that are associated with slower economic growth and compare them to the broader sample. First, the association between growth and investment remains strong. In this sample a negative correlation between growth and government spending is more pronounced. There is also a negative association between the initial level of income and growth.

Finally, Table 3 includes a variable that measures the average tax rate on income and profits in each country. Such taxes include taxes on capital gains and other investment activities. Modern growth theory predicts that such a tax would act to discourage investment in both physical and human capital and thus lower the growth rate. The correlation is indeed negative as seen in the table. Figure 6 displays this negative association between tax rates and growth.

## **Policy Implications for Promoting Growth**

### ***Taxes on Physical and Human Capital***

Capital investment is the key ingredient for promoting long-run economic growth. However, the forms of capital that are important go beyond the simple notions of plant and equipment that we usually associate with investment activity. Capital includes human capital and the state of technical know-how. Both theory and evidence suggest that raising the tax rate on either physical or human capital is detrimental to long-run economic growth. Human capital seems to be particularly important for developing countries. The case has been made before, but it bears repeating, that a move towards a consumption tax and away from taxes on investment and the double taxation of capital as currently exists in the U.S. will be an important step towards improving the long-run standard of living. Figure 6 is a striking illustration of the potential negative impact of high tax rates on income and profits.

The importance of human capital has important implications for how we think about aid to countries making the transition to market economies such as Russia and the countries of eastern Europe. While many of these countries have a literate and well educated work force, they lack the knowledge of markets. They have little or no experience with competition, marketing, distribution systems, contractual agreements and the like. Knowledge of this kind cannot be transmitted through the World Bank or IMF or aid money given to the governments of these countries. This knowledge will only be acquired by western companies seeing opportunities offered to them by private parties to invest and transmit their skills in these areas. If privatization does not occur and these countries refuse to grant foreign firms the necessary incentives to bring their market knowledge to the table, then all the aid money the west can provide to these fledging capitalistic economies will not promote growth and the transition will fail.



### ***Government Spending***

It is often claimed that what this country needs is more public investment in infrastructure. There is little evidence that such a policy will have any impact whatsoever on economic growth. It is important to keep in mind that any and all public spending or investment must crowd out private spending of one form or another. Thus increases in public investment are likely to result in less private investment. The government's track record does not suggest that this is a particularly good trade-off. Nevertheless, if there are projects whose returns in terms of increasing private productivity clearly exceed the opportunity costs of permitting private citizens to undertake an investment of their choosing then a case can be made. Unfortunately, public investment activities rarely undergo such scrutiny.

Government spending on entitlements can be particularly detrimental to growth because the revenue is raised by taxing all forms of income including investment goods. As a result, the after-tax return to investment is reduced with no possibility of an offsetting public investment.

### ***Trade***

All the evidence points to the fact that countries that do not actively participate in international trade are likely to do so at the substantial cost of lower long-run growth. More interesting, growth is highly correlated with trade (ie. imports and exports) and not simply exports as is sometimes asserted. The implication for policy is that closing borders and restricting the flow of capital and goods across international boundaries can only harm the prospects for long-run economic growth.

### ***Monetary Policy and inflation***

The evidence presented here and elsewhere indicates that countries with low and stable inflation rates grow faster than those with high and variable rates. This suggests that stable monetary policies that focus on price level stability are most conducive to long-run economic growth.

With policies that encourage long-run growth there need be no concern that the standard of living will ever decline and we will insure prosperity for future generations.

## NOTES

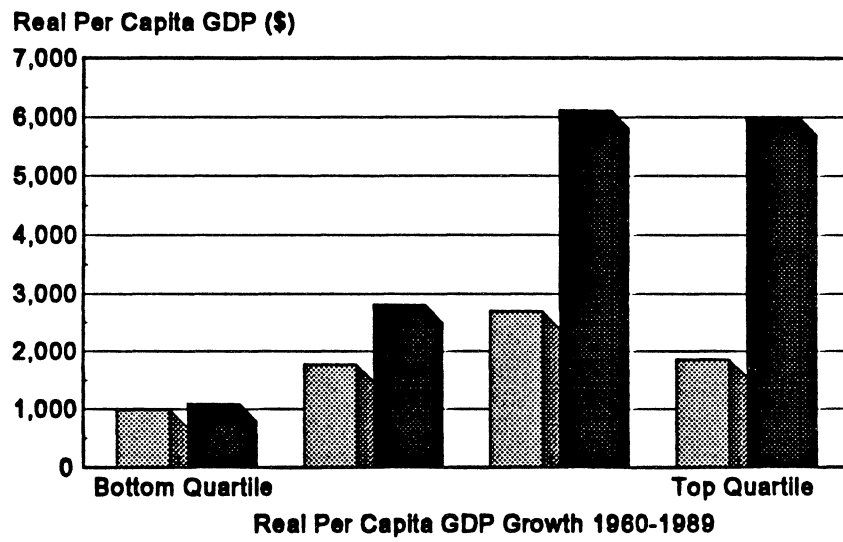
1. The standard deviation of the average growth rates for the 97 countries is 1.78 percent so the slow and fast growth countries are those that are slightly less than one standard deviation from the mean.

**Table 1**  
**Real GDP Growth and Productivity<sup>1</sup>**

	1913-50		1950-73		1973-84	
	GDP Growth	Productivity	GDP Growth	Productivity	GDP Growth	Productivity
France	1.20	1.42	5.10	4.02	2.20	1.84
Germany	1.30	0.86	5.90	4.32	1.70	1.55
Japan	2.20	1.10	9.40	5.79	3.80	1.21
Netherlands	2.40	1.25	4.70	3.35	1.60	0.81
U.K.	1.30	1.15	3.00	2.14	1.10	1.22
U.S.	2.80	1.99	3.70	1.85	2.30	0.52
Average	1.87	1.30	5.30	3.58	2.12	1.19

<sup>1</sup>Source: Maddison (1987).

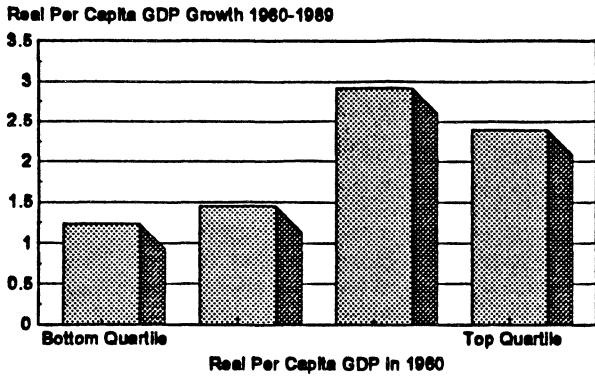
**Figure 1**  
**AVERAGE REAL PER CAPITA GDP IN 1960 AND 1989**



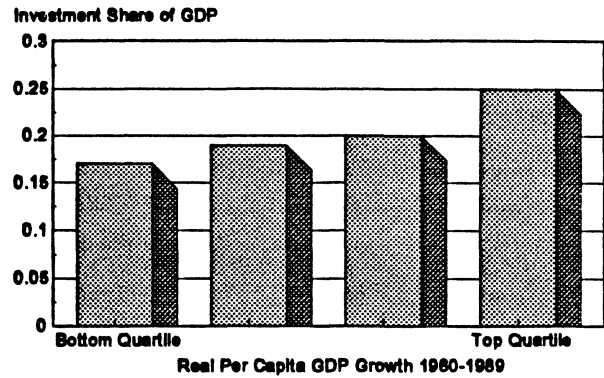
**Table 2**  
**Economic Growth in a Cross-Section of Countries 1960-1989**

	Overall Average n=97	Slow growth <0.5% n=23	Fast growth >3.5% n=14	Correlation with GDP Growth Rate
Real per capita GDP growth 1960-1989	2.03%	-0.26%	4.88%	1.00
Investment share of GDP	0.21	0.17	0.26	0.61
Government consumption share of GDP	0.15	0.15	0.14	0.10
Inflation rate	23.00%	42.11%	7.90%	-0.17
Standard deviation of inflation rate	52.38	137.19	5.68	-0.16
Exports as a share of GDP	0.28	0.24	0.35	0.30
Imports as a share of GDP	0.33	0.30	0.40	0.31
Secondary school enrollment rates 1960	0.21	0.06	0.34	0.41
Primary school enrollment rates 1960	0.74	0.44	0.98	0.54
Population growth	2.06%	2.55%	1.26%	-0.36
Revolutions and coups per annum	0.20	0.35	0.12	-0.37
Real per capita GDP in 1960	\$1840	\$889	\$1968	0.20

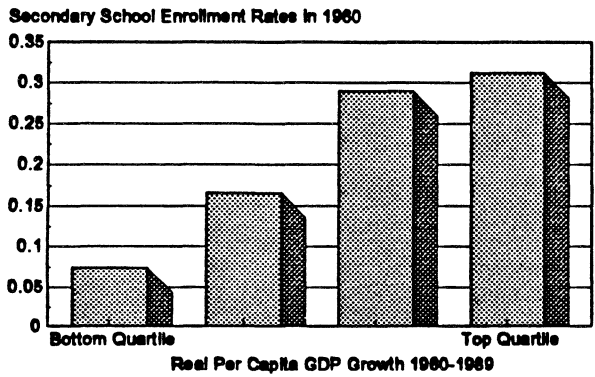
**Figure 2**  
**REAL PER CAPITA GROWTH AND REAL INCOME**



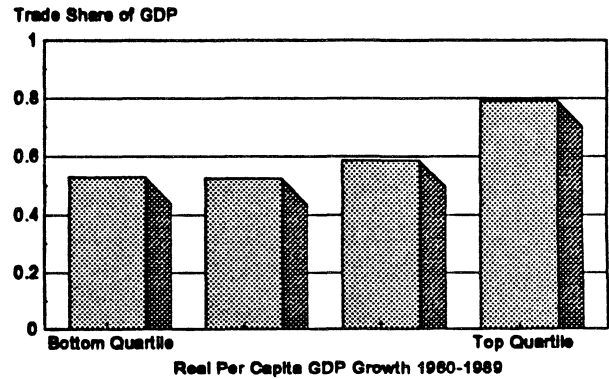
**Figure 3**  
**INVESTMENT SHARES AND REAL PER CAPITA GROWTH**



**Figure 4**  
**SCHOOL ENROLLMENT RATES AND REAL PER CAPITA GROWTH**



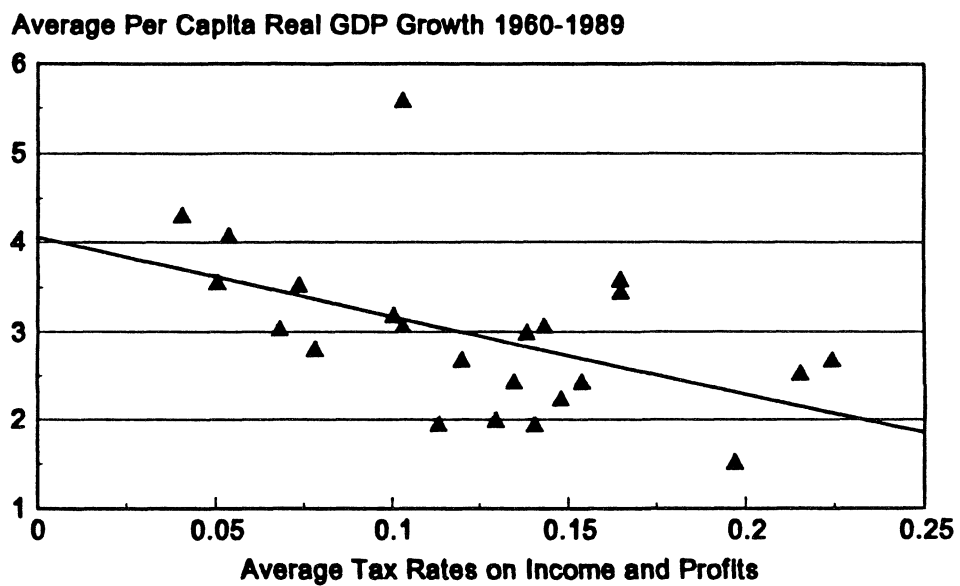
**Figure 5**  
**TRADE SHARE OF GDP AND REAL PER CAPITA GROWTH**



**Table 3**  
**Growth Characteristics for OECD Countries 1960-1989**

	Overall Average n=24	Slow growth <3.0% n=13	Fast growth >3.0% n=11	Correlation with GDP Growth Rate
Real per capita GDP growth 1960-1989	3.00%	2.40%	3.71%	1.00
Investment share of GDP	0.23	0.21	0.25	0.61
Government consumption share of GDP	0.17	0.19	0.16	-0.45
Income & profit taxes share of GDP	0.12	0.14	0.10	-0.52
Inflation rate	9.03%	8.33%	9.84%	0.13
Standard deviation of inflation rate	5.61	5.38	5.87	0.13
Exports as a share of GDP	0.29	0.31	0.27	-0.17
Imports as a share of GDP	0.30	0.31	0.29	-0.11
Secondary school enrollment rates	0.50	0.51	0.50	-0.15
Primary school enrollment rates	1.10	1.10	1.09	0.03
Population growth	0.78%	0.88%	0.67%	-0.14
Real per capita GDP in 1960	\$4333	\$4990	\$3534	-0.68

**Figure 6**  
**REAL ECONOMIC GROWTH AND TAX RATES IN OECD COUNTRIES**





*September 13-14, 1992*

## THE ROLE OF INFLATION AND INFLATION EXPECTATIONS IN THE CURRENT DISMAL RECOVERY

William POOLE  
Brown University\*

A number of different economic and political conditions have contributed to the sluggish rate of the current economic recovery; some of these, such as substantial defense cuts, are widely recognized whereas others are poorly understood. This latter category includes the role of inflation and inflation expectations, and especially the gap between the two. The long-term bond market seems to be pricing bonds under the assumption of average inflation over the long run of about 4 percent, but most producers (both firms and employed individuals) see substantially less inflation in their immediate futures. Some observers have put this same observation somewhat differently by arguing that real interest rates are relatively high and that the Fed should drive down nominal interest rates to get the recovery moving. I think that is a misleading way to analyze the policy significance of the current state of inflation expectations. The question is whether policy should bring actual inflation *up* to the level of inflation expectations, or inflation expectations *down* to actual inflation.

### Some Facts

Figure 1 (all figures at end of paper) shows interest rates on five maturities of Treasury securities. Many analysts have commented on the unusually persistent steep yield curve over the last two years or so; this is the large gap between the bill rate and the 30-year bond rate in the figure. I think another fact is at least as interesting: the long-bond rate is actually higher today than it was in mid 1986, and not much below its level at the end of 1989, which is the year when the current prolonged period of slow average economic growth began.

Figure 2 provides four measures of the inflation rate. From the figure, inflation seems stuck after 1983 at 4-5 percent per year for the CPI and 2-3 percent per year for the PPI. Figure 3 shows the Employment Cost indexes for total compensation and for wages and salaries. Taking Figures 2 and 3 together, we may conclude that inflation reached its cyclical low in 1986-1987, rose modestly to peak in 1989-1990, and as of mid 1992 has returned to its 1986-1987 level.

If we think of inflation today as about the same as the cyclical low in 1986-1987, and not much different from its average rate over the last eight years, then the current level of the long-bond rate seems perfectly reasonable. Investors cannot look to convincing evidence of low inflation to justify expectations of lower future inflation and therefore to justify lower interest rates on long bonds.

### **The Current Policy Environment**

Expectations of future inflation depend on much more than observed recent inflation. Does the current policy environment justify inflation expectations that differ very much from average inflation over the last few years?

Figure 4 reports growth in the Fed's measures of M1 and M2 and in the MZM measure I have been experimenting with.<sup>1</sup> As measured by M2, monetary policy has been relatively restrictive—indeed, increasingly restrictive—since mid 1990. The narrower measures M1 and MZM suggest an expansionary policy, as does the behavior of money market interest rates.

My own judgment is that Fed policy has been on the restrictive side, especially considering that real GDP growth has not exceeded 3 percent in any quarter since 1989:I, and that by most measures a substantial amount of economic slack has accumulated. Since 1989, economic growth has gone from slow to negative to slow, but the Fed has generally adjusted the federal funds rate down in a reactive fashion rather than in an aggressively leading fashion. However, I am less interested in arguing that Fed policy has been restrictive over the past two years than in making another observation: by every measure, Fed policy has been less expansionary, or more restrictive, than it was in 1985-1986. The Fed's expansionary policy at that time reflected several considerations, which included slower economic growth. (GDP grew by 3.3 percent in 1985 and 2.2 percent in 1986, fourth quarter to fourth quarter.)

Even if the Fed is viewed as following a relatively restrictive policy today, bond investors have ample reason to be cautious about how long the policy can be sustained. The Bush administration has constantly prodded the Fed seeking more expansionary policy, and a Clinton administration would likely put even greater pressure on the Fed to expand. The steep yield curve today is not a result of the long end being obviously too high but of the short end being sensibly low given the current sluggish economy.

## **Inflation, Expectations, and Inflation Risks**

Cyclical fluctuations are concentrated in manufacturing, mining, and construction. Firms in these cyclical industries are making investment decisions today in an environment of intense price pressures, which are perhaps best measured by the PPI. Let me exaggerate (or simplify) a bit to state my punch line. Goods prices are rising at an annual rate of 1-2 percent but investors in the bond market are pricing bonds under the assumption of about 4 percent inflation. As seen by firms, real interest rates are high. Moreover, households see wage increases ahead of only 3 percent or less per year; given such an expectation, mortgage rates of 8-9 percent reflect a high real rate. These high real rates as perceived by firms and households depress real investment in plant, equipment, and housing.

Part of the difference between price expectations held by producers and those held by bond investors is a matter of horizon. Firms are looking at prices in the present and immediate future whereas long-bond investors necessarily have a much longer horizon. But horizon is not the whole story. What we have been calling the bond investor's inflation expectation is really the sum of the investor's point estimate of future inflation and risk premium on inflation uncertainty. Firms and bond investors might both have point estimates for average PPI inflation over the next 10 years of, say, 2 percent but bond investors add an inflation risk premium of 2 percentage points in pricing bonds. This inflation premium is a real cost to the firm considering investment in plant and equipment, and depresses such investment. The same analysis hold for household considering purchases of houses and consumer durables.

## **Policy Options**

In 1985-1986, the rate of inflation fell sharply as OPEC oil prices fell. The general discussion at that time was that the decline in inflation was temporary and that no change in the underlying situation had occurred. The Fed in fact followed a very expansionary policy, which soon brought the actual rate of inflation up to the expected rate of 4-5 percent on the CPI. The Fed did not use the oil-price break as an opportunity to lower the overall rate of inflation another notch. One consequence of this policy was a substantial cycle in interest rates as the Fed tightened sharply in 1987 to prevent trend inflation from rising in response to the monetary stimulus of 1985-1986.

Over the last several years, the Fed seems to have been committed to reducing inflation another notch rather than to simply ratifying an inflation of 4-5 percent. The Fed has been trying to take advantage of an inadvertent recession to work down the long-run rate of inflation. However, the bond market is far from convinced that the Fed will be successful, and has held long rates well above the levels appropriate for 2 percent inflation.

I think the Fed has been doing about as good a job as possible in sustaining a policy that will in time contribute to working down this inflation premium. Fed officials have repeatedly emphasized their commitment to restoring full price stability. The Fed has been generally cautious about lowering the funds rate; however one comes out in interpreting the mixed signals given off by the various monetary aggregates, money growth is clearly lower than it was back in 1985-1986. Under the circumstances, I don't know what else the Fed could have done to move the process along more quickly. If the Fed persists in this policy, assuming I am reading it correctly, investors will eventually squeeze down the inflation premium in long rates. Indeed, I think this process is underway and explains the downward drift in long rates since early 1991.

Is there anything else that could be done? The administration could help by supporting the Fed's desire to achieve price stability rather than constantly urging the Fed to goose up the economy. If Bush wins the election, he should quickly seize the opportunity to emphasize a policy of growth with price stability. If Clinton wins, he will probably be faced with increased market uncertainty and a tendency for rates to rise. He would be wise to support the goal of price stability to help reduce fears that his presidency will encourage somewhat higher inflation. Rising inflation fears not accommodated by the Fed will depress current business activity, which will in turn increase the pressure on the Fed to accommodate higher inflation.

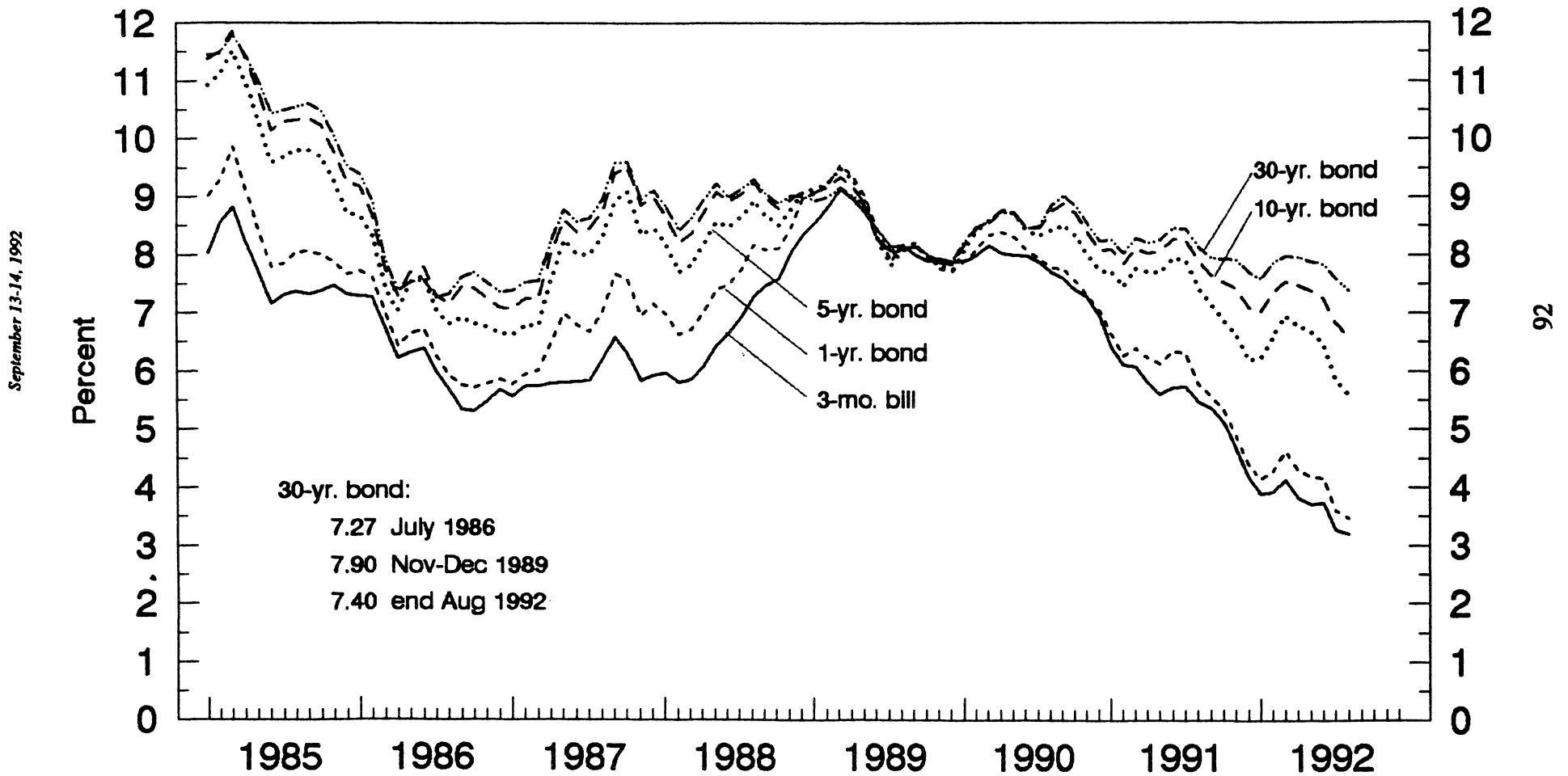
The outcome of an accommodative policy would be another interest rate cycle and the necessity of dealing with rising inflation in several years. We would have lost the benefit of a lower inflation rate bought, even if accidentally, by a prolonged period of sluggish growth. Given that the economy has already suffered most of the costs of slow growth, we might as well enjoy the benefits of a permanently lower rate of inflation.

## NOTES

\*I thank Data Resources, Inc. for providing access to its data bank, from which I drew the data used in this paper.

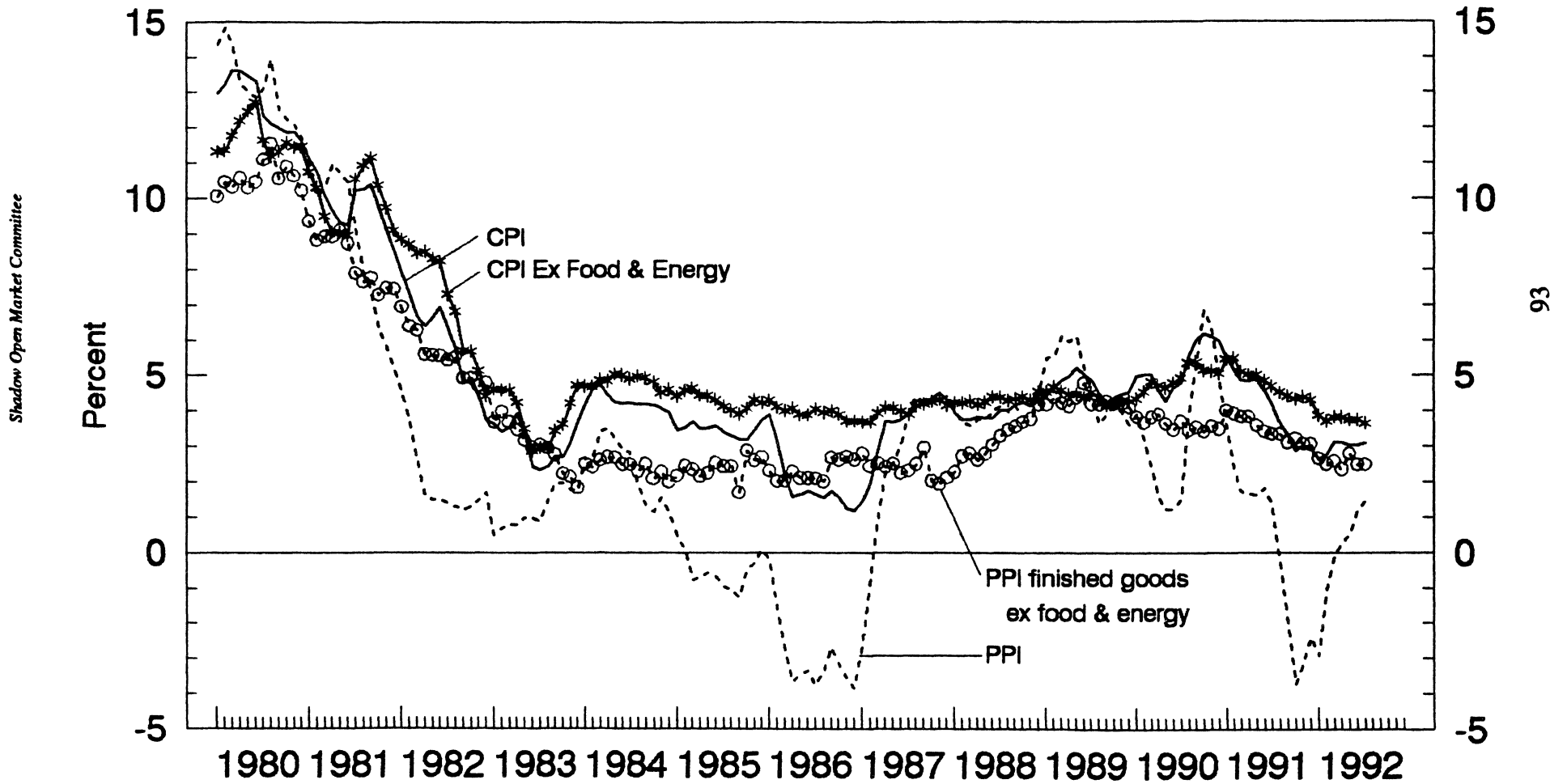
1. For those unfamiliar with my SOMC memos in September 1991 and March 1992 discussing MZM, the idea behind this measure is that it includes all assets that are either currency or can be converted to currency without delay and without penalty or risk. ("MZM" stands for "money zero maturity.") Statistically, MZM equals the Fed's M2 plus institution—only money market mutual funds minus small time deposits.

**Figure 1**  
**Interest Rates on U.S. Treasury Securities**  
 Monthly, 1985-92



Bill rate on bond-yield equivalent basis  
 Last observation: 1992:8

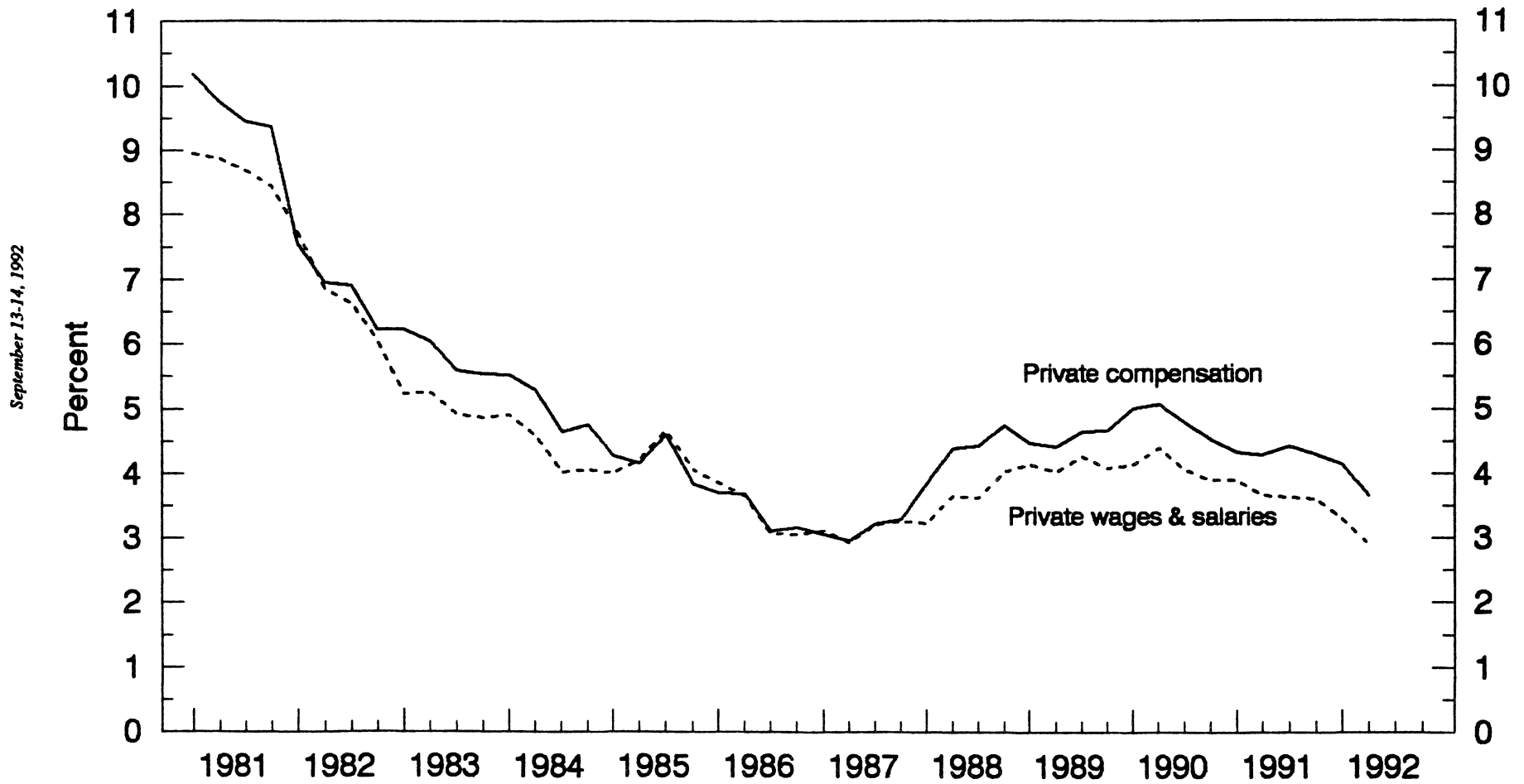
Figure 2  
CPI, PPI Inflation, 1980-1992  
12-Month Change, Percent



Last observation: 1992:7



Figure 3  
Employment Cost Index, 1981-1992  
4-Quarter Change, Percent

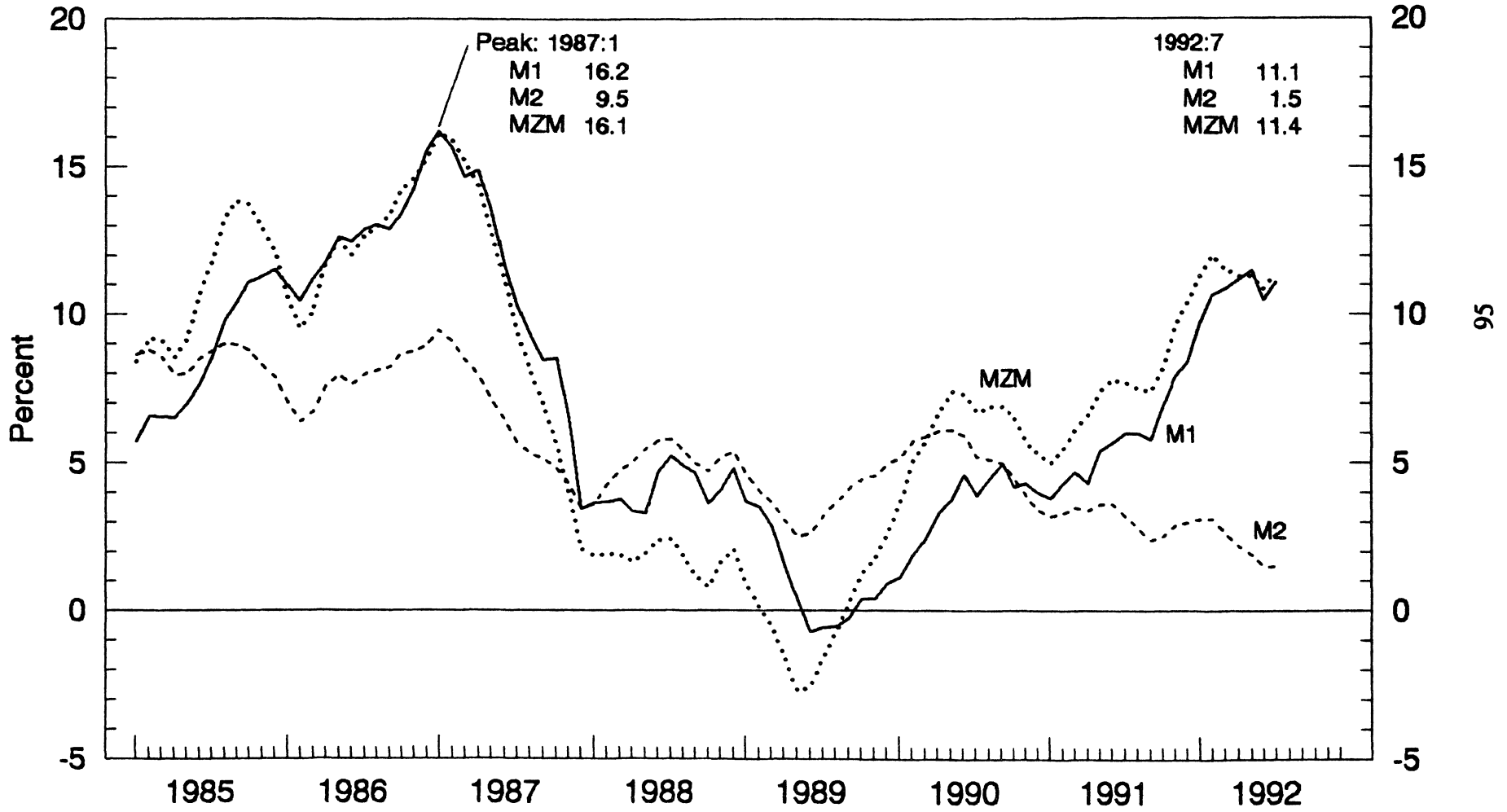


Last observation: 1992:II

# Figure 4

## Money Growth, 1985-92

12-Month Changes, Percent



Shadow Open Market Committee

Last observation: 1992:7

*September 13-14, 1992*

## **MONETARY AGGREGATES AND MONETARY POLICY**

**Robert H. RASCHE**  
**Michigan State University**

At a quick glance, the behavior of various monetary aggregates in the recent past is quite bewildering. Since the beginning of 1991 (through June, 1992) M1 has grown at an annual rate of 10.5 percent, the adjusted monetary base at an annual rate of 7.8 percent, adjusted reserves at an annual rate of 11.1 percent, but M2 has grown at an annual rate of only 2.4 percent. Since January, 1992, M1 has grown at an annual rate of 11.3 percent, but M2 at an annual rate of only .8 percent. In the summer of 1991 M2 effectively stayed constant, while February, 1992 it has actually fallen slightly.

This disparate behavior of the various monetary aggregates has provoked recent discussions of monetary policy that are reminiscent of and appear to closely parallel the debate over the behavior of the narrowly defined monetary aggregates approximately a decade ago. In his most recent Humphrey-Hawkins testimony, Chairman Greenspan stated:

The relationship between money and spending also has been profoundly affected by the process of balance sheet restructuring...My previous testimony to the Congress noted that aberrant monetary behavior emerged in 1990 and has since intensified. ...reduced depository intermediation stemmed from emerging problems of asset quality, which in turn prompted both the pulling back of depositories from lending and responses by regulators that reinforce those tendencies. ...Looking ahead, the recent increases in M2 velocity may well continue, although the uncertainties in this regard are considerable.

Almost ten years ago, in February, 1983, Chairman Volcker stated in his Humphrey-Hawkins presentation:

In setting our monetary and credit objectives for 1983, the Federal Reserve has had no choice but to take into account the fact that "normal" past relationships between money and the economy did not hold in 1982, and may be in the process of continuing change. Part of the problem lies in the ongoing process of deregulation and financial innovation that has resulted in a new array of deposit and financial instruments, some of which lie at the very border of "transactions" and "savings" accounts, defying clear statistical categories.

The common thread in both of these presentations is that there is something historically unprecedented and perhaps unique in the behavior of the aggregate under consideration. The experience of 1982 led to the removal of M1 from the pantheon of aggregates that the Fed monitored,

and the reestablishment of a borrowed reserves operating procedure, which over time has evolved back to the Federal funds rate operating procedure that existed throughout the 1970s. The singular distinction between the present funds rate operating procedure and that of the 1970s is that the current FOMC appears to be much more aggressive about implementing changes in the funds rate target, and hence the operating procedure is not characterized by the inertia of the 1970s. It seems possible that the current allegations that M2 behavior is not consistent with past patterns could lead to a downgrading of this aggregate in discussions of appropriate monetary policy and a return to the monetary policy operating procedure of the late 1960s in which short-term interest rates were the exclusive focus of policy discussions.

Are we really in a situation in which the behavior of monetary aggregates is inexplicable, and where there are no discernible relationships between monetary aggregates and economic activity? Some analysts (B. Friedman [1988], Friedman and Kuttner [1992]) clearly are convinced that this is the case, and that the behavior of monetary aggregates should be minimized in policy discussions. Other analyses of the U.S. data (Lucas [1988], Poole [1988], Hoffman and Rasche [1991] and King, Plosser, Stock and Watson [1992]) suggest that systematic historical relationships are responsible for the behavior of M1 over the past decade. Similarly, recent behavior of M2 can be shown to be consistent with previous episodes.

### **M1 Behavior Since 1980**

The velocity of M1 on a quarterly basis from 1959-92:1, relative to gross domestic product (GDP) is plotted in Figure 1. Clearly this series has behaved much differently since about 1980. Gone is the upward trend that persisted since the 1950s. If anything there is a slight negative trend over the most recent 11 years. In addition, fluctuations in this velocity measure over the recent period have huge amplitude compared to the fluctuations of the previous twenty-five years. At a first glance it is tempting to dismiss any claim to systematic velocity behavior before and after 1980 as lunacy.

Figure 2 presents M1 velocity data in a somewhat different light. The data plotted here are annual averages of the Treasury bill rate and the reciprocal of M1 velocity; a textbook representation of a money demand specification. The solid line is a long-run (or equilibrium) velocity relationship estimated from the quarterly data in Figure 1 over a sample period of 1956-1990, using the model that Dennis Hoffman and I have published (Hoffman and Rasche [1991]).<sup>1</sup> That model allows for a substantial long-run interest elasticity (approximately .55) of velocity with respect to the Treasury Bill rate. The boxes are a scatter plot of the actual annual observations of the Treasury bill rate and

the reciprocal of M1 velocity. The solid box is the 1991 observation (which is not included in the sample period of the estimation). A plot of the quarterly observations would exhibit more variation around the estimated long-run money demand relationship, but the story is the same: with a simple constant elasticity relationship the movement of interest rates describe the fundamental behavior of M1 velocity over the three and a half decades.

A somewhat different picture using the quarterly data is presented in Figure 3. Here the actual quarterly M1 velocity is plotted as the solid line, while the predicted long-run M1 velocity, *based on the current quarterly value* of the Treasury bill rate is plotted as the broken line. There are large deviations between the two lines, but these deviations are not permanent: the two lines cross repeatedly.<sup>2</sup>

There are two conclusions to be drawn from this analysis of Figures 2-3. The first is that the recent rapid growth of M1 relative to nominal income growth (the decline in M1 velocity) is a predictable consequence of the decline in the Treasury bill rate from its peak of 7.90 percent in March, 1990 to the recent level of around 3.15 percent. The second is that the full impact on M1 velocity of the 92 percent decline in the Treasury bill rate (measured as log differences) over the past 2 and 1/2 years has not been fully realized yet. Note in Figure 3 that the dotted line is considerably below the actual velocity line. The implication of this is that if the Fed maintains the Treasury bill rate at current levels for some period of time (say over the next year) we should expect to see M1 velocity continue to fall. While the dynamics of the adjustment process to the reduction in nominal interest rates is not identified in the model used here, the adjustments of velocity to various shocks appear to be largely completed in about two years. Hence prolonged growth in M1 relative to GDP will be inconsistent with the Fed's stated objective of reducing inflation.

The same type of relationship held for base velocity for the two decades through the end of the 1980s (see Hoffman and Rasche [1991]), but probably with a lower long-run interest elasticity than M1 velocity. With the major currency exports of a couple of years ago there appears to have been a permanent shift in the level of base velocity, but otherwise the relationship driving the long-run behavior of base velocity was probably unaffected. Therefore it is likely that the same factors that are responsible for the rapid growth of M1 in the recent past are responsible for the rapid growth of the monetary base measures.

## Behavior of M2 Since 1990

Quarterly M2 velocity for 55-92:1 is plotted in Figure 4. The broken line is the mean of M2 velocity for that period. Again, velocity is measured relative to the recently revised GDP numbers. The mean here is changed very little from that reported by Hallman, Porter, and Small [1992] for quarterly M2 velocity relative to GNP over the period 55-88:1. As in the case of M1 velocity deviations from the estimated long-run M1 demand equation, the deviations of M2 velocity from the mean M2 velocity are strictly transitory.<sup>3</sup> However, it is important to note that the variance of M2 velocity around its mean is very large.

The shaded areas in Figure 4 represent the NBER recession phases. I have arbitrarily dated the end of the 1990-1991 recession with the second quarter of 1991, though it should be noted that the NBER has yet to date the trough of this recession. The characteristic post-war historical behavior of M2 velocity is a sharp decline during recessions or shortly thereafter. The traditional explanation of this is that market rates of interest fall quickly during these periods, but that the rates of interest paid on various components of M2 are considerably more sluggish, so that as the opportunity cost of holding M2 balances (measured by the spread between market rates and own rates) falls and M2 velocity falls. This spread between the Treasury bill rate and the "own rate" on M2 as measured by the staff of the Board of Governors is plotted in Figure 5. Note that this spread dropped substantially in 1985-1986, so the large decline in M2 velocity at this time is consistent with the conventional wisdom. The last two years do not fit the conventional wisdom. The rate spread plotted in Figure 5 dropped throughout the most recent recession as it did in past recessions and remains close to the post-war minimum value. However, it can be seen from Figure 4 that M2 velocity did not behave in the characteristic manner. There was a very small decline in M2 velocity in the year following the cyclical peak, but since then it has increased so that at the latest observation (92:1) it is close to the value at the beginning of the recession.

The recent increase in M2 velocity can be traced to the behavior of the small time deposit component of M2. Small time deposits outstanding are plotted in Figure 6 and it can be observed there that they have declined dramatically and steadily since the beginning of the 1990 recession. If we exclude these small time deposits from M2 and construct the zero maturity money aggregate that Poole [1991] proposed (M2M), it can be seen in Figure 1 that the velocity of M2 excluding the small time deposits has declined steadily for the last several years.

The decline in small time deposits is not unprecedented. While such deposits grew almost continuously throughout the 1960s and 1970s, there have been three periods in the 1980s during which the outstanding volume of these deposits declined. Two of these incidents occurred long before the thrift crisis became everyday news. The reason for these declines does not seem particularly mysterious. In Figure 7 the rate on small time deposits of six-month maturity (as collected by the staff of the Board of Governors) is plotted with the Treasury bill rate. It is evident that over the decade the small time deposit rate has tracked the path of the Treasury bill rate quite closely.<sup>4</sup> This rate clearly is not sluggish in response to changes in market rates. In Figure 8 the spread of the six-month small time deposit rate over the rate paid on other checkable deposits (OCD) is plotted. The three periods during the 1980s in which the outstanding volume of small time deposits declined correspond to the three periods in which this spread fell. Over the last year to eighteen months this spread has been consistently below one percent and close to the historical lows observed in 1986. The only question is why the decline in small time deposits in the recent past has been so dramatic relative to the decline in 1986. The most frequently cited explanation for the extent of the recent decline in these deposits is the thrift crisis, since the decline in small time deposits at thrifts is much larger than the decline in such deposits at commercial banks. This is part of Chairman Greenspan's rationalization of the recent behavior of M2.

It is probably premature to jump to the conclusion that this behavior of small time deposits represents a unique portfolio restructuring. The major difference in the behavior of the rate spread shown in Figure 8 in 1991-1992 compared to 1986 is that the spread rebounded quickly from its minimum in 1986 while at the present time it has remained near the 1986 minimum for almost a year and a half. Given the long maturity of a large portion of the outstanding small time deposits (Poole [1991]) and the "substantial penalty for early withdrawals," the potential exists for rolling a much larger fraction of the outstanding balances over into other assets in response to the present low rate spread than existed during the short lived decline in the spread in 1986. The decline in outstanding small time deposits in 1986 and 1991-1992 are quite similar to the declines in outstanding large time deposits in 1968 and 1970 when Reg Q ceilings were allowed to become binding. In those two cases, the size of the "runoff" in large CDs was directly related to the length of time that the Reg Q ceiling remained effective. A second factor is the difference in the shape of the yield curve in the recent past compared to 1986. In May, 1992 the yield on 5 year Treasury bonds was 6.69 percent; in December, 1986 it was 6.67 percent. However, in December, 1986 the spread between the two year and five year Treasury rates was only 40 basis points; in May, 1992 this spread was 166 basis points. If the yield curve on small time deposits has a shape similar to that in the Treasury market, then in recent months there is considerably more incentive to roll maturing



intermediate maturity small time deposits over into longer term nondeposit assets. Therefore, a reasonable alternative hypothesis is that the recently observed behavior of small time deposit balances is a normal portfolio adjustment in response to the prevailing structure of interest rates, and would have occurred regardless of the severity or existence of the thrift crisis. Discriminating between these two alternative views of the recent behavior of small time deposits (and M2) will take a considerable amount of careful research, and a definitive answer may not be possible at the present time, given the short history of small time deposit behavior in the absence of interest rate regulation.

If the view that the decline in small time deposits is a normal response to changes in the structure of interest rates, proposals which advocate additional Fed intervention to lower short-term interest rates must be examined with considerable caution. Further reductions in the funds rate target are not likely to have much impact on the spread between small time deposit rates and rates offered on other checkable deposits, since banks will not find it profitable to bid aggressively for such deposits when short-term lending rates are low. Increasing the funds rate in an effort to improve the yield on small time deposits relative to longer term maturity nondeposit assets and stimulate the growth of M2 is not a policy that will be considered in the present circumstances. Under these conditions it is possible that short-run manipulation of M2 growth by the Fed may be difficult or impossible.

### **The Velocity of Zero Maturity Money**

The velocity of zero maturity money (VELMZM) is plotted in Figure 1 along with the velocity of M1. There are many similarities between these two measures. Both show positive trends throughout the 1960s and 1970s; negative trends in the 1980s and much larger amplitude fluctuations in the 1980s compared with the previous decades. The velocity of zero maturity money has declined relative to the decline in M1 velocity since the beginning of the 1990 recession in about the same relationship that occurred during 1986. The trends in zero maturity money velocity before and after 1980 appear to be smaller in absolute value than those in M1, and the fluctuations of the former measure have much smaller amplitude than those of the latter measure during the 1980s. At a quick glance it would appear that if M1 velocity is driven in the long run by a relatively high interest elasticity (Figure 2) then the long-run behavior of zero maturity money velocity could be similarly explained but with a much lower interest elasticity. I have been unable to isolate such a relationship statistically. The reason seems straightforward. The problem is in the behavior of this velocity measure in the 1978-1982 period when zero maturity money deposits were substantially affected

by Req Q ceilings and other deposit regulations. In the late 1970s VELMZM rose very quickly, but this increase was completely reversed in the 1981-1982 period when banks were authorized to issue insured money market deposit accounts. Separating shifts in the demand curve for zero money deposits from the impact of changes in interest rates (movements along the demand curve for these deposits) during this period is extremely difficult and will require considerable more research that I have not accomplished to the present. Until we understand the behavior of the velocity of this aggregate in the absence of regulatory changes, my judgement is that it is premature to make it a significant factor in monetary policy decisions.

### **Implications for the Role of Monetary Aggregates in Monetary Policy**

I think that there are several conclusions about the role of monetary aggregates in monetary policy that can be drawn from the above discussion. First with respect to M2 it is important to distinguish between the transitory nature of shocks to M2 velocity and the variance of those shocks. The fact that M2 velocity has returned to its mean during the post-war period implies nothing about the variance around that mean. In fact that variance is considerable. The coefficient of variation of M2 velocity (standard deviation relative to sample mean) in quarterly data is 2.9 percent. Therefore, from quarter-to-quarter large changes can occur in nominal GDP independent of changes in M2. The collapse of the economy is not guaranteed by any short period of slow M2 growth anymore than an explosion in inflation is guaranteed by a similarly short period of high M2 growth. Second, there may be market conditions, such as have been experienced recently, in which Federal Reserve actions to lower short-term interest rates have no impact on increasing the growth rate of M2, and indeed may be counter productive in that objective.

With respect to narrower monetary aggregates such as the base or M1, policy has to be designed to cope with permanent changes in trends such as occurred around 1980. My conclusion is that the change in velocity trend in these aggregates can be attributed to changes in interest rate trends. My view is that the most plausible cause of the change in interest rate trends is a change in inflation expectations. Under these conditions, changes in monetary policy regimes which affect inflation expectations will in turn affect nominal interest rate trends and velocity trends.

Monetary rules which do not allow for feedback from velocity changes are not going to work very well under these conditions if the objective of monetary policy is the stabilization of nominal income. For example, suppose that inflation, expected inflation, nominal interest rates and velocity have been drifting upward. Further suppose that with these initial conditions the monetary authority desires to stabilize the inflation rate and sets a monetary growth objective equal to a projected

growth rate for natural output plus a desired stabilized inflation rate, minus the historically observed drift in the velocity of a narrowly defined monetary aggregate. If this money growth rate is maintained after expected inflation is stabilized, the drift in nominal interest rates will have disappeared and the actual steady rate of inflation will prove to be lower than the planned rate.

Meltzer [1987] and McCallum [1988] propose alternatives to a fixed money (base) growth rule that allow feedback from velocity onto the planned growth in money (base). These rules are designed to account for permanent shocks to velocity, but not to respond to transitory velocity shocks. The rules set the growth rate of the monetary base equal to a desired growth of nominal income less a moving average of the drift in base velocity. McCallum's rule provides an additional adjustment to base growth as nominal income is observed to deviate from nominal natural output. These rules establish base growth consistent with the planned stable inflation once stabilization is achieved and adjust base growth to compensate for the declining velocity drift during the transition period to the stabilized inflation rate.

However, the above conclusion depends critically on the credibility of the monetary authority. As long as private agents believe that the monetary authority is following the feedback rule consistently, then inflation expectations should adjust either in anticipation of or with the observation of falling inflation over time and the feedback mechanism will adjust base growth as desired. Both the Meltzer and McCallum rules are deterministic. In practice stochastic fluctuations around such deterministic rules will be observed which may make direct verification of the rule difficult. If the monetary authority lacks credibility, feedback rules such as these could prove unstable. Suppose the rule is implemented by the monetary authority and inflation and inflation expectations begin to stabilize. This lowers the drift in velocity and the feedback rule calls for base growth to be adjusted upward. The McCallum rule which ultimately restores nominal income to a specified path of nominal potential income requires that base growth and nominal income growth overshoot equilibrium base growth and equilibrium income growth during the transition period. If the rule is not well understood by private agents, or if the increase in base and nominal income growth is interpreted by such agents as an abandonment of the rule, then inflation expectations could start adjusting upward. This would change the drift of velocity and the rule would then call for reductions in base growth. It is not difficult to conceive of a situation where the monetary authority lacks credibility, in which the Meltzer-McCallum rules suffer from instrument instability (Holbrook [1972]), if the observed behavior of the monetary base affects inflation expectations, and through this the drift of

base velocity. Therefore, a prerequisite for the success of these types of monetary rules is a good and convincing explanation by the monetary authorities of their objectives and how they are seeking to obtain those objectives.

Finally, some analysts object to the implementation of monetary policy through the monetary base, since the base is largely currency, and that large quantities of currency may be held by foreigners and/or are held as a result of illegal activities. From time to time, the level of the base outstanding can change considerably as major currency exports occur. These arguments strike me as a basis for devoting some additional resources to obtaining better data on the holdings of base money in the domestic economy, not for ruling out monetary policies implemented through the monetary base.

## NOTES

1. The data used in the current estimation are the 1992 Federal Reserve revised measures of the money stock for 1959-1992 and my [1987] estimates of a M1 series consistent with current definitions of M1 for the earlier years. GDP for 1959-1992 are the current Bureau of Economic Analysis revisions. For the earlier years the older (pre 1991) revisions of GDP and real GDP were used. These were adjusted to the 1959 annual levels of the current revisions.
2. There are two ways of testing for the temporary nature of these deviations. The first is one of the several "unit root" tests where the null hypothesis is that the deviations are permanent and the alternative hypothesis is that they are transitory. The second is a class of tests in which the null hypothesis is that the deviations are transitory and the alternative hypothesis is that they are permanent. Using a Phillips-Perron test to implement the first approach, we reject the null hypothesis of permanent deviations. Using a KPSS [1991] test as adapted by Shin [1992] to implement the second approach, we fail to reject the null hypothesis of transitory deviations.
3. Here we have tested deviations of M2 velocity from its mean using Phillips-Perron tests for which the null hypothesis is that the deviations are permanent and using KPSS tests for which the null hypothesis is that the deviations are temporary. In the former case we reject the null hypothesis; in the latter case we fail to reject the null hypothesis. Thus the results of both types of tests are consistent and support the conclusion in Hallman, Porter, and Small [1992] that deviations of M2 velocity from its mean in the post-war period are transitory.
4. It would be interesting to observe the entire term structure of rates on small time deposits, but I do not have any additional information on these rates at the present time, and I am told that it is difficult to obtain consistent data series for other maturities. The rate on six month deposits is used by the staff of the Board of Governors as the yield on all small time deposits in the construction of an effective yield on M2.

## BIBLIOGRAPHY

Friedman, B.M., 1988, "Monetary Policy without Quantity Variables," *American Economic Review*, 78:440-5.

Friedman, B.M. and Kuttner, K.K., 1992, "Money, Income, Prices and Interest Rates," *American Economic Review*, 82:472-91.

Hallman, J.J., Porter, R.D., and Small, D.H., 1991, "Is the Price Level Tied to the M2 Monetary Aggregate in the Long Run?," *American Economic Review*, 81:841-58.

Hoffman, D.L., and Rasche, R.H., 1991, "Long-Run Income and Interest Elasticities of Money Demand in the U.S.," *Review of Economics and Statistics*, 78:665-74.

Holbrook, R.S., 1972, "Optimal Economic Policy and the Problem of Instrument Instability," *American Economic Review*, 62:231-55.

King, R., Plosser, C.I., Stock, J.H., and Watson, M.W., 1991, "Stochastic Trends and Economic Fluctuations," *American Economic Review*, 81:819-40.

Kwaitkowski, D., Phillips, P.C.B., Schmidt, P. and Shin, Y., 1991, "Testing the Null Hypothesis of Stationarity Against the Alternative of a Unit Root: How Sure are we that Economic Time Series have a Unit Root," Michigan State University, Department of Economics (mimeo).

Lucas, R.E., 1988, "Money Demand in the United States: A Quantitative Review," *Carnegie-Rochester Conference Series on Public Policy*, 29:137-168.

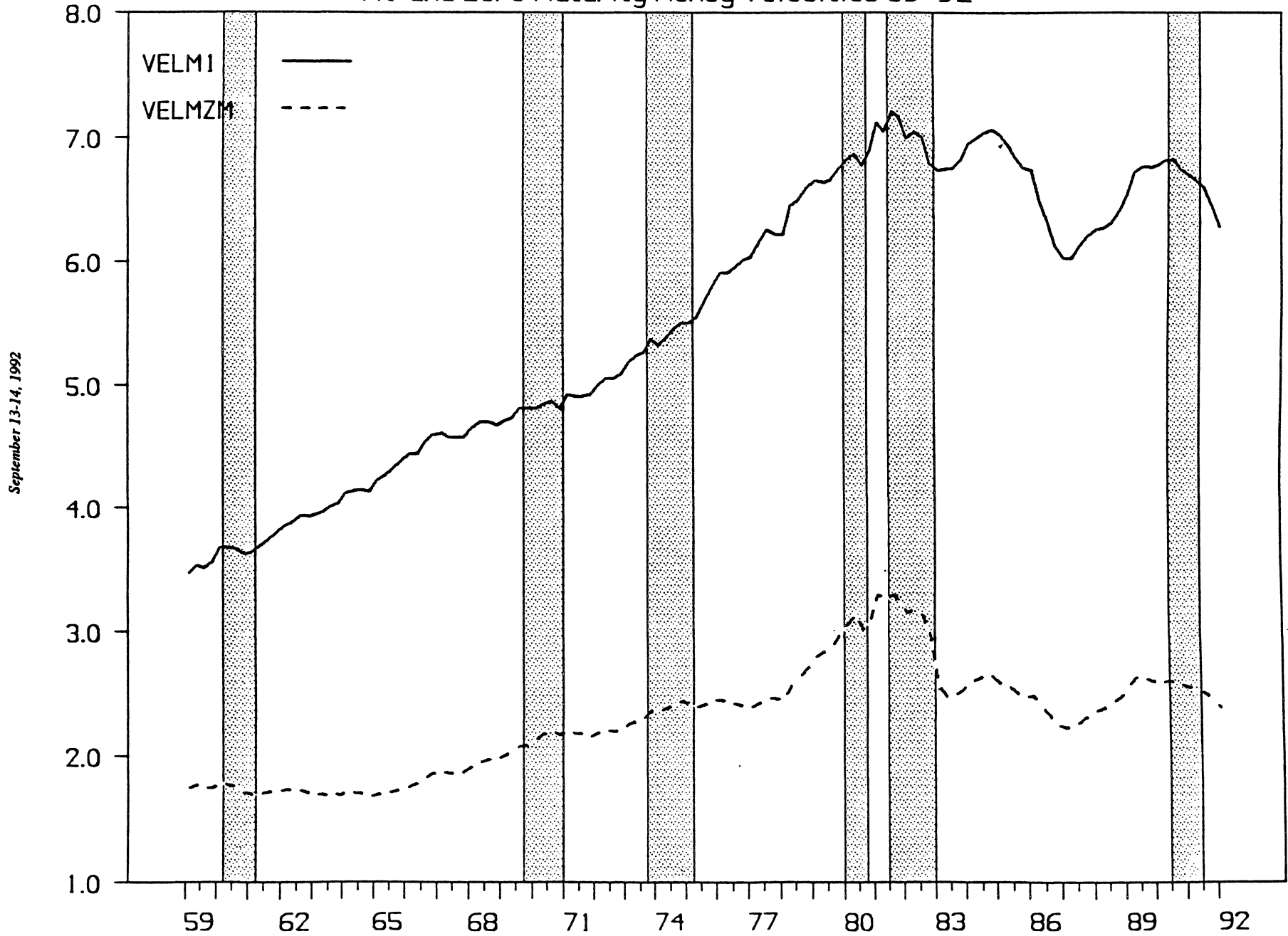
McCallum, B.T., 1988, "Robustness Properties of a Rule for Monetary Policy," *Carnegie-Rochester Conference Series on Public Policy*, 29:173-203.

Meltzer, A.H., 1987, "Limits of Short-run Stabilization Policy," *Economic Inquiry*, 25:1-14.

Poole, W., 1991, "Choosing a Monetary Aggregate: Another Look," *Shadow Open Market Committee Policy Statement and Position Papers*, Bradley Policy Research Center Public Policy Studies, Working Paper Series, PPS 91-02:91-104.

Shin, Y., 1992, "A Residual-Based Test of the Null of Cointegration against the Alternative of No Cointegration," Michigan State University, Department of Economics (mimeo).

Figure 1  
M1 and Zero Maturity Money Velocities 59-92



September 13-14, 1992

Figure 2

Annual M1 Velocity 55-91

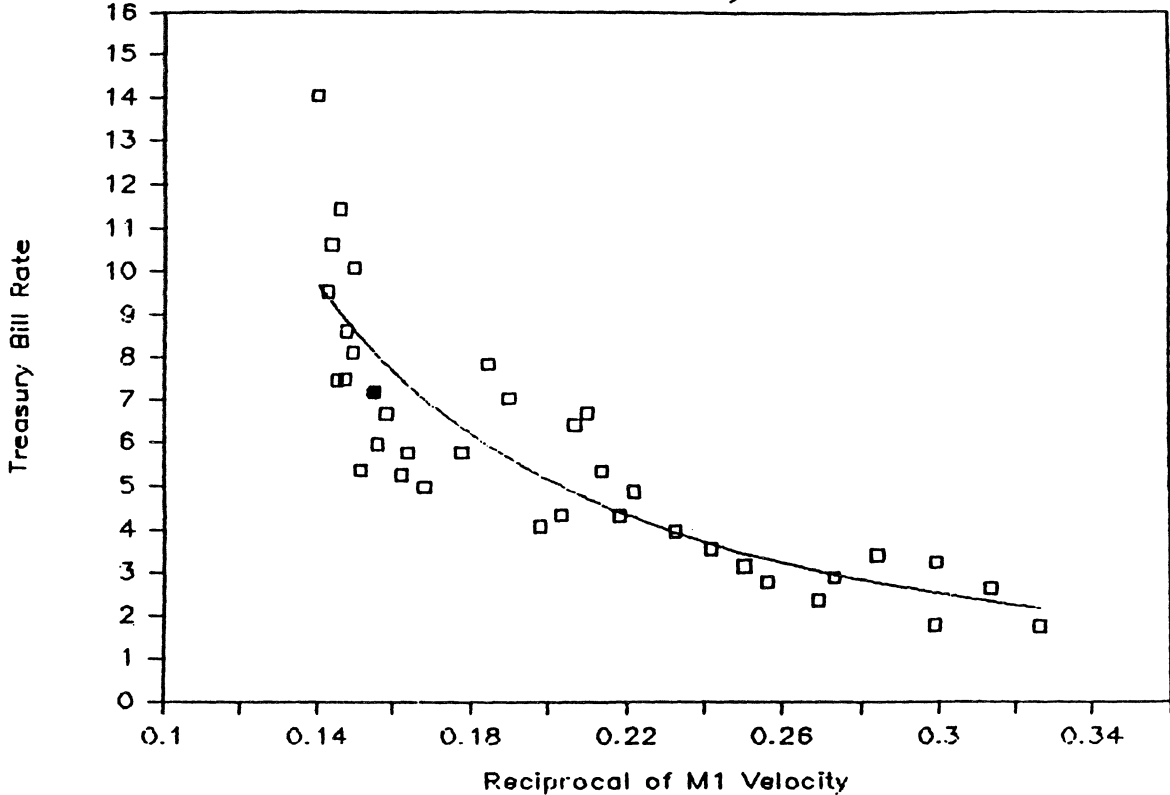




Figure 3  
M1 Velocity and Predicted Long-Run Velocity

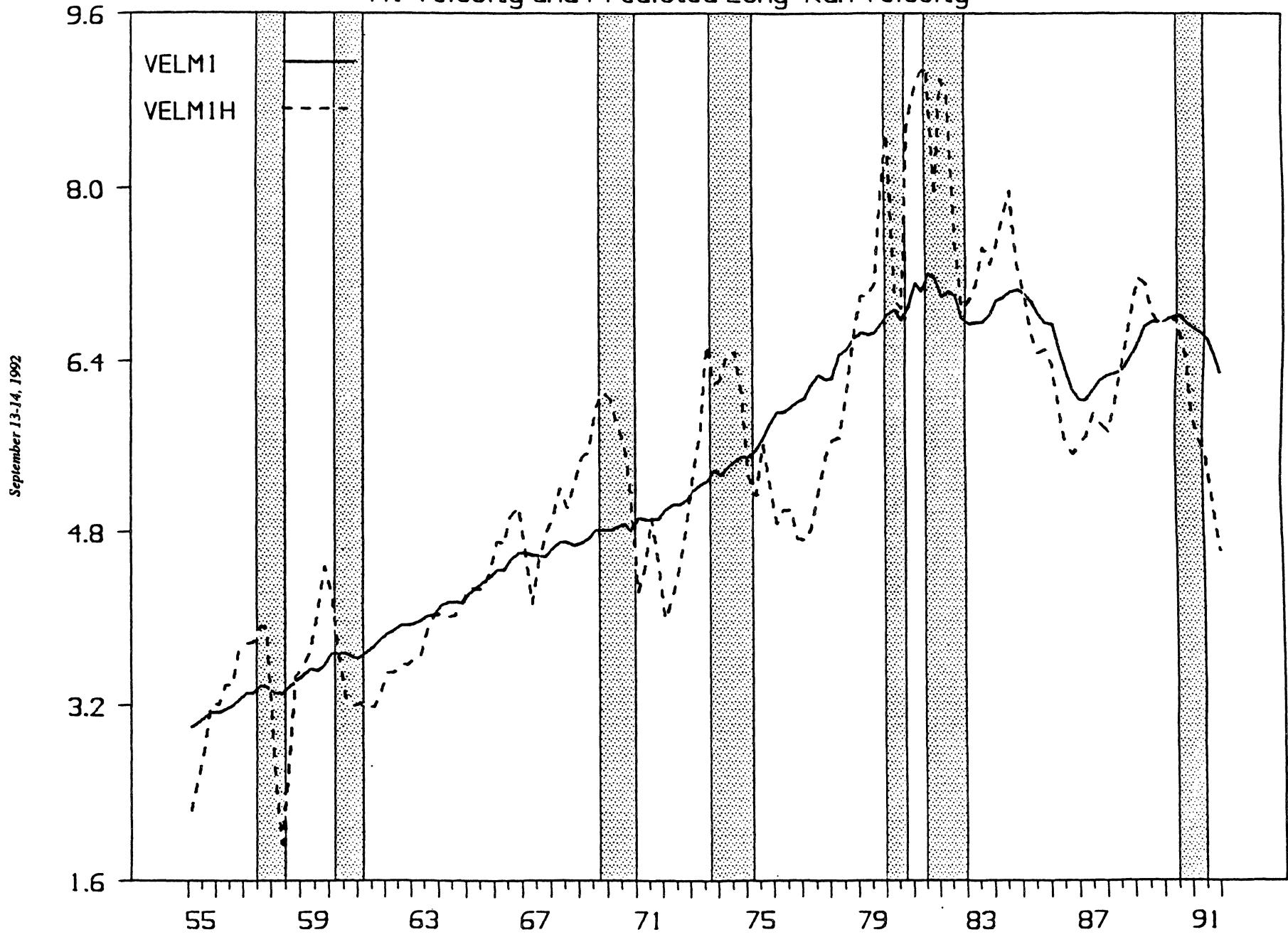
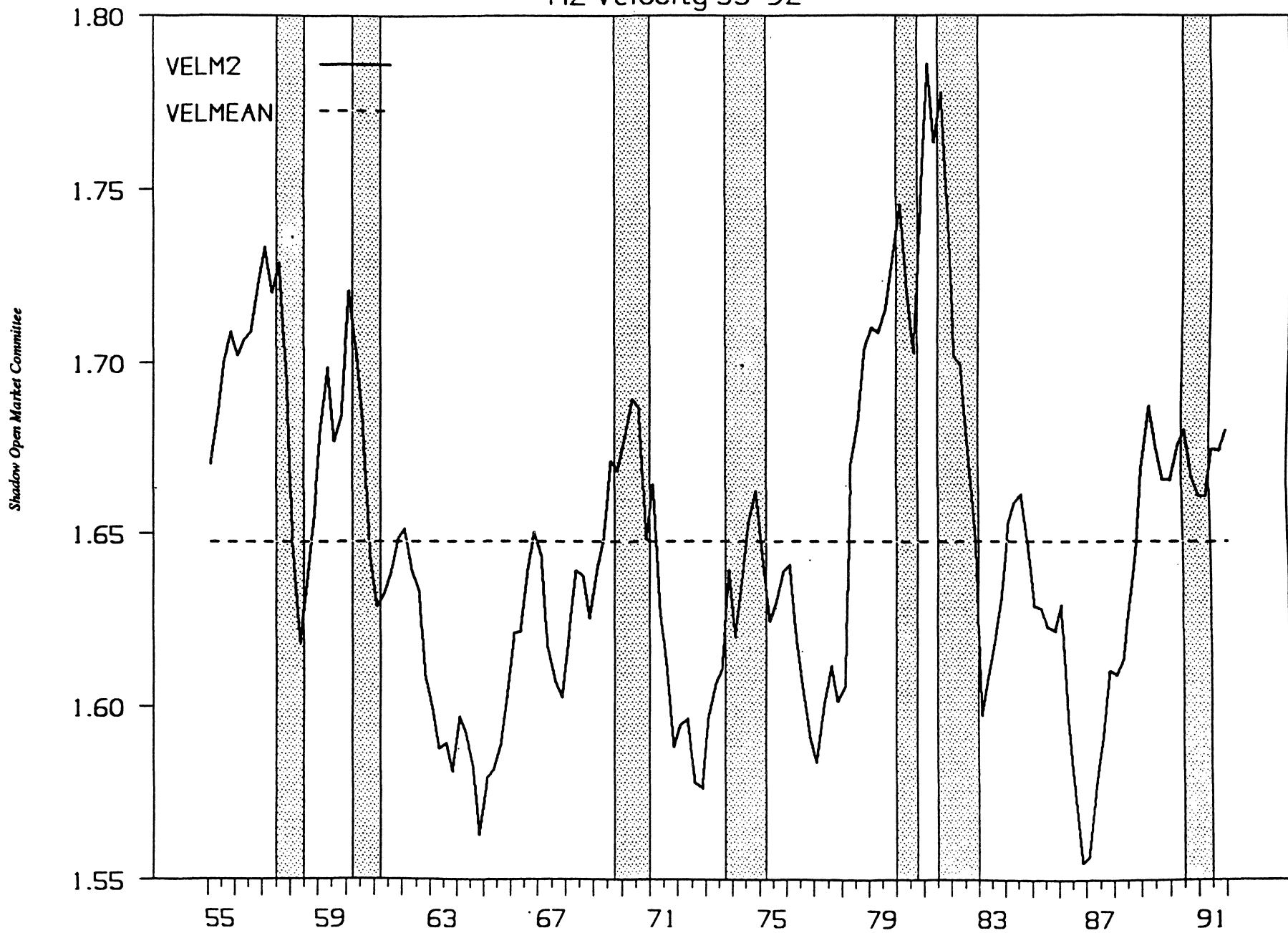


Figure 4  
M2 Velocity 55-92



Shadow Open Market Committee

Figure 5  
Treasury Bill Rate - M2 Rate Spread

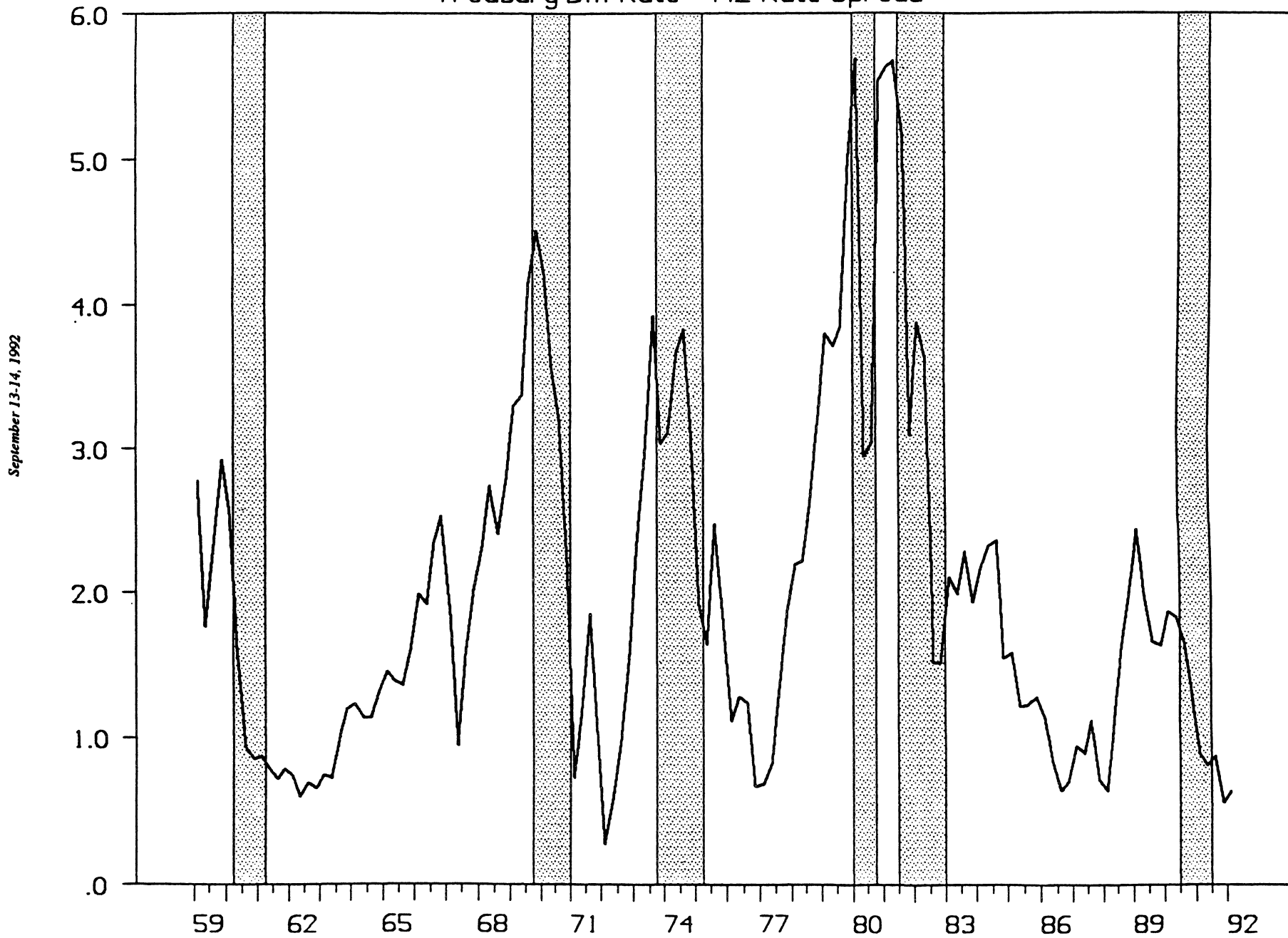


Figure 6  
Small Time Deposits

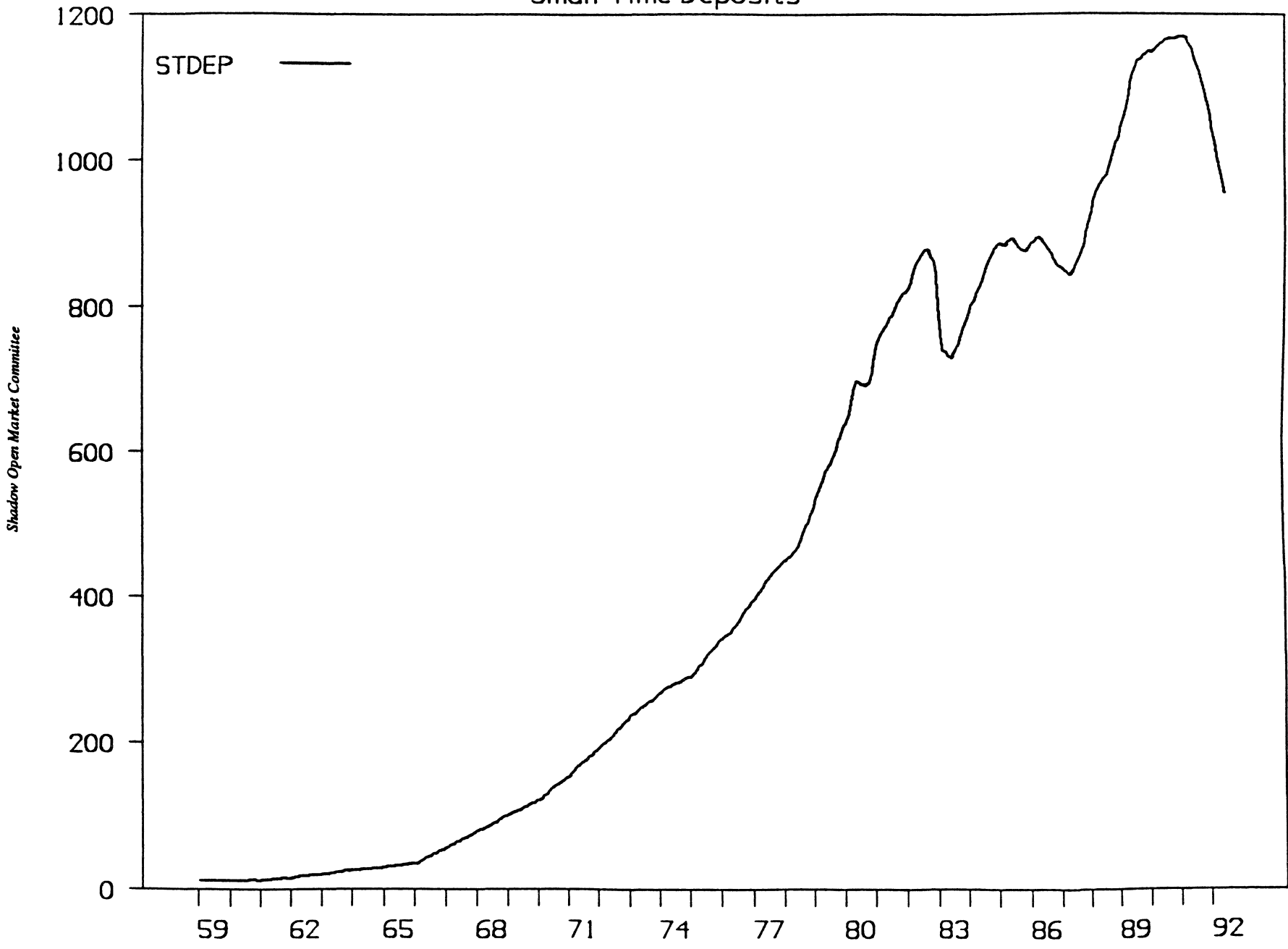


Figure 7  
6 Month Small Time Deposit Rate -- Treasury Bill Rate

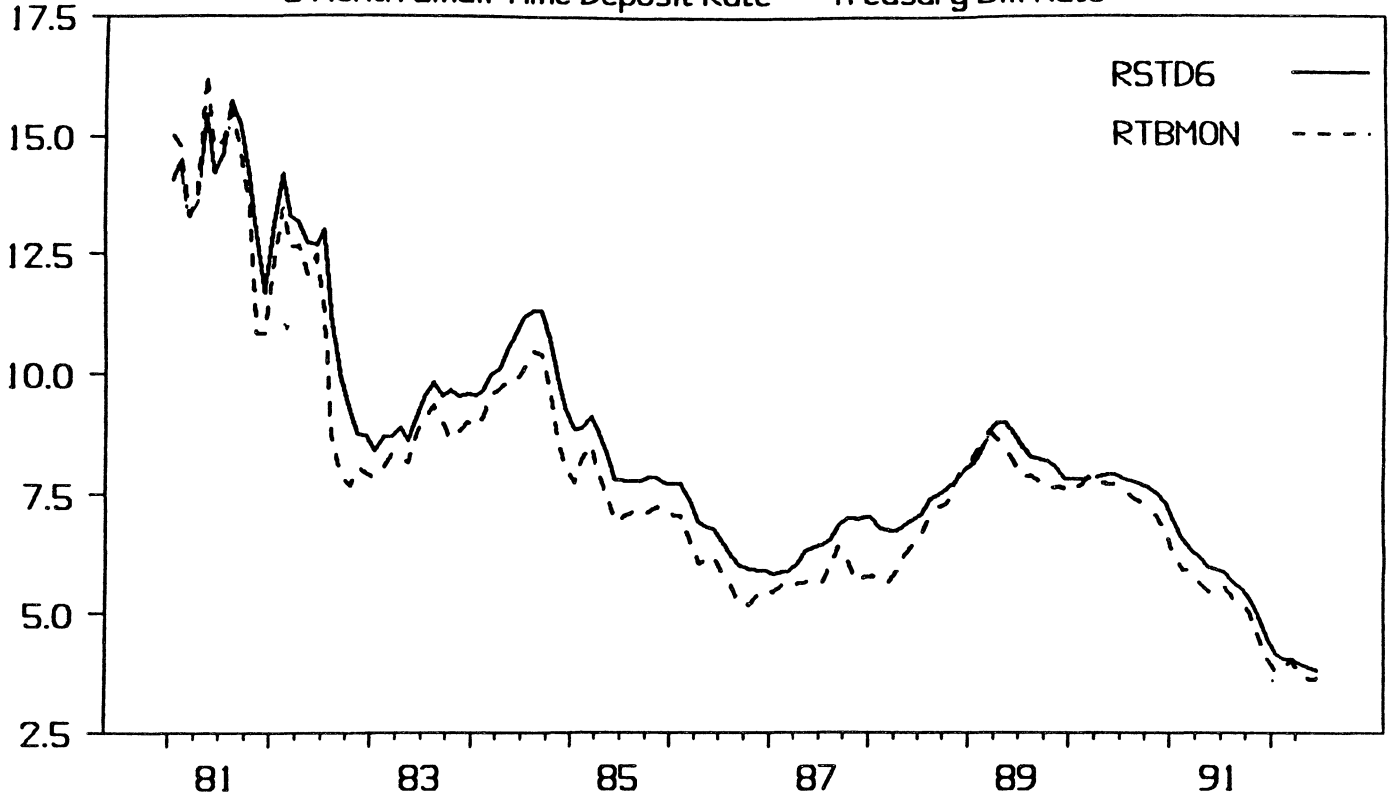


Figure 8  
6 Month Small Time Deposit - OCD Rate Spread

