1. Shadow Open Market Committee Members - March 1983
2. SOMC Policy Statement, March 7, 1983
3. Position Papers prepared for the March 1983 meeting:
   Monetary Policy as a Random Walk Through History, Karl Brunner, University of Rochester
   Chicken Little and the Monetary Aggregates, James M. Johannes and Robert H. Rasche, Michigan State University
   Monetary Policy Options and the Outlook for 1983, Jerry L. Jordan, University of New Mexico
   Economic Projections, Burton Zwick, Prudential Insurance Company of America
   Budget Outlook, Rudolph G. Penner, American Enterprise Institute
   The Recession of 1981/1982 in the Context of Postwar Recessions, Karl Brunner, University of Rochester
   Trade Policy and Current Economic Problems, Jan Tumlir, GATT, Geneva, Switzerland
Shadow Open Market Committee

The Committee met from 2:00 p.m. to 7:30 p.m. on Sunday, March 6, 1983.

Members of SOMC:

PROFESSOR KARL BRUNNER, Director of the Center for Research in Government Policy and Business, Graduate School of Management, University of Rochester, Rochester, New York. (Co-Chairman)

PROFESSOR ALLAN H. MELTZER, Graduate School of Industrial Administration, Carnegie-Mellon University, Pittsburgh, Pennsylvania. (Co-Chairman)

DR. HOMER JONES, Retired Senior Vice President and Director of Research, Federal Reserve Bank of St. Louis, St. Louis, Missouri.

DR. JERRY L. JORDAN, Anderson Schools of Management, University of New Mexico, Albuquerque, New Mexico.

DR. RUDOLPH G. PENNER, American Enterprise Institute, Washington, D.C.

PROFESSOR ROBERT H. RASCHE, Department of Economics, Michigan State University, East Lansing, Michigan.


DR. BERYL SPRINKEL, Executive Vice President and Economist, Harris Trust and Savings Bank, Chicago, Illinois.*

DR. BURTON ZWICK, Vice President, Economic Research, Prudential Insurance Company of America, Newark, New Jersey.

* On leave from the SOMC; currently Under Secretary of the Treasury for Monetary Affairs.
Economic recovery is underway, and inflation has been reduced temporarily. Recent declines in the market price of oil contribute to economic recovery and to the decline in the reported rate of inflation by lowering costs of production and prices. These one-time effects sustain the illusion that inflation is no longer a problem.

The Administration's challenge is to convert these temporary gains into lasting benefits. Recent monetary and fiscal policy actions, if continued, will not meet that challenge. They will not achieve the high rate of capital investment and sustained productivity growth required for lasting economic growth, and they will renew inflation. Uncertainties about domestic monetary and fiscal policies and international trade and lending policies are the main reasons that interest rates remain at levels that reflect the risk of a return to stagnation and inflation in the next two or three years.

The recessions of 1980 and 1981-82 are the high price paid for the slower inflation that we now enjoy. These sacrifices will be wasted if the Federal Reserve — urged on by some in the Congress and the Administration — continues on its current mistaken course. The next round of inflation is always set in the policies pursued during the recovery from the preceding recession. To prevent the next round of inflation, the Federal Reserve must slow money growth now. We recommend that the growth rate of money, currency and checkable deposits, should not exceed 5-1/2% from 4th quarter 1982 to 4th quarter 1983.

Policy Errors and Inconsistencies

Rapid monetary growth threatens to squander the gains achieved at the cost of the two recent recessions and prolonged stagnation from 1979 through 1982. The original monetary policy of the Administration — to cut money growth in half by 1986 — has been abandoned. The debate about measures of money is a smoke screen to hide a resumption of inflationary policies. Such policies will produce higher interest rates and sustain high risk premiums in current interest rates. The Administration and the Federal Reserve have no policy to reduce these risk premiums and sustain a low rate of inflation.
Current monetary, budget, trade and international lending policies are mutually inconsistent. Furthermore, they are inconsistent with a return to high growth and economic stability.

**Inflationary policies will not reduce the budget deficit**

In the past, inflation reduced budget deficits by raising taxes, through the process known as "bracket creep." In the late seventies, this became the principal means of reducing projected deficits. Indexing of taxes, effective in 1985, removes this source of revenue.

Congressional Budget Office estimates for 1984 through 1988 include $390 billion of expenditures to index current spending and maintain the real value of military, entitlement and discretionary spending programs. In addition, inflation is projected to increase interest expense by more than $250 billion during the same period. Ending inflation will eliminate these expenditures.

**Sustained budget deficits reduce long-term growth**

Government borrowing to sustain high rates of growth of defense spending and transfer payments undercuts the effects of the tax rate reductions that were introduced to increase investment. Government spokesmen now talk about a recovery of consumption spending, whereas they used to talk about a surge of investment. Unless resources are shifted from consumption to investment, productivity gains will be limited to cyclical, not secular increases. Long-term productivity growth will remain low, and the economy will return to the stagnation of the recent past.

**Sustained budget deficits and high money growth would encourage protectionism and worldwide inflation**

High money growth would increase domestic spending, but much of the increased spending would be for imports. If foreign governments choose to use the dollars we pay for imports to buy our bonds, they would help to finance our budget deficit, but output and employment in manufacturing industries — cars, trucks, metals, auto parts, machine tools, and others — would rise slowly. Estimates of the 1983 merchandise trade deficit now run as high as $75 billion, before adjustment for the recent decline of oil prices. Trade deficits of this magnitude could help to
finance the budget deficit, but would also slow the recovery of domestic output and the decline in unemployment.

Politicians, workers and businessmen in traditional manufacturing industries would conclude that we must have protection against imports because we cannot compete. This is a wrong conclusion. It ignores the effects of decisions by foreigners to exchange their goods for our bonds. Such decisions would produce higher world inflation and slower recovery of domestic employment.

**Protectionist policies hinder debt repayment by debtor countries**

Debtor countries can only pay interest and reduce existing foreign debt by increasing net exports. Protectionist policies reduce trade and economic efficiency, and increase the burden of foreign denominated debt on the debtors. Restrictions on imports of agricultural products and raw materials, or subsidization of such products by the industrialized countries, are particularly harmful because these are major exports of many of the debtor countries. The less developed producers of these primary products use the foreign exchange they earn to buy manufactured goods from other debtor countries, as well as from industrialized countries.

**Policies toward foreign debt encourage inefficient use of domestic saving**

Some agencies or branches of the government criticize commercial bankers for lack of discretion and past errors and call for new laws and restrictions on foreign lending. Other agencies or branches urge them not to reduce existing loans to debtor countries, or to increase lending.

There are three kinds of international debt. One kind of debt represents borrowing that was used to build or expand productive enterprises. When world growth resumes, many of these enterprises will be profitable and will be able to pay interest and reduce their borrowing. A second type of borrowing was used to delay reductions of consumption or to finance the flight of capital from inflationary or politically unstable countries. Most of this debt is unlikely to be serviced. Lenders should be encouraged to write these loans down to their true market value. A third type of debt is intermediate between the others. Investments were made based on projections that, after the fact, will not be realized. Investments in oil are the most obvious but not the only example. Additional lending will not correct the original mistakes.
Federal Reserve and Administration policies do not encourage banks to distinguish between the various types of debt or to recognize implicit loan losses. Instead, lenders are encouraged, and even urged, to maintain or increase the amount of lending. This policy allocates saving inefficiently, discourages productive investment at home, lowers standards of living, and delays adjustment in the debtor countries.

Federal Reserve claims about money growth are unsupported

The Federal Reserve has claimed that recent changes in regulation make estimates of money growth unreliable. They justify the return to highly inflationary monetary policies by claiming that the principal monetary aggregates have lost their meaning. No evidence has been given to support their claim.

Our estimates suggest that, for the year ending 4th quarter 1982, deregulation increased the growth rate of money — currency and checkable deposits — by no more than 4% in the fourth quarter and no more than 1% for the year. Removing the effect of deregulation leaves a 7.5% adjusted annual growth of money, a rate far above the announced target and not very different from the inflationary rates of the late 1970s. Errors in forecasting money growth, using our procedures, are no larger than in the past. Federal Reserve statements to the contrary can only reflect inefficient or improper control procedures.

Recommendations

We recommend the following policies to restore the economy to stable non-inflationary growth.

Fiscal policy

Based on our current economic forecasts, and without allowance for the current favorable oil shock, we project deficits in the range of $175 to $200 billion in fiscal years 1983, 1984 and 1985. Continued large deficits result from rapid growth of government spending. The path of total government spending for the remainder of the decade will be largely determined by spending for defense, pensions (mostly social security), and health care services. Together with interest on the debt, outlays on these programs will account for about 80 percent of total government spending.
in the future. Congress and the Administration should reduce the growth rate of real Federal outlays on these programs below the rate of sustainable GNP growth. This would require a re-examination of the defense spending path, and significant structural reforms in retirement and health programs.

**Tax indexation**

Indexation of income taxes should be maintained. Indexation removes the incentive for government to finance its spending by inflation.

**Monetary policy**

The current inflationary policy should end. The growth rate of money should return to a disinflationary path. We recommend an annual growth rate of money (M1) not to exceed 5-1/2% in the year ending 4th quarter 1983.

Again, we urge the Federal Reserve to improve control procedures and we challenge them to produce some evidence to support their statements about the effects of deregulation on the monetary aggregates. Proposals to set targets for interest rates — real or nominal — would be destabilizing.

**International indebtedness**

The international debt crisis is a temporary phenomenon. It requires a temporary (self-liquidating), not a permanent, increase in the lending capacity of the International Monetary Fund. We oppose a permanent increase in the IMF quota.

The international debt problem should not be an excuse for inflation, deflation or bailouts that socialize losses.

International loans should be valued on the books of the lenders to reflect their real value. Outstanding loans that are unlikely to be repaid in full should be written down, over time, to current economic value.

Central banks and governments should announce in advance that they will accept responsibility to serve as lender of last resort to banks or branches operating in their country, regardless of the nationality of the owners. Central banks of major countries bear responsibility to prevent a financial panic stemming from failures of banks that issue liabilities denominated in their currencies.
Trade policy

Growing restrictions on international trade in agricultural and manufactured goods reduce opportunities for debtor countries to earn foreign exchange. These restrictions lower standards of living in debtor and creditor countries.

The United States should take the leadership in international economic policy by calling for another round of phased reductions in barriers to capital movements and in quotas, tariffs and other restrictions affecting trade in agricultural and manufactured goods.

Medium-term strategy

The long-term problems of inflation, growth and recovery cannot be solved by short-term policies. The failure to pursue a medium-term strategy for budget, trade, lending and monetary policies increases uncertainty and delays recovery.
MONEYARY POLICY AS A RANDOM WALK THROUGH HISTORY
Karl BRUNNER
University of Rochester

I. THE VICTORY OF MAGOOVIAN POLICY

Some readers may remember Mr. Magoo. He did not see much but he knew something about policymakers. He was prone to warn us that some procedures or moves were just an expression of "policy" involving really little reason. We should probably qualify this statement and admit that monetary policymakers usually have "reasons". The crucial question involves the nature and relevance of these reasons. Whatever these reasons may have been late last summer, they produced a major shift in the evolution of our monetary affairs.

We observe the implications of an essentially unreliable commitment to an anti-inflationary policy. This is possibly the fifth time since the age of permanent worldwide inflation emerged over history's horizon that our monetary authorities ended an anti-inflationary intermezzo and reaffirmed their de facto commitment to the uncertainty of discretionary adjustments.

The change in course was signaled by the final disappearance of any semblance of monetary control. The available indications suggested a full return to a strategy of interest targeting with little concern for the resulting monetary growth. The rate of increase in M-1 over two quarters from II/1982 to IV/1982 almost reached the postwar record for a two quarter rise experienced in 1980. The rate of monetary growth exhibited by the last quarter of 1982 yielded with 17.1 percent p.a. a postwar record for one quarter changes. The rate of acceleration observed in the second half of 1980 however still measures the postwar record. Lastly, the abandonment of monetary control was also signaled with the recent announcement of "non-targets" for M-1 by Chairman Volcker. The target range for M-1 was set for 1983 from 4 percent p.a. to 8 percent p.a. The circumstances of the announcement made it clear that this wide band expresses the Fed's drift away from any pretence to follow a strategy of monetary control. The target range covers simultaneously a policy of maintained disinflation (at 4 percent p.a.) and a policy of renewed and accelerating inflation (at 8 percent). The span between the upper and lower boundary moreover subsumes major differences in
the shorter-run movement of output. A 4 percent growth would produce a non-negligible monetary deceleration and consequently a retardation in output by next winter. No retardation would appear with monetary growth along the upper boundary before next year. The FOMC also conveyed early this year that the return to a policy of monetary control remained indefinite and it offered no clear commitment in this respect.

II. THE RE-AFFIRMATION OF DISCRETIONARY POLICYMAKING

The events described express a pronounced re-affirmation of discretionary policymaking. The Federal Reserve authorities traditionally oppose any pre-committing strategy. This opposition was clearly revealed by the behavior of the Fed's representatives on the President's Gold Commission. Any pre-committing strategy instituted by some monetary standard imposes more or less serious constraints on the Central Bank's behavior. A standard, whether a well defined commodity reserve or a constant monetary growth standard, lowers the Fed's range of admissible actions and lowers the cost of monitoring the performance of the Central Bank. The policy bureaucracy suffers under the circumstances a loss in status on the political market. A policy of monetary control executed in accordance with publicly announced rules has been anathema to the Fed since the first days the idea was proposed. The actual practice of monetary targeting and the tactical implementation of monetary control was substantially influenced by the Fed's determined adherence to a pattern of discretionary policies. The reader may find some elaboration on this theme in the position paper prepared for the session of March 1982.

An inherent unpredictability of monetary evolution forms the crucial characteristic of discretionary policymaking. Monetary growth is essentially controlled under the circumstances by a random process with shifting and unclear probabilities. The discretionary procedure produces a policymaking pattern which raises uncertainty about monetary prospects. It moreover increasingly operates in our contemporary world with an inflationary bias. Monetary growth is substantially exposed in this context to all the shocks operating on the economy. A wide array of real and foreign monetary shocks determines the pattern of monetary growth. It produces a state of affairs with a large dose of built-in uncertainty affecting interest rates and output.

The Fed's almost explicit reaffirmation of discretionary policymaking and the associated burial of monetary control was encouraged by political influences outside the Fed. Congress lamented about interest rates and voices advocating abandonment
of monetary control multiplied. The Secretary of the Treasury argued over more than a year for short-run adjustments in policy. Influential members of the White House staff apparently nudged the Fed away from an anti-inflationary monetary control. These forces were also joined by the Chairman of the Council of Economic Advisers. His public statements and arguments at Congressional Hearings advocated judgmental discretion and short-run "flexibility" in the formulation and execution of policy.

It is worth noting at this stage the major difference in policy conception expressed by the President's Economic Report for 1982 and 1983. The first Report prepared by the Reagan Administration dealt in some depth with monetary policymaking. A special chapter raised fundamental questions about the desirability of an "institutionalization" of monetary policy. The design of such "institutionalization" should raise the predictability of monetary evolution and lower frequency and range of erratic monetary shocks. The chapter's basic thrust was hardly supportive of the Fed's discretionary tradition. The current Administration's second Report, recently released, attends quite marginally to monetary policy. It conveys a sense that monetary policy be trustfully left to the good offices of the Federal Reserve authorities. It also suggests that realism demands a good measure of judgmental discretion. The general sense conveyed is thus essentially a position supportive of the Fed's strategic and tactical traditions. Policymakers are counseled to avoid "doctrinaire attachment to arbitrary standards". They are also admonished that "the exercise of discretion must not degenerate into unprincipled fine tuning". This advice is sufficiently elastic in content to satisfy the Fed's tradition and justify any pattern of discretionary policymaking. The Report however fails to support the Fed on all counts. The murky case for a discretionary approach is balanced by a forthright critique of interest rate targeting.

III. THE JUSTIFICATION OF DISCRETIONARY AND ACTIVIST POLICY

Several strands of thought merge in the justification of discretionary activism in monetary policymaking. The idea that Central Banks should "look at everything" and "flexibly adjust to circumstances" still finds much sympathy and has an intuitive appeal. But, of course, nobody can look at everything. Attention is unavoidably selective and guided by some prior conception. The relevance and reliability of the guiding conception is the crucial problem associated with this justification. The consequences of a strategy of "flexible adjustment to prevailing circumstances" are highly sensitive to the reliability of the policymakers' detailed knowledge of the
economy's response structure. A solid knowledge of the economy's responses offers wonderful opportunities for flexible adjustments to offset the effect of ongoing shocks on the economy. But in spite of all the claims to such knowledge, implicitly raised by advocates of activist policymaking, we do not possess the required degree of knowledge. The pursuit of flexible adjustments in the actual context of uncertainty about important aspects of the economy becomes thus a speculative game. Attempts to offset shocks are translated with substantial likelihood into effects reenforcing the shocks operating on the economy.

The problem with activist adjustment may be outlined with the following argument. There is substantial agreement that monetary policy should be geared to produce a growth of nominal GNP along a desired path. The Shadow joins this agreement. The problem begins with the implementation. The Shadow uses information about the normal rate of real growth and the goal of a stable price-level to determine the desired growth path of nominal GNP. This path and the trend in velocity yield the benchmark of a non-inflationary monetary growth. This benchmark level should guide the actual monetary growth.

The alternative implementation assumes that a better performance can be assured by not pre-committing monetary growth in the manner indicated. Adjustment to new information cast up by the economy is claimed to offer superior results. This argument was used of course to justify the policies of the last seventeen years which brought us to the state experienced over the past years. But let us dismiss this little historical detail and consider the current arguments. A proposal for GNP targeting remains by itself somewhat empty or at least incomplete. We need to know how such targeting is translated into specific behavior pursued by the Central Bank. Suppose we stipulate, as some did, that monetary growth $m_t$ in a quarter $t$ should be adjusted in accordance with the following procedure

$$m_t = c - \mu (a - m_{t-1} - v_{t-1}) + \varepsilon_t$$

where $a$ is the targeted growth in nominal GNP, $v$ the monetary velocity and $\varepsilon$ expresses the stochastic element in the money supply process. The magnitude $c$ describes the monetary growth to be maintained whenever the previous period's growth in nominal GNP (i.e., $m_{t-1} + v_{t-1}$) equals the targeted increase. The choice of $c$ depends on the desired longer-run behavior of the price level, and the expected trend in velocity and normal output. The parameter $\mu$ determines the rate of adjustment in monetary growth to the observed divergence in target and actual growth. Some tentative analytic elaborations show that in the absence of serial correlation in the
random component of monetary growth the optimal choice of \( \mu \) is zero. This means that in the absence of temporal dependencies between values of \( \varepsilon \) at different times the variability of \( (m+v) \), the growth in nominal GNP, is lowered by a constant monetary growth. This result holds even with a contemporaneous correlation between velocity changes \( v \) and the random disturbance \( \varepsilon \). The larger on the other hand the serial correlation of \( \varepsilon \), i.e., the more information past values of \( \varepsilon \) become in order to forecast the next observation, the larger is the best choice of the adjustment parameter.

The implication of this result is somewhat intriguing. The occurrence and magnitude of serial correlation in the random disturbance is not independent of the policy regime and the institutional arrangements affecting the money supply process. This means that this serial correlation can be manipulated to some extent by the policymakers. A slow "reentry" of monetary growth to the target path distributed over many months would exemplify a choice of tactical procedure raising the serial correlation of \( \varepsilon \). Policymakers are thus in a position to foster conditions justifying a flexibly activist adjustment to the observed current conditions. Tactical choices lowering serial correlations to zero however lower under a constant monetary growth path the variability of the growth in nominal GNP to below the level observed with a serially correlated \( \varepsilon \). We note in passing that the statistical work on monetary control prepared by Johannes-Rasche for the Shadow suggest negligible serial correlation, if any at all, for the random component. This holds most particularly (but not alone) in case velocity is a random walk. The evidence from the postwar period suggests that velocity seems to be approximately governed by a random walk with drift expressing a trend. This means that past deviations from trend contain little, if any, information about the future values of such deviations. Any particular sub-sample (e.g., for the 1950's) may yield evidence of an augmented random walk, i.e., a random walk representing the permanent condition of velocity supplemented by a purely transitory component negatively correlated with the permanent innovation. But these patterns do not persist over sub-samples and offer a poor and unreliable basis for the choice of an adjustment parameter. A determined choice of a positive \( \mu \) made under these circumstances produces very likely a more variable performance of aggregate nominal demand for output.

The problem may be approached in a different manner. This accounts for the objection that the prior procedure does not exploit all available information. Some may argue that the monetary growth \( m_t \) should be set in accordance with
\[ m_t = a - Ev^*_t + \epsilon_t \]

where \( a \) denotes again the targeted nominal growth and \( Ev^*_t \) is the expectation of velocity changes based on all information available at the time. Once again there is unavoidably a random component \( \epsilon \). The variability of aggregate nominal demand around the target path can now be described by the following expression

\[ \text{variance of } v + \text{variance of } (Ev^*_t - Ev) + \text{variance of } \epsilon \]

The covariances are disregarded. The second component is of particular importance for our purpose. The first component states the best result that can objectively be achieved under full knowledge of the true structure of the stochastic process controlling velocity. The expectation \( Ev \) describes the true, objective, mathematical expectation of \( v \). But actual expectations \( \hat{Ev} \) may diverge and adjustments based on such estimates produce a positive second component in the variability measure of aggregate nominal demand. The strong indication that velocity is a random walk with drift suggests that there is no improvement to be expected beyond accounting for the drift (i.e., \( Ev = \text{trend} \)) and tactical choices which minimize the last component. Ambitious discretion with "looking at everything" raises most probably the variability of aggregate nominal demand with a positive middle component due to the misguided effort to pretend the possession of a non-existent knowledge. The increase in variability due to misperceived activism under the assumption that velocity is an augmented random walk can be expressed by the formula \( \sigma^2_a(\Theta^* - \Theta)^2 \). The term \( \sigma^2_a \) is the variance of the innovation in velocity, \( \Theta \) the true parameter characterizing the augmented random walk (zero in case of a random walk) and \( \Theta^* \) is the policymakers value guiding his instrument setting.

These issues are less esoteric than they might appear. They are addressed to the claims advanced on behalf of a discretionary and activist regime adjusted to target the growth of nominal GNP. They also bear on the current discussion. The Federal Reserve authorities suspended at least for the moment any meaningful targeting of monetary growth and slid back, against the advice of the President's recent Economic Report, into an interest rate strategy. This action is justified in terms of the uncertainty about the measures of the monetary aggregates M-1 and M-2 resulting from the innovations initiated this winter. Chairman Volcker emphasized in his interview on Meet the Press (February 27, 1983) that monetary aggregates, specifically M-1, are "confusing and distorted". This justifies apparently that movements in M-1 be dismissed from considerations. The Fed appears to suggest that M-2 is much less affected by recent institutional changes.
The Fed has not supported its positions with any evidence and it is not clear whether it has initiated studies to examine the problem. We challenge the Fed to present us with a coherent examination of the changes occurring. The statements made about M-1 seem very dubious indeed and one wonders whether the Fed possesses any relevant foundation. The Johannes-Rasche projection of the monetary multiplier for the fourth quarter yields an underestimate of about 3 percent. This result suggests that the multiplier moved to this extent beyond the pattern consistent with its past behavior. If we consider this to be an effect of the ongoing innovations and correct the observed growth in M-1 correspondingly, then there still remains an excessive acceleration to about 14 percent for the quarter.

Two distinct aspects of the change need be examined: the measurement error and possible changes in the behavior of true measures of velocity and monetary multiplier. Both aspects will in general be revealed by the actually observed behavior of the two magnitudes. The occurrence of new measurement errors modifies the level of the velocity and the monetary multiplier of M-1 in opposite directions. The same holds for M-2. It follows that new measurement errors do not affect the velocity of monetary base. The Fed could thus shift over a transition period, until more reliable information is available, to a direct targeting of the monetary bases instead of shifting to an unjustifiable interest rate strategy.

The case for the assumption of substantial new measurement does remain dubious and offers no adequate basis for abandoning anti-inflationary policy. A growth rate of about 8 percent p.a. in the monetary base can hardly be described to represent the execution of a policy addressed to lower inflation, even when we consider some measurement errors in M-1 or M-2.

Probably the more important aspect emphasized by the Fed involves the possibility of changes in velocity and multiplier behavior. Several types of changes should be distinguished. The new accounts offered by banks may permanently change the level of velocity, change its trend or change permanently the variance of its stochastic innovation. The same division applies to the monetary multiplier. We need not consider transitory changes. Such changes offer no case for any changes in procedure or setting of policy. Additional transitory noises in the system suggests on the contrary that anti-inflationary policy should be continued on the course announced in prior years. The nature of the underlying adjustments indicates that any permanent changes in level and trend of M-1 and M-2 would most probably be negatively correlated. The same situation applies also to level and trend of the two monetary multipliers. This implies that apart from the effect of lower inflation expectations in
ease anti-inflationary policy be continued, the pattern of the base velocity will not suffer any significant changes over the next two years. The conclusion derived from considerations of measurement extend to the current case. Possible doubts about the changes in velocity and multiplier patterns can temporarily be resolved by using the monetary base directly as a target, instead of as an instrument to control monetary growth. This conclusion is not affected by changes, particularly not by increases, in the variance of stochastic innovations moving velocity and multiplier. A larger variance erodes the case for discretionary adjustments even more. This was at least partly recognized by the President's Economic Report: "The less predictable they (i.e., the innovations) are the more likely it is that any attempt at countervailing shifts in the money stock will add to the overall volatility of nominal GNP". (p. 23).

IV. THE UNCERTAIN FUTURE

The position paper noted in section I the apparent abandonment of anti-inflationary policy. A persistent growth of the base at 8 percent-9 percent p.a. will produce an inflation of at least 6 percent-7 percent p.a. by the second half of 1984. With a corresponding inflation premium supplemented by a risk premium (note on this count the position paper of March 1982) long term interest rates would stay in the double digit range. This scenario clearly implies that our monetary authorities and President Reagan's Administration "have thrown away the game". Permanent and erratic inflation would be assured. The substantial fall in the price of oil will obscure for a while the longer-run consequences of this policy. But they would become visible by the second half of 1984.

Two alternative scenarios can be considered. The Fed may be induced by the consequences of this return to an inflationary policy to change its course again by early 1984. This would produce a retardation in economic activity at the time of an accelerating inflation a short period before the election in November 1984.

A third scenario involves a correction in course this spring or summer in response to signs of a strong recovery. An earlier correction could prevent a major acceleration of inflation but would still induce some retardation in activity by early 1984 depending on the magnitude of the monetary deceleration.

We confront thus once more, as on several occasions in the past, an unfortunate dilemma as a result of the Fed's past behavior. We have the choice between monetary adjustments later (1985, 1984 or this summer) or immediately now. This implies a choice between retardation and probably recession and inflation in 1985, the second
half of 1984, or a significant retardation in the first half of 1984 with some moderate inflation acceleration, or lastly a retardation of activity emerging in the second half of 1983 with a subsequent improvement in 1984.

It would seem that an immediate return to an anti-inflationary policy is our best choice at this time. The Administration moved a long way to lower inflation and abandoning the course, however tempting immediately, will produce social costs over the future vastly exceeding the social cost remaining for the course. Previous position papers elaborated this point in some detail. The Fed moreover received some help from the oil market. The fall in the price of oil contributes this year to contain the (short-run) rate of inflation. It also stimulates economic activity as of any given monetary growth. It offers thus a good opportunity for an immediate correction in monetary policy with an impact on activity attenuated by the fall in the oil price. But the order of magnitude of the correction is not negligible. The new course should produce at most a growth in M-1 of about 6 percent p.a., say 5 1/2 percent p.a. from the fourth quarter of 1982 to the fourth quarter of 1983. With the monetary multiplier expected to rise (according to estimates prepared by Johannes-Rasche) by about 1 1/2 percent p.a. over this period the growth of the monetary base should not exceed about 4 1/2 percent p.a. This proposal does involve a substantial decline in monetary growth. It measured about 8 1/2 percent from the fourth quarter 1981 to the corresponding quarter in 1982. It grew at about 14 percent-15 percent from July 1982 to February 1983. It increased in January 1983 at 10 percent p.a. The goal specified implies therefore a substantial decline in monetary growth to at most 4.8 percent p.a. beyond January to the end of the year. We can hardly avoid an unfortunate relapse of economic activity in the second half of 1983 followed by a new surge in 1984.

This unhappy choice is simply the consequence of the discretionary arbitrariness of Federal Reserve policymaking. The nature of our monetary policymaking thus remains our central problem. It has been confronted with uncustomed explicitness in the Economic Report of the President for 1982 but glossed over in the current report with empty phrases. With a pattern of discretionary activism we must expect repetitive occurrences of large and persistent swings in monetary growth around a gradually rising trend. This is the pattern of increasing and erratic inflation already experienced over seventeen years. This pattern would worsen in the future if we persist with the hoax of discretionary policymaking. The questions addressed last year by the authors of the Economic Report need be seriously answered. The ultimate control over our monetary affairs cannot be reasonably granted to a "well meaning Federal Reserve bureaucracy". This control and the resulting protection against
persistent inflation or deflation can be achieved with the choice of a monetary standard. A standard imposes constraints on the behavior of a central bank moderating its discretionary exploitations and accommodating exercises which created the deflation of the 1930's and the inflation of the 1970's. The choice between alternative standards would moreover be rationally guided by the respective consequences expressed in comparative performance characteristics. The optimal choice is still an open issue. The Shadow however does argue that a constant monetary growth standard would lower the monetary shocks and the exposure to foreign shocks prevailing under a gold standard. Whatever choice we ultimately prefer, the central issue remains the taming of the government's arbitrary monetary powers.
During recent months the behavior of the various monetary aggregates in the United States has been the subject of almost continuous commentary. The most frequent conclusion is that the observed behavior has been dominated by a number of unique events. First it was alleged that the behavior of \( M_1 \) was dominated by the "parking" of maturing All-Savers balances in transactions accounts. Next it was alleged that various distortions were occurring as a result of portfolio shifts in anticipation of the introduction of Insured Money Market Accounts. Then Insured Money Market Accounts were introduced in December 1982, and rapid growth of such accounts was observed and cited as a dominating portfolio shift. Finally, Super NOW's introduced in January 1983, have been thrown into the discussion for good measure.

This general concern about the impact of regulatory change on the behavior of the monetary aggregates appears not only in the popular press, but it appears also to have been a persuasive force in the deliberations of the FOMC. Quotations from recent Records of policy Action indicate:

With respect to the period ahead, the Committee continued to face uncertainties about the interpretation of the behavior of the monetary aggregates in general, arising from the impact of the current economic environment on precautionary demands for money and liquidity. Moreover, the behavior of \( M_1 \) in particular during the final three months of the year would inevitably be distorted by two institutional developments. First, a very large volume of all savers certificates would mature in the first part of October, and disposition of the proceeds could be expected to induce temporary bulges in both the demand deposit and NOW account components of \( M_1 \). Second, later in the quarter, as the Depository Institutions Deregulation Committee (DIDC) implemented recent legislation, depository institutions would be authorized to offer a new account (or accounts) that
would be free from interest rate ceilings, would be usable to some degree for transaction purposes, and would be competitive with money market mutual funds. The new account was likely to have a substantial impact on the behavior of $M_1$, but no basis existed for predicting its magnitude. While the new account seemed likely to have a depressing effect on currently defined $M_1$ as it drew money from NOW accounts, the direction of the overall effect was in some doubt since that would depend in part on the exact characteristics of the instrument or instruments authorized by the DIDC. The new instrument could include even more transaction features than the account specifically provided for in the legislation. The new instrument could also be expected to affect the composition of $M_2$ and perhaps in some degree its total as well. It seemed clear, however, that the new instrument would affect the behavior of $M_2$ and other broader aggregates to a much smaller extent than that of $M_1$. (Record of Policy Actions, October 5, 1982. Federal Reserve Bulletin, December, 1982, p. 764.)

In their discussion the Committee members agreed that the behavior of $M_1$ would continue to be distorted by institutional developments. The first involved the large buildup of checkable deposits associated with the maturing of a very large volume of all savers certificates, especially in early October. The resulting bulge in $M_1$ growth had persisted somewhat longer than some members had anticipated; but, according to a staff analysis, $M_1$ growth could be expected to decelerate over the balance of the quarter as the transaction balances built up from maturing all savers certificates were invested or drawn down. Growth of $M_1$ and also $M_2$ could be positively affected in the near term, however, by a possible buildup of balances for eventual placement in the short-term deposit account that had recently been authorized by the Depository Institutions Deregulation Committee, effective December 14, 1982. It was generally expected that the new account, which would be free from interest rate ceilings and could be used to a limited extent for transaction purposes, would draw funds from regular transaction accounts, thereby tending to reduce $M_1$ after its introduction. In view of these institutional distortions, the Committee decided that it would continue to give much less than the usual weight to $M_1$ and
that it would not set a specific objective for its growth over the fourth quarter. (Record of Policy Actions, November 16, 1982. Federal Reserve Bulletin, January, 1983, p. 19.)

It is our contention that all of this discussion is pure speculation, and is inconsistent with the observed facts. Stated slightly differently, the behavior of \( M_1 \), \( M_2 \), and \( M_3 \) over the fourth quarter of 1983 is dominated by the behavior of any of several reserve aggregates, including nonborrowed reserves, and the predictable behavior of the corresponding money multiplier. The differences between observed and predicted values of the various money multipliers are not at all unusual by historical standards; indeed they are quite small.

A few words of explanation are in order about our current forecasting techniques. In the past, we have reestimated our multiplier component modes only infrequently, and generally not included data from the most recent months in the sample for the estimation. We are in the process of completing an analysis in which the multiplier component modes have been used in an ex-ante forecasting mode similar to that which we believe that Federal Reserve economists would use if they applied such models in a policy environment. For the five year period from mid-1977 to mid-1982, we have reconstructed as accurately as possible, the data set on the various monetary and reserve aggregates that existed during each month. This was no small task because of the tremendous number of revisions, both conceptual and statistical that occurred over this period. After we assembled this data set, each of our component models was estimated on the data set ending at time \( t \), and from those estimates a one period ahead forecast was constructed for period \( t+1 \). These forecasts were then compared with the initial released data at \( t+1 \) to derive a true ex-ante forecast error for \( t+1 \) based on all the information, but only the information available at \( t \). The data set for estimation was then updated to include the information for \( t+1 \) and all of the revisions that had been introduced for data through \( t \), and the model was reestimated over the longer sample and an ex-ante forecast was constructed for \( t+2 \) based only on the information available through \( t+1 \). We have not fully completed the analysis of these forecasting experiments. However, the same methodology is applied in the forecasts that we are presenting here. October 1982 forecasts are based on the data through September 1982; November 1982 forecasts are based on new estimates of the models including all of the data through October 1982. Similarly for December 1982 and January 1983.
Tables 1-3 contain information on the forecasts of multipliers for $M_1$, $M_2$, and $M_3$, associated with the four reserve aggregates the monetary base, the net monetary base, total reserves and nonborrowed reserves. The risk in presenting all of this information is that the trees will obscure the forest. The advantage of presenting all of the information is the overwhelming consistency of the data in support of our contention that the allegations that the behavior of the various monetary aggregates has been distorted in recent months by financial innovation and/or regulatory change is myth, not reality. The first thing that is noteworthy in Tables 1-3 is that the inferences that can be drawn are independent of the data revisions that have occurred over the past several months. There are no substantial changes in the multiplier forecast errors for any of the monetary aggregates because of measurement of those forecast errors against November, December, or January data.

The first allegation is that concerning the affect of All Savers accounts that matured in large quantity in October 1982. The statement that is frequently made is that the proceeds of such deposits were "parked" in transactions accounts pending the definition of the terms on and the introduction of the new Insured Money Market Accounts in early December. It is our interpretation of this statement that there was an unusually large positive shock to the $M_1$ multiplier in October, possibly accompanied by a large negative shock to the multipliers for the broader aggregates. First, none of the multiplier forecasts in Table 1, with the possible exception of the $M_2$ and $M_3$ multipliers for unborrowed reserves are unusually large by historical standards. Second, the largest (in absolute value) forecast error for $M_1$ has a negative sign, that is the multiplier is overestimated not underestimated as required by the "parking" story.

For November 1982, the $M_1$ monetary base multipliers are indeed underestimated, and the magnitude of the forecast errors is close to twice the root-mean-squared error that we have observed in past samples. However, the percentage forecasts errors for the corresponding reserves and unborrowed reserves multipliers are very small by historical standards. Furthermore, there is no evidence of large overestimates of the $M_2$ or $M_3$ multipliers measured on any basis during this month. Our conclusion again is that there is nothing unusual in the behavior of the various aggregated prior to the introduction of IMMA's given the behavior of the various reserve and base concepts.

Finally, all of the forecast errors for December 1982 are negligible. In particular, the $M_2$ multiplier forecasts are slightly larger than the observed multipliers regardless of the reserve concept on which the multiplier is computed. This occurs in
| TABLE 1 |
| OCTOBER, 1982 |

<table>
<thead>
<tr>
<th>Forecast with 9/82 Data</th>
<th>Actual as of 11/82</th>
<th>Actual as of 12/82</th>
<th>Actual as of 1/83</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>COMPONENT RATIOS</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>k</td>
<td>.39764</td>
<td>.39234</td>
<td>.39234</td>
</tr>
<tr>
<td>t₁</td>
<td>4.57126</td>
<td>4.50358</td>
<td>4.50389</td>
</tr>
<tr>
<td>t₂</td>
<td>1.23142</td>
<td>1.22965</td>
<td>1.22965</td>
</tr>
<tr>
<td>g</td>
<td>.03535</td>
<td>.04904</td>
<td>.04904</td>
</tr>
<tr>
<td>r+λ</td>
<td>.02173</td>
<td>.02191</td>
<td>.02177</td>
</tr>
<tr>
<td>r+λ-ν</td>
<td>.02103</td>
<td>.021061</td>
<td>.021054</td>
</tr>
<tr>
<td>z</td>
<td>.06411</td>
<td>.065491</td>
<td>.065612</td>
</tr>
<tr>
<td>tₖ</td>
<td>.03532</td>
<td>.034299</td>
<td>.034299</td>
</tr>
<tr>
<td>b</td>
<td>.000433</td>
<td>.000199</td>
<td>.000199</td>
</tr>
</tbody>
</table>

| **Mᵢ MULTIPLIERS**     |                   |                   |                   |
| Base                   | 2.57784           | 2.59193(.55)      | 2.59648(.72)      | 2.59717(.75)      |
| Net Base               | 2.59198           | 2.59846(.25)      | 2.60303(.43)      | 2.60373(.45)      |
| Unborrowed Reserves    | 9.93002           | 9.84052(-.91)     | 9.84320(-.88)     | 9.84962(-.81)     |

| **M₂ MULTIPLIERS**     |                   |                   |                   |
| Base                   | 10.92529          | 10.89538(-.27)    | 10.91506(-.10)    | 10.91768(-.07)    |
| Reserves               | 41.21848          | 40.97454(-.59)    | 40.98774(-.56)    | 41.01309(-.50)    |
| Unborrowed Reserves    | 42.08499          | 41.36539(-1.72)   | 41.37884(-1.69)   | 41.40451(-1.63)   |

| **M₃ MULTIPLIERS**     |                   |                   |                   |
| Base                   | 13.17395          | 13.16254(-.09)    | 13.18619(.09)     | 13.18961(.12)     |
| Reserves               | 49.70213          | 49.50071(-.41)    | 49.51620(-.37)    | 49.54778(-.31)    |
| Unborrowed Reserves    | 50.74700          | 49.97289(-1.53)   | 49.98869(-1.50)   | 50.02066(-1.44)   |

Percent errors in parentheses.
### TABLE 2

**NOVEMBER, 1982**

<table>
<thead>
<tr>
<th>COMPONENT RATIOS</th>
<th>Forecast with 10/82 Data</th>
<th>Actual as of 12/82</th>
<th>Actual as of 1/83</th>
</tr>
</thead>
<tbody>
<tr>
<td>k</td>
<td>.39523</td>
<td>.38858</td>
<td>.38835</td>
</tr>
<tr>
<td>( t_1 )</td>
<td>4.49610</td>
<td>4.42899</td>
<td>4.41498</td>
</tr>
<tr>
<td>( t_2 )</td>
<td>1.23747</td>
<td>1.21292</td>
<td>1.21481</td>
</tr>
<tr>
<td>g</td>
<td>.031507</td>
<td>.023422</td>
<td>.023412</td>
</tr>
<tr>
<td>( r+\ell )</td>
<td>.022125</td>
<td>.022148</td>
<td>.022134</td>
</tr>
<tr>
<td>( r+\ell-\nu )</td>
<td>.021146</td>
<td>.021306</td>
<td>.021293</td>
</tr>
<tr>
<td>z</td>
<td>.06600</td>
<td>.063546</td>
<td>.063506</td>
</tr>
<tr>
<td>( t_c )</td>
<td>.03296</td>
<td>.032404</td>
<td>.031650</td>
</tr>
<tr>
<td>b</td>
<td>.000199</td>
<td>.000252</td>
<td>.000252</td>
</tr>
</tbody>
</table>

#### \( M_1 \) Multipliers

| Base             | 2.57749                  | 2.60629(1.11)    | 2.60819(1.18)    |
| Net Base         | 2.58392                  | 2.61454(1.18)    | 2.61643(1.25)    |
| Reserves         | 9.74910                  | 9.77342(.24)     | 9.79340(.45)     |
| Unborrowed Reserves | 9.84172               | 9.89040(.49)     | 9.91069(.69)     |

#### \( M_2 \) Multipliers

| Base             | 10.80657                 | 10.84456(.35)    | 10.82948(.21)    |
| Net Base         | 10.83351                 | 10.87888(.42)    | 10.86372(.27)    |
| Reserves         | 40.87476                 | 40.66643(-.51)   | 40.66332(-.52)   |
| Unborrowed Reserves | 41.20307               | 41.15318(-.27)   | 41.15033(-.27)   |

#### \( M_3 \) Multipliers

| Base             | 13.07147                 | 13.10070(.22)    | 13.09162(.15)    |
| Net Base         | 13.10407                 | 13.14215(.29)    | 13.13302(.22)    |
| Reserves         | 49.44153                 | 49.12676(-.64)   | 49.15737(-.57)   |
| Unborrowed Reserves | 49.91123                | 49.71477(-.39)   | 49.74611(-.33)   |

Percent errors in parentheses.
TABLE 3
DECEMBER, 1982
Forecast with Actual as
11/82 Data of 1/83

COMPONENT RATIOS

<table>
<thead>
<tr>
<th></th>
<th>Forecast with 11/82 Data</th>
<th>Actual as of 1/83</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>$k$</td>
<td>0.38638</td>
<td>0.38497</td>
</tr>
<tr>
<td>$t_1$</td>
<td>4.34983</td>
<td>4.32545</td>
</tr>
<tr>
<td>$t_2$</td>
<td>1.19846</td>
<td>1.16743</td>
</tr>
<tr>
<td>$g$</td>
<td>0.031434</td>
<td>0.031036</td>
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<tr>
<td>$r+v$</td>
<td>0.022108</td>
<td>0.022471</td>
</tr>
<tr>
<td>$r+v$</td>
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<td>0.021542</td>
</tr>
<tr>
<td>$z$</td>
<td>0.063820</td>
<td>0.062357</td>
</tr>
<tr>
<td>$c$</td>
<td>0.031972</td>
<td>0.031065</td>
</tr>
<tr>
<td>$b$</td>
<td>0.000252</td>
<td>0.000302</td>
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</tbody>
</table>

$M_1$ MULTIPLIERS

<table>
<thead>
<tr>
<th></th>
<th>Base</th>
<th>Net Base</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2.62301</td>
<td>2.61050(-.08)</td>
</tr>
<tr>
<td></td>
<td>2.63127</td>
<td>2.63085(-.02)</td>
</tr>
<tr>
<td></td>
<td>9.84431</td>
<td>9.84575(.01)</td>
</tr>
<tr>
<td></td>
<td>9.96169</td>
<td>9.98574(.24)</td>
</tr>
</tbody>
</table>

$M_2$ MULTIPLIERS

<table>
<thead>
<tr>
<th></th>
<th>Base</th>
<th>Net Base</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>10.78013</td>
<td>10.73677(-.40)</td>
</tr>
<tr>
<td></td>
<td>10.81408</td>
<td>10.77699(-.34)</td>
</tr>
<tr>
<td></td>
<td>40.45849</td>
<td>40.33210(-.31)</td>
</tr>
<tr>
<td></td>
<td>40.94089</td>
<td>40.90556(-.01)</td>
</tr>
</tbody>
</table>

$M_3$ MULTIPLIERS

<table>
<thead>
<tr>
<th></th>
<th>Base</th>
<th>Net Base</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>13.02757</td>
<td>12.92720(-.76)</td>
</tr>
<tr>
<td></td>
<td>13.06860</td>
<td>12.97562(-.71)</td>
</tr>
<tr>
<td></td>
<td>48.89327</td>
<td>48.56031(-.68)</td>
</tr>
<tr>
<td></td>
<td>49.47624</td>
<td>49.25076(-.45)</td>
</tr>
</tbody>
</table>

$t$ errors in parentheses.
spite of the spectacular growth of Insured Money Market Accounts during this month. This is very strong evidence in support of the hypothesis that all of the growth of these new accounts came from portfolio shifts out of other components of M₂ that are not included in M₁, and is consistent with the conclusion that we inferred from the October and November forecast errors that there was no "parking" of funds in transactions accounts in anticipation of the introduction of the IMMA's.
### \( M_1 \) - MONETARY BASE MULTIPLIER FORECASTS FOR 1983

<table>
<thead>
<tr>
<th>Month</th>
<th>1982 Actual</th>
<th>1983 Forecast</th>
<th>Year Over Year % Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jan.</td>
<td>2.62460</td>
<td>2.64079*</td>
<td>.61</td>
</tr>
<tr>
<td>Feb.</td>
<td>2.55694</td>
<td>2.59023</td>
<td>1.29</td>
</tr>
<tr>
<td>March</td>
<td>2.56627</td>
<td>2.59988</td>
<td>1.30</td>
</tr>
<tr>
<td>April</td>
<td>2.61688</td>
<td>2.65419</td>
<td>1.42</td>
</tr>
<tr>
<td>May</td>
<td>2.53530</td>
<td>2.62607</td>
<td>3.52</td>
</tr>
<tr>
<td>June</td>
<td>2.54235</td>
<td>2.59722</td>
<td>2.13</td>
</tr>
<tr>
<td>July</td>
<td>2.54092</td>
<td>2.60864</td>
<td>2.63</td>
</tr>
<tr>
<td>Aug.</td>
<td>2.53167</td>
<td>2.60029</td>
<td>2.67</td>
</tr>
<tr>
<td>Sept.</td>
<td>2.56356</td>
<td>2.62558</td>
<td>2.39</td>
</tr>
<tr>
<td>Oct.</td>
<td>2.59702</td>
<td>2.64952</td>
<td>2.00</td>
</tr>
<tr>
<td>Nov.</td>
<td>2.60686</td>
<td>2.64440</td>
<td>1.43</td>
</tr>
<tr>
<td>Dec.</td>
<td>2.61973</td>
<td>2.65750</td>
<td>1.43</td>
</tr>
</tbody>
</table>

* Jan., 1983 actual (as of 2/22/83) is 2.62974 for an error of -.42 percent.
MONETARY POLICY OPTIONS AND THE OUTLOOK FOR 1983

Jerry L. JORDAN
University of New Mexico

Adopting a restrictive policy to reduce inflation and being willing to stick with it even in a long and deep recession is not evidence that it will be successful. The test of whether a long-run anti-inflation policy will be maintained does not occur until the subsequent expansion gets underway. If excessive prior stimulus is what tends to make recessions unavoidable, then we have to go along with Hayek's warning that the only time to fight recession is during the previous expansion.

Also following Hayek, if we assert the "inherent resiliency" of an economy based on private property and relying on market forces, then we must reject both the desirability and necessity of "stimulus" to get the economy going again. In this context, the rationalizations from Washington of the recent monetary explosion are troubling. The argument that faster monetary growth is not potentially inflationary because of the "slack" that currently exists must be rejected.

It must be recognized that the prospective fiscal developments make reinflating very tempting. No doubt, there are those who would argue, in private at least, that debasing the currency is the form of taxation that is most politically acceptable for the foreseeable future. All dissenters from that view will be able to do is point out some of the regressive, divisive, and dishonest aspects of this form of taxation (not to mention the reduced standards of living that are ultimately implied).

The following propositions underlie the projections of economic activity for 1983 and 1984 that are presented in this report.

(1) The deceleration in monetary growth in 1981 was one of the sharpest on record, and the subsequent sharp deceleration of nominal income growth in late 1981 and early 1982 conforms to historical lags;

(2) The sharp reacceleration of monetary growth in 1982, especially late in the year, contributed to the appearance of a "shift in money demand" because of the decline of contemporaneously measured velocity;

(3) Once monetary growth had exploded to unacceptably rapid rates in early 1982, the Fed had no good options remaining; the sharp deceleration of monetary growth in mid-1982 may have been unavoidable even though it aborted the recovery that was getting under way in spring;
(4) The latest monetary explosion in Q4/82 and continuing in Q1/83 is another episode of "too much, too late";

(5) Even though the quarter-to-quarter growth rates of the monetary base and M1 have differed significantly in the past few years, the respective growth rates for full years have been quite close;

(6) However, in previous decades M1 growth has averaged one percentage point slower than that of the monetary base, while in 1981 and 1982 M1 growth was .6 of a percentage point faster than the monetary base; consequently, base velocity has averaged that much faster than M1 velocity, in contrast to the previous experience of M1 velocity averaging on percentage point faster than the base velocity;

(7) For the past five years, the year-to-year growth rates of M2 have varied less than .8 percent, failed to signal the recent recession, and provide little reliable indication of the pace of total spending in the economy in 1983;

(8) Normal lags between monetary growth and GNP growth suggest that there will be a significant acceleration of total spending growth in 1983;

(9) In view of the recent sharp acceleration of monetary growth, the Fed is again faced with few good options — continue high monetary growth and risk accelerating inflation, or sharply reduce monetary growth and risk aborting the recovery once again;

(10) In view of past experiences, financial market participants will be justified in beginning to anticipate accelerating inflation, and market interest rates can be expected to rise as rapid monetary growth continues.

ASSUMPTIONS:

(1) Monetary growth will continue a pattern of alternating accelerations and decelerations, each lasting for 4 to 6 months, with the average growth of the monetary base and M1 continuing in the 6 to 8 percent range;

(2) The income velocity of the monetary base will continue to average, on balance, about the same as the past few decades;

(3) M1 has grown .6 percentage points faster than the base in each of the past two years, as the weighted average reserve ratio has fallen and increased the monetary multiplier; therefore, if the monetary base velocity continues to average about the same as in the past and the multiplier continues to rise, the growth of the income-velocity of M1 must average less than in the past; however, the M1 growth rates shown in tables below reflect early 1981 policy, rather than an attempt to forecast how fast M1 will grow for a given growth of the base;
(4) The level of "real" interest rates implied by the mix of monetary and fiscal policies may be above that of the 1970's, but that will affect only the composition of spending growth, not the rate of increase.

POTENTIAL "SURPRISES" (not mutually exclusive):

(1) Declining world oil prices could raise economic capacity in the highly energy intensive industries sufficiently rapidly that rapid spending growth will not be accompanied by accelerating inflationary pressures as rapidly as otherwise;

(2) Wealth transfers in favor of oil importing countries might mean the Fed could "luck out" and be able to reduce monetary growth to a less inflationary trend without aborting the current recovery;

(3) Misinterpretation of the redistributive effects of the "international lending problems" could result in major policy mistakes that could be either highly inflationary or drastically deflationary;

(4) Stalemate on the long-run budget problems, including Social Security, could cause a further increase in the "uncertainty premium" in market interest rates, and result in an unbalanced recovery that consists mainly of increased current consumption and military spending.

RECENT DEVELOPMENTS:

The respective growth rates of monetary measures, velocities, prices, and output are shown in the following table:

<table>
<thead>
<tr>
<th>Period:</th>
<th>GNP</th>
<th>OUTPUT</th>
<th>PRICES</th>
<th>M1</th>
<th>V1</th>
<th>BASE</th>
<th>VB</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q4/76-Q4/78</td>
<td>13.5%</td>
<td>5.7%</td>
<td>7.4%</td>
<td>8.2%</td>
<td>4.8%</td>
<td>8.9%</td>
<td>4.2%</td>
</tr>
<tr>
<td>Q4/78-Q4/80</td>
<td>9.6%</td>
<td>0.4%</td>
<td>9.2%</td>
<td>7.4%</td>
<td>2.4%</td>
<td>8.2%</td>
<td>1.2%</td>
</tr>
<tr>
<td>Q4/80-Q4/82</td>
<td>6.4%</td>
<td>-0.3%</td>
<td>6.7%</td>
<td>6.8%</td>
<td>-0.3%</td>
<td>6.1%</td>
<td>0.3%</td>
</tr>
<tr>
<td>Q4/80-Q4/80</td>
<td>8.8%</td>
<td>3.6%</td>
<td>5.1%</td>
<td>5.5%</td>
<td>3.1%</td>
<td>6.5%</td>
<td>2.1%</td>
</tr>
</tbody>
</table>

The past two years can be characterized as follows: a sharp deceleration of monetary growth in 1981 (and therefore an increase in velocity measured contemporaneously) followed by a sharp acceleration of monetary growth in 1982 (and therefore an even sharper decline in velocity since GNP growth was slowing in lagged response to previous monetary growth while concurrent monetary growth was accelerating).
PROJECTIONS:

In 1983 it is expected (hoped?) that monetary growth will slow compared with 1982, while GNP growth will accelerate in lagged response to more rapid monetary growth in 1982. Consequently, velocity growth in 1983 can be expected to be more rapid than the historical trend rate by Q4/84.

Regarding assumptions about monetary growth, something slower than the average rate for the past two years would be desirable, and certainly slower than last year, but there is something unrealistic about such an assumption. If average monetary growth in 1983 and 1984 were to be slower than in 1981-82, it would be the first time monetary growth was slower in the recovery than during the previous recession. It would represent an assumption that the long standing pattern of procyclical monetary growth would be broken. There is little reason to have much confidence in such an assumption.

Nevertheless, the following projections are based on such a heroic assumption. In 1981, the Administration advocated a 50 percent reduction in monetary growth over a six-year period between 1980 and 1986. That prescription would have produced the following time paths:

<table>
<thead>
<tr>
<th>Year</th>
<th>M1</th>
<th>Base</th>
</tr>
</thead>
<tbody>
<tr>
<td>1980</td>
<td>7.3%</td>
<td>8.2</td>
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<tr>
<td>1981</td>
<td>6.7%</td>
<td>7.5</td>
</tr>
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<td>1982</td>
<td>6.1%</td>
<td>6.8</td>
</tr>
<tr>
<td>1983</td>
<td>5.5%</td>
<td>6.1</td>
</tr>
<tr>
<td>1984</td>
<td>4.9%</td>
<td>5.4</td>
</tr>
<tr>
<td>1985</td>
<td>4.3%</td>
<td>4.7</td>
</tr>
<tr>
<td>1986</td>
<td>3.7%</td>
<td>4.1</td>
</tr>
</tbody>
</table>

The average growth rates implied for 1981-1982, compared with actual, were:

<table>
<thead>
<tr>
<th>Year</th>
<th>Actual</th>
<th>Average</th>
<th>Implied policy average</th>
</tr>
</thead>
<tbody>
<tr>
<td>1981</td>
<td>5.0%</td>
<td>6.8%</td>
<td>6.4%</td>
</tr>
<tr>
<td>1982</td>
<td>8.5%</td>
<td>6.1%</td>
<td>7.15</td>
</tr>
</tbody>
</table>

No doubt the changes in reserve requirement regulations and introduction of new accounts (NOW) in 1981 have influenced the monetary multiplier, and therefore the relative growth rates of the monetary base and M1. The drop in monetary base growth by almost one-half in 1981 was much more than Administration policy, and more than was consistent with anybodys idea of gradualism, but once it had occurred, the subsequent reacceleration by almost 80 percent in 1982 makes little sense. The 70 percent acceleration of M1 growth from 1981 to 1982 left the average for that measure somewhat above the policy objective for the two year period.
Returning to the original policy objectives for 1983 would represent a significant slowing from the growth of last year, and a sharp drop from the growth of Q4/1982. It now seems likely that the growth rates of both M1 and the monetary base in Q1/1983 will be in the range of 9 percent to 12 percent. To achieve the 5.5 percent and 6.1 percent growth rates for M1 and the base for the four quarters of 1983 would imply growth rates in the ranges of 3.5 percent to 4.5 percent for M1 and 4.4 percent to 5.1 percent for the base for Q2/83 to Q4/83.

Assuming the original policy of cutting monetary growth in half between 1980 and 1986 were still operative, the following relationships would be expected (if trend monetary base velocity is reestablished by Q4/84):

<table>
<thead>
<tr>
<th>GNP</th>
<th>OUTPUT</th>
<th>PRICES</th>
<th>M1</th>
<th>V1</th>
<th>BASE</th>
<th>VB</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q4/82-Q4/83:</td>
<td>11.2%</td>
<td>5.9%</td>
<td>5.0%</td>
<td>5.5%</td>
<td>5.4%</td>
<td>6.1%</td>
</tr>
<tr>
<td>Q4/83-Q4/84:</td>
<td>8.7</td>
<td>2.5</td>
<td>6.0</td>
<td>4.9</td>
<td>3.6</td>
<td>5.4</td>
</tr>
</tbody>
</table>

The intra-year results for 1983 are expected to be similar to the following:

<table>
<thead>
<tr>
<th>GNP</th>
<th>OUTPUT</th>
<th>PRICES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q4/82-Q2/83:</td>
<td>12.3%</td>
<td>7.2%</td>
</tr>
<tr>
<td>Q2/83-Q4/84:</td>
<td>10.5</td>
<td>4.7</td>
</tr>
</tbody>
</table>

If such monetary growth rates prevailed on average for the next two years, the following averages would result:

<table>
<thead>
<tr>
<th>M1</th>
<th>V1</th>
<th>BASE</th>
<th>VB</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q4/80-Q4/82:</td>
<td>6.7%</td>
<td>-.31%</td>
<td>6.1%</td>
</tr>
<tr>
<td>Q4/82-Q4/84:</td>
<td>5.2</td>
<td>4.5</td>
<td>5.7</td>
</tr>
<tr>
<td>Q4/80-Q4/84:</td>
<td>6.0</td>
<td>2.1</td>
<td>5.9</td>
</tr>
</tbody>
</table>

Again, if the monetary multiplier continues to rise as a result of declining reserve requirement ratios, M1 growth would be somewhat faster, and M1 velocity would grow more slowly than the base velocity.
ECONOMIC PROJECTIONS
Burton ZWICK*
Prudential Insurance Company of America

During the past six months, M1 has grown at a 14.4 percent annual rate (see table 1). In allowing M1 to grow about 3 times as fast as the announced 1982 growth target of 2 1/2 percent to 5 1/2 percent, the Federal Reserve argued that, by changing the public's asset allocation, the introduction of super saver and super NOW accounts altered the meaning of M1. They also emphasized the need to satisfy a sharp 1982 increase in the public's demand for money and liquidity. Because unemployment is so high, the monetary authorities also felt that the Fed could shift its focus away from fighting inflation, at least for a time.

Each of these factors -- the meaning of M1 in the presence of new accounts, the behavior of money demand, and the relation between inflation and unemployment -- critically affect our forecast for 1983 and beyond. With regard to the measurement of M1, we believe that the regulatory effects of super savers (which are not even included in M1) and super NOWs have been greatly exaggerated. As shown in table 1, the monetary base (both the St. Louis and Federal Reserve Board measures) has risen rapidly during the past 6 months. We conclude that not more than $6-8 billion of the $30 billion increase in M1 since last July reflects the introduction of these new accounts. With regard to the demand for money, the 1982 decline in M1 velocity is far sharper than any decline in the past three decades. The magnitude of this decline suggests that monetary acceleration -- at least from July through September -- moderated the severity of the recession. However, unless this decline in velocity signals a permanent change in the relation of M1 to the economy, it does not release the Federal Reserve from the need to control M1 growth over the longer term.

In our most probable forecast (see Scenario 1), we assume — Q4/82 to Q4/83 — M1 growth of 6 percent and velocity growth of 3.3 percent. M1 velocity growth of 3.3 percent is close to the 1955-81 trend but below the velocity growth (given the trend of

*The projections presented here represent my own personal views and not necessarily the official view of the Prudential. I appreciate the comments of Jason Benderly.
3.3 percent) that might have been predicted in view of the sharp monetary acceleration in late 1982, the weak velocity growth in 1982, and the recovery generally expected for 1983. Our modest velocity growth forecast — which for a given inflation rate implies correspondingly slower output growth — reflects our concern that the 1982 weakness in velocity may reflect not only recession and disinflation but possibly some longer term decline in the growth trend (though not necessarily in the stability) of M1 velocity. Weaker velocity and output growth in 1983 could also reflect the adverse effects — through increased uncertainty and higher real rates — of continued budget deficits (projected to remain in the $200 billion range even into the recovery) and volatile monetary policy.

Even with 3.3 percent velocity growth, our forecast of 6 percent M1 growth in 1983 implies nominal GNP growth of 9.5 percent. Our forecast for inflation is 5.3 percent, so that real growth will average 4 percent for the four quarters of 1983, including real growth slightly over 5 percent in the second half of the year. The major risk to this forecast, reflected in Scenario 2, is that some combination of higher velocity growth or faster money growth could raise nominal and real GNP for 1982 by an additional percentage point or more. Under both Scenarios, interest rates trend upward over the balance of the year.

As mentioned above, many expect that, because of high unemployment and low capacity utilization in the economy, the acceleration in money growth will not lead to accelerating inflation. Economists emphasizing the effects of money on inflation have argued that, insofar as the acceleration of inflation is linked to unemployment, it is to the change rather than to the level of unemployment. More explicitly, in focusing on changes in output or unemployment, they argue that inflation will be affected as monetary acceleration leads to faster output growth and lower unemployment, even if the level of unemployment is quite high. Though unemployment remains high, both of our forecasts call for inflation to accelerate — up to 7 percent in 1984 in Scenario 1 and up to 9 percent by late 1984 in Scenario 2.

In choosing the money-inflation relation over the unemployment-inflation relation to predict inflation for 1983 and 1984, it is worth noting that, under most specifications, the evidence from the 1955-81 period favors the effects of money growth over unemployment in determining the trend in inflation. However, the (inverse) correlation between current unemployment and lagged money growth (given lagged inflation) is quite high, making the relative importance of money versus unemployment in inflation models extremely sensitive to model specification.
Relative to the normal inverse correlation, we are currently observing the sharpest aberration — with current unemployment high in 1983 and 1984 and lagged money growth high in 1982 and 1983 — of the post World War II period. The behavior of inflation over the 1983-84 period provides by far the sharpest test since the 1930's of these competing hypotheses of inflation.

As mentioned above, we believe that monetary expansion since last July may have mitigated the severity of the recession. Unfortunately, it has once again placed the Fed in a no win situation. If they try to slow money growth in late 1983 as assumed in Scenario 1, they risk sharply reduced output growth in late 1984 if not an outright recession. If they fail to tighten, they risk a return to 9 percent inflation by late 1984 and double-digit inflation in 1985.
<table>
<thead>
<tr>
<th>Aggregate (SA)</th>
<th>13 Week</th>
<th>26 Week</th>
<th>52 Week</th>
</tr>
</thead>
<tbody>
<tr>
<td>Louis Base</td>
<td>9.1</td>
<td>8.3</td>
<td>7.9</td>
</tr>
<tr>
<td>FRB Base</td>
<td>9.0</td>
<td>9.1</td>
<td>7.4</td>
</tr>
<tr>
<td>Total Reserves</td>
<td>9.6</td>
<td>12.4</td>
<td>5.2</td>
</tr>
<tr>
<td>Nonborrowed Reserves</td>
<td>10.2</td>
<td>13.6</td>
<td>8.5</td>
</tr>
</tbody>
</table>

Prudential Economic Research  
February 8, 1983
### Economic Projections: Scenario 1

(1972$, Seasonally Adjusted Annual Rates of Change Except Where Noted)

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<tbody>
<tr>
<td>Real GNP</td>
<td>0.7</td>
<td>-2.5</td>
<td>2.6</td>
<td>2.8</td>
<td>5.8</td>
<td>4.7</td>
<td>4.0</td>
<td>3.0</td>
<td>2.0</td>
<td>2.0</td>
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<td>7.5</td>
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<td>2.0</td>
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<td>3.9</td>
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<td>6.0</td>
<td>5.0</td>
<td>4.0</td>
<td>5.0</td>
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<td>3.8</td>
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<td>3.1</td>
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<td>Business Inv.</td>
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<td>PPI Exp (Bi.72$)</td>
<td>27.5</td>
<td>21.1</td>
<td>17.7</td>
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<td>8.8</td>
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<td>PPI Invent (Bi.72$)</td>
<td>3.4</td>
<td>-17.7</td>
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<tr>
<td>30-Yr Rate (%)</td>
<td>9.9</td>
<td>10.7</td>
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<td>9-11</td>
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<td>30-Yr Gov't. (%)</td>
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<td>11-13</td>
<td>10-12</td>
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*Millions of domestic units.
**Millions of starts.

Prudential Economic Research
February 16, 1983
**ECONOMIC PROJECTIONS: SCENARIO 2**

(1972$, Seasonally Adjusted Annual Rates of Change Except Where Noted)

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<td>Q4A</td>
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<td>3.1</td>
<td>4.4</td>
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<td>Services</td>
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<td>2.7</td>
<td>2.7</td>
<td>3.4</td>
</tr>
<tr>
<td>Residential</td>
<td>-5.9</td>
<td>24.2</td>
<td>28.5</td>
<td>33.2</td>
</tr>
<tr>
<td>Federal</td>
<td>23.2</td>
<td>28.4</td>
<td>-14.4</td>
<td>3.4</td>
</tr>
<tr>
<td>State &amp; Local</td>
<td>-0.2</td>
<td>1.1</td>
<td>-0.9</td>
<td>-1.1</td>
</tr>
<tr>
<td>Net Export (Bi.72$)</td>
<td>27.5</td>
<td>21.1</td>
<td>17.7</td>
<td>15.4</td>
</tr>
<tr>
<td>Invent (Bi.72$)</td>
<td>3.4</td>
<td>-17.7</td>
<td>-4.5</td>
<td>0.0</td>
</tr>
<tr>
<td>Addenda:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Unemp Rate (%)</td>
<td>9.9</td>
<td>10.7</td>
<td>10.5</td>
<td>10.2</td>
</tr>
<tr>
<td>Funds Rate (%)</td>
<td>11.0</td>
<td>9.2</td>
<td>8.3</td>
<td>9.0</td>
</tr>
<tr>
<td>30-Yr Gov't. (%)</td>
<td>12.8</td>
<td>10.8</td>
<td>10.5</td>
<td>11.0</td>
</tr>
<tr>
<td>Ind. Prod.</td>
<td>-3.4</td>
<td>-6.7</td>
<td>5.7</td>
<td>10.0</td>
</tr>
<tr>
<td>DGP72S</td>
<td>1.3</td>
<td>-0.2</td>
<td>2.0</td>
<td>4.5</td>
</tr>
<tr>
<td>Auto Sales*</td>
<td>5.5</td>
<td>6.1</td>
<td>6.2</td>
<td>6.8</td>
</tr>
<tr>
<td>Housing**</td>
<td>1.12</td>
<td>1.25</td>
<td>1.35</td>
<td>1.45</td>
</tr>
<tr>
<td>Deficit (Bi.72$)</td>
<td>147.0</td>
<td>190.0</td>
<td>175.0</td>
<td>147.0</td>
</tr>
</tbody>
</table>

*Millions of domestic units.
**Millions of starts.

Prudential Economic Research
February 16, 1983

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*Digitized for FRASER
http://fraser.stlouisfed.org/
Federal Reserve Bank of St. Louis*
BUDGET OUTLOOK

Rudolph G. PENNER
American Enterprise Institute

As each successive official report on the budget is issued, it seems to contain worse and worse news. The January and February budget documents issued by the Administration and the Congressional Budget Office (CBO) show even more clearly than previous reports that the United States faces a fiscal mismatch of highly disturbing proportions. Unless tax and spending policies are altered significantly the deficit grows and grows over time even if a healthy economic recovery is assumed.

According to CBO, current policy combined with a substantial economic recovery implies the following unified budget totals for the 1983-85 period:

<table>
<thead>
<tr>
<th></th>
<th>1983</th>
<th>1984</th>
<th>1985</th>
</tr>
</thead>
<tbody>
<tr>
<td>Outlays</td>
<td>$800</td>
<td>$850</td>
<td>$929</td>
</tr>
<tr>
<td>Receipts</td>
<td>606</td>
<td>653</td>
<td>715</td>
</tr>
<tr>
<td>Deficit</td>
<td>$194</td>
<td>$197</td>
<td>$214</td>
</tr>
</tbody>
</table>

The economic assumptions used for this meeting contain somewhat more real growth and less unemployment than does CBO for 1983 and somewhat less growth and greater unemployment later in the period. The baseline budget projections consistent with our assumptions are:

<table>
<thead>
<tr>
<th></th>
<th>1983</th>
<th>1984</th>
<th>1985</th>
</tr>
</thead>
<tbody>
<tr>
<td>Outlays</td>
<td>$799</td>
<td>$851</td>
<td>$936</td>
</tr>
<tr>
<td>Receipts</td>
<td>611</td>
<td>663</td>
<td>729</td>
</tr>
<tr>
<td>Deficits</td>
<td>$188</td>
<td>$188</td>
<td>$207</td>
</tr>
</tbody>
</table>

Off-budget outlays are likely to average $10 to $20 billion over the period.

One very disturbing feature of the budget projections is that they show very clearly that while the outlay path is not exactly frozen in concrete, it is at least mired in very heavy clay.
Many believe that deficits can be lowered greatly by reducing the growth of defense expenditures. There is little appreciation of the extent to which legislation passed in 1981 and 1982, when there was an enthusiastic pro-defense consensus, committed us to a rapidly growing defense path lasting at least to the late 1980's. The Administration is now asking little more than that the Congress finance a strategy that they have already approved. The Administration asks only that the Congress add $3 billion in 1984, $7 billion in 1985, and $13 billion in 1986.

The CBO carefully examines the path implied by past Congressional actions and looks hard for possible economies. But if one adds up all of their suggestions for cuts, the savings are only $11 billion in 1985 and $14 billion in 1986 compared to their baseline path. It is conceivable that the Congress will cut more than this, but higher cuts would involve either expensive cancellations of already-existing contracts, an inefficient stretchout of already-initiated modernization plans, or drastic cuts in personnel, operations, maintenance, and training — areas in which most military experts believe that the U.S. is weakest. It is more likely that eventual cuts will fall far short of the totals implied by the acceptance of all of the CBO cut options.

On the non-defense side, the largest program by far is social security which constitutes almost 30 percent of 1984 non-defense spending. There, cuts are limited by the existence of the recommendations of the National Commission on Social Security Reform. After much agony, that group was only able to agree to tax increases and benefit reductions totalling $11.3 billion in 1984 and $8.8 billion in 1985. Given the difficulty in agreeing to these modest measures, it is impossible to imagine further cuts for some time to come. Even the passage of the commission recommendations, though likely, is far from certain.

It may be possible to pass similar benefit reductions in the civil service and military pension programs, but that would save only a few billion.

The Administration has recommended some meritorious reforms in the medicaid and medicare programs, but since the reforms would impose a heavier financial burden on recipients, they are likely to be very unpopular politically. The Congress is likely to pass further constraints on the fees charged by physicians and hospitals, but if past experience is any guide, they are likely to claim more savings than will actually emerge.
In total, defense, pensions (including social security), medicaid, medicare, other entitlements and the interest bill on the debt will constitute about 80 percent of 1984 outlays. Given the severe constraints on reducing the growth of any of these functions in the next two years the path of total spending is virtually foreordained. There seems to be little sympathy in the Congress for cutting entitlements for the poor or other discretionary programs which bore the brunt of the cuts enacted in 1981. Moreover, it now seems virtually certain that any cuts will be offset to some degree by a $4 to $10 billion jobs bill.

As time goes on the amount of flexibility grows and it is quite possible that the Congress will take steps this year that lower the total spending path significantly in the late 1980's. It is vitally important that they do this. But, in the interim, spending cuts will make only a modest contribution toward lowering the gargantuan deficits implied by current policy.

All of this makes some sort of significant tax legislation virtually certain. By "significant", I mean something comparable to the legislation passed last summer. That raised revenues almost $20 billion 1983 and $40 billion in 1984. There is, however, an important difference. While last summer's so-called tax increase was really only a reduction of an already-passed tax cut, any additional tax action effective in 1984 and later will imply a true tax increase compared to 1983 levels.

It will, of course, be politically difficult for the Congress to take the painful actions necessary to reduce the deficit. One can expect the process to be time consuming and it is likely to create much uncertainty on its way to fruition. Since many legislators blame the relatively new Congressional budget process for their problems in completing budget actions in a timely fashion, that process will be under constant attack.

Although it cannot be claimed that the Congressional budget process is perfect, it is not, in my view, the cause of the time consuming nature of the process. The real problem is that the legislative actions of 1981, which cut taxes far more than they cut spending, left the Congress with only bad options. They must either cut spending or raise taxes and when the Congress faces anything this unpleasant, it is bound to take a long time to make the necessary decisions.

It is hard to extract any good news from this dismal fiscal story. But while the deficit is likely to remain far too high for some time to come, it can be noted that the worst is over. The national income accounting deficit will have peaked relative to GNP and domestic private saving in either the last quarter of 1982 or in the first
quarter of 1983. It will remain roughly constant in absolute terms through calendar 1983, and then, with any tax increases or spending cuts at all, it should decline absolutely through 1984.

With modest cuts in defense, the acceptance of the social security package, the application of the same principles to other government pension programs, a few other spending cuts, and the sort of tax action outlined above, it is possible that unified deficits could be lowered to the neighborhood of $150 billion in 1984 and 1985. It is not a very desirable neighborhood, but it is preferable to the one containing the Administration's estimates of a $189 billion deficit in 1984 and a $194 billion deficit in 1985. If recession can be avoided, the absolute deficit should fall rapidly after 1985.
The discussion of economic events in the public arena conveyed to innocent citizens two major impressions: first, that we experienced an unexpected and surprising decline of economic activity, and secondly that it was the most serious recession since the Great Depression in the 1930's. We actually heard voices claiming that we drifted into a "depression".

The first impression can be excused provided we assume that the media accept official forecasts as expressions of the Administration's best available professional judgment. But we do know that the unrealistic forecast made early in 1981, as again in 1982, was a purely political product with no serious claim to any relevant assessment of economic prospects. The "Shadow" projected two years ago that the monetary retardation initiated by the Reagan Administration would push the economy into a recession during 1981. The recession was expected to be less severe than the recession of the 1950's, but probably more severe than the shallow recessions of 1960/61 and 1969/70.

The outcome observed at this time confirms the Shadow's assessment. There is in particular no basis for the claim of a "depression", conveying with the choice of this word the occurrence of a deeper fall in activity. There is moreover no basis for the claim that the U.S. economy experienced the largest recession since the 1930's.

The table attached to this statement provides a useful focus on the relevant aspects. The 1981/82 recession exhibits a definitely smaller decline in total real output than the two recessions in the 1950's. The decline was larger than for the shallow recessions of 1948/49, 1960/61 and 1969/70. Most remarkable are the differences in employment, and especially in total private employment. The recent recession shows the largest increase in private employment ever observed over any postwar recession. These data yield no support for the contention that we suffered the first major depression since the 1930's. Even the increase in the rate of unemployment coincided approximately with the episode of 1953/54. The relative increase is less than in the two recessions of the 1950's and less than in 1973/75.
The impression of the most serious depression since the 1930's was influenced by a simple comparison of measured levels of the unemployment rate. But the comparative level of unemployment does not provide a reliable measure of the recession effect. Apart from the temporary cyclical effect contained in the current rate of unemployment (10.7 percent in the last quarter of 1982) we should recognize the high level of normal unemployment prevailing in the U.S. economy. This normal level consists of two components. One is the more permanent level conditioned by institutional incentives and demographic changes on the labor market experienced over the past eighteen years. Institutional arrangements (the expanding welfare system) and demographic conditions raised the more permanent component of normal unemployment to about 7 percent by the late 1970's. There appeared additionally a more intermediate-run component. All western nations are confronted with large structural changes expressed by a substantial reallocation of resources away from long established industries. This reallocation affects in the U.S.A. especially the steel and the automobile industries. These adjustments proceed independently of the temporary recession and cannot be prevented by financial fine-tuning. For the duration of the adjustments, spread over a number of years beyond the recession, normal unemployment rises above 7 percent. The occurrence of the structural adjustments under way in the U.S. economy is reflected by the comparative decline in industrial production. This decline is remarkably large relative to the total real output and the movement in total employment. The intermediate-run adjustments require particularly a relative decline of major branches in the industrial sector. The behavior of industrial production thus reveals beyond the cyclical recession component a pronounced effect expressing the ongoing reallocation of resources.
Changes in % of Major Real Magnitudes From Peak to Trough
Over Postwar Recessions

<table>
<thead>
<tr>
<th>Period</th>
<th>Real GNP</th>
<th>Industrial Production</th>
<th>Total Employment</th>
<th>Private Employment</th>
<th>Unemployment</th>
</tr>
</thead>
<tbody>
<tr>
<td>1948/49</td>
<td>-1.43</td>
<td>-6.75</td>
<td>+1.78</td>
<td>+1.83</td>
<td>+2.04</td>
</tr>
<tr>
<td>1953/54</td>
<td>-3.40</td>
<td>-8.79</td>
<td>-2.29</td>
<td>-2.77</td>
<td>+3.14</td>
</tr>
<tr>
<td>1957/58</td>
<td>-3.35</td>
<td>-10.46</td>
<td>-2.00</td>
<td>-2.43</td>
<td>+2.1</td>
</tr>
<tr>
<td>1960/61</td>
<td>-1.20</td>
<td>-6.56</td>
<td>+.45</td>
<td>+.25</td>
<td>+1.2</td>
</tr>
<tr>
<td>1969/70</td>
<td>-.91</td>
<td>-2.94</td>
<td>+.83</td>
<td>+.72</td>
<td>+.6</td>
</tr>
<tr>
<td>1973/75</td>
<td>-6.06</td>
<td>-16.08</td>
<td>-1.32</td>
<td>-2.56</td>
<td>+3.0</td>
</tr>
<tr>
<td>1981/82</td>
<td>-2.56</td>
<td>-11.05</td>
<td>+.43</td>
<td>+1.92</td>
<td>+3.3</td>
</tr>
</tbody>
</table>

Note: The change in the rate of unemployment states the increase expressed in percentage points.
Two issues have dominated economic policy discussions in recent months. The first is that of cyclical recovery in the main industrial countries, which many observers expected to be weak and/or threatened by a possible resurgence of inflation. Several indicators suggest that a spontaneous upturn may be expected now that inflation has declined much more rapidly than originally expected, with interest rates declining in parallel fashion from February into December 1982. Inventory levels are low, financial balances of households have improved, construction is experiencing a gradual revival of orders. There is little doubt that many firms and households can no longer postpone the replacement and improvement of durable equipment. Another encouraging development, especially for employment, is the improved relationship between real wages and real interest rates; for much of the 1970's, low or negative real interest rates and high real wages combined to give business investment a strong labour-saving bias. The potential created by these favourable conditions will, however, be realized only in an appropriate policy environment. What constitutes "the right policy environment" is thus the key question.

That also applies to the second issue, which concerns the short-run situation facing the most indebted developing countries and their creditor banks. An almost exclusive preoccupation of all the actors involved with the short-term aspects of the problem, mainly with mobilization of emergency credits, is the most worrisome aspect. Debtors see their indebtedness growing (through the capitalization of interest due) but little in the way of new resources flowing in, while creditors are asked to provide additional funds to countries which are behind in servicing existing debts. Although neither party is likely to find this situation tolerable for long, the question of a long-term solution has hardly been raised.

A sustained recovery in the major developed countries is, clearly, an important condition for a successful solution of the international financial problem. It would be a mistake, however, to consider it a sufficient condition. The difficulty under which the international financial system has been labouring in recent years is of a more fundamental nature. Overcoming, instead of merely allaying, it will require additional
policy changes in both the creditor and the debtor countries. It is now urgent that both
sides, in a joint analysis, agree on the underlying causes of the problem and appropriate
solutions. Only such an agreement can provide the realistic perspective needed to
maintain cooperation among the many actors involved. The policy changes required
would be easier for each government to implement if they were identified through such
a joint and agreed analysis.

In this regard, it is regrettable that for the last six months or so economic policy
discussion has been concerned almost exclusively with the macroeconomic (demand
management) aspects of the two problems. The awareness of the role played by micro-
economic (structural) distortions — an awareness which seemed to be growing as
recently as a year or year and a half ago — has almost completely disappeared again.
The macroeconomic view fails to take account of the enormous changes that have
occurred on the microeconomic level in the last decade or two. The extent of these
changes is such that most economic relations and reactions that used to be taken for
granted no longer hold. Market, and even mixed, economies must rely on prices to
ensure an efficient use of resources through a continuous, orderly adjustment to
changing conditions, including macroeconomic conditions. This consideration applies
with equal force to both the problem of securing a sustained recovery and the problem
facing the financial system. It is therefore necessary to consider explicitly the extent
to which the price system in contemporary market and mixed economies is prevented
from discharging its vital guiding function. Even a brief reflection on the state of the
private economy suggests that one should, indeed, ask: What remains of the price
system?

Government services, now a substantial part of total output everywhere, are
clearly not priced by the spontaneous interplay of supply and demand. The bulk of
agricultural output is marketed at prices set entirely by the political process. Textiles
and clothing, industries with vigorous internal competition, are effectively sheltered
against low-cost foreign competition in most countries while steel, without significant
competition on the national level, is also extensively regulated in international trade.
Shipbuilding in industrial countries continues to exist only by virtue of subsidies.
Energy supply, subject to non-competitive pricing, has been a major source of
instability. Petrochemicals are largely cartelized, the world's most efficient producer
of automobiles is severely constrained in foreign trade, an extensive and increasingly
acrimonious international political negotiation is going on about where and under what
conditions the latest technological innovations will be produced, and most services (such as transportation, insurance and communications) are both politically regulated and protected against import competition.\textsuperscript{1)}

Thirty-five years ago we were reminded of the importance of structural flexibility for macroeconomic stability:

Surely a competitive economy would be extremely sensitive to monetary controls and relatively easy to stabilize by fiscal devices. That the same should be true of a highly monopolized or syndicalist system is improbable on its face and, on reflection, appears quite impossible. Monetary remedies can cure monetary ills. That they should counteract and greatly ameliorate the consequences of wholesale organization of producer groups to exploit one another (and the unorganized) by rising their prices relatively and restricting their respective outputs is certainly not to be anticipated on the basis of any reasoned analysis.\textsuperscript{2)}

If relative prices are not flexible, the price signals which businesses rely on to identify changing patterns on demand are weak and often unintelligible. Investment in plant and equipment, and in developing labour skills, fails to keep pace with the changing demand. In such a situation, even "prudently" expansionary policies designed to lift an economy out of a recession are likely to lead to a resurgence of inflation, as the nascent recovery soon encounters supply bottlenecks. In a similar way, bringing down the inflation rate in an economy whose structures have grown rigid is bound to be unnecessarily costly in terms of unemployment and lost output if the restrictive monetary policy is not coupled with microeconomic reforms designed to loosen up the economy's price structure.

\textsuperscript{1)} The malfunctioning price system, coupled with inflation differentials and unpredictable policy changes in the major countries, explains the instability of exchange rates in recent years. If prices are flexible, adjustments to changing economic conditions occur relatively quickly, with a minimum of uncertainty. When prices are rigid or change only very slowly, changing conditions generate increased uncertainty and groping adjustments, with frequent "under" or "overshooting" in all markets, including the foreign exchange market. The widespread demands for measures to stabilize exchange rates ignore or evade the crucial question: who in this situation can say what pattern of exchange rates should be stabilized? Stability in exchange rates can be expected only after (a) national price levels in the major countries have been stabilized and (b) relative prices have regained a greater degree of freedom to react to all kinds of economic change.

These propositions find ample support in the experience of industrial countries since the late 1970's. In 1978, with inflation in the industrial countries down to 7 percent from the peak of 13 1/2 percent in 1974, macroeconomic restraint gave way to "finely tuned" demand management policies, coupled this time with calls for coordinated expansion among the leading countries. Meanwhile, the extent of the rigidities at the heart of the unemployment problem had been growing as a result of increased protection, including direct subsidies to uncompetitive industries. The result was two years of rapid inflation (beginning well before the second round of increases in petroleum prices) that erased the costly gains of 1975-78 and brought the annual inflation rate back to 12 percent in 1980. On the downside there is the experience of 1981-82, when resolute anti-inflation policies, accompanied by measures to restore microeconomic flexibility, resulted in a much sharper curtailment of economic growth than had been anticipated.

It is also clear that adequate investment incentives can be maintained only when relative prices are flexible and free of inflationary distortions. As long as the present distortions persist investment incentives will be not only weak but distorted as well, so that even such mild cyclical upswings as occur will involve a considerable misallocation of investment in both creditor and debtor countries. In the former, for example, highly protected and subsidized industries such as textiles and clothing, steel, shipbuilding and others will continue to attract scarce investment capital for projects of a strongly labour-saving kind. These are not the building blocks of a sustained recovery in output and employment.

The problems created when the price mechanism's incentive function is impaired extend beyond the simple macroeconomics of full employment and price level stability. For the past fifteen years growing dissatisfaction with the overall performance of the Western economies has included concern with declining productivity growth, insufficient innovation and difficulties in developing an appropriate mix of labour skills. Persistent failures to deliver the right goods, with the right quality, at the right price cannot be remedied simply by manipulating the rate of interest and the budget balance.

Recent developments in the "new political economy" — a discipline analyzing the way in which special interest groups influence the policy making process — help explain the neglect of the microeconomic changes needed to restore stable growth. The objectives of macroeconomic fine-tuning are, of course, policy goals to which no economic interest group can effectively object. In contrast, it is the nature of microeconomic policy — deciding questions involving subsidies, trade restrictions,
regulation and so forth — that it nearly always affects the interests of well-defined and organized groups. Here it can be observed that even those industry groups which proclaim their allegiance to the free market in principle, seldom hesitate to demand interventions where their particular interests are involved. It is not surprising that when the policy makers are under great pressure to improve the general performance of national economies, the thorny microeconomic causes of unemployment and inflation are left aside.

Against the background of the general economic deterioration caused by the extensive impairment of the price system, it is easy to understand why demands of individual lobbies for special treatment continue to aggravate the problem. As new restrictions are piled on top of the existing ones, the situation can only worsen. When imports of clothing or consumer electronics are restrained, the illusion may persist that the government is helping national industry since such protection redistributes income from consumers to domestic producers of those items. There are, however, many ways in which protection tends to spread from industry to industry, the most important of which is the creation of political precedents giving other industries a claim to equal treatment. Once import restrictions are extended to such producers' goods as steel and machine tools, industrial protectionism may be said to have acquired an outright suicidal aspect.

Microeconomic distortions — long-term distortions of relative prices and wages which underlie the rigidity of economic structures — and the policies responsible for them play an equally important role in the second major problem, that of managing the international debt situation.

The lending institutions' concern with the ability of the debtor countries to service their debts is understandable, but threatens to become self-defeating if the perspective is too narrow. Debt service made possible by reduced activity levels could not be maintained for long. Thus the first concern of the creditor banks, their governments and the international organizations must be the improvement of the general economic performance of the indebted countries.

In essence, the problem is to ensure both a level of debt service needed to keep the international financial system functioning, and a net inflow of new resources to the debtor countries sufficient to keep their economies on a reasonable growth path. At current stages of development, after decades of being net importers of capital, the indebted countries would find it impossible to become net exporters of capital without exposing their political systems to an extreme strain. Such an attempt would also create serious problems for the export sector in the creditor countries, as it would
inevitably involve a sharp reduction in their exports to the debtor countries. The trade figures for 1982 already point in this direction, as the percentage decline in the value of imports into the oil-importing developing countries was double the decline in their exports (-10 versus -5 percent), resulting in a sizeable reduction in the current account deficits of several of the most heavily indebted countries.

The debtors' need for capital can be satisfied to only a limited extent by governments and international organizations. Securing domestic political approval in the industrial countries of these additional public credits will be easier if it can be demonstrated that the funds represent a good "investment". A multilateral agreement on the true causes of, and remedies for, the current problems obviously would be very useful to this end. The two other sources of additional funds are private foreign lending and, possibly, the repatriation of assets held abroad by citizens of the indebted countries. In both instances, the extent to which funds will be forthcoming depends importantly on policy changes designed to raise the creditworthiness of the indebted countries by providing, among other things, predictability of future price level developments and flexibility of relative prices. Through reforms of this kind, the debtor countries would create sound investment incentives and opportunities to which private funds would then flow voluntarily.

Without going into more detail, it is evident that the necessary policy reforms in the debtor countries can only be articulated on the basis of explicit assumptions with respect to the near- and longer-term development of the world economy and its institutional and policy framework. Developments in international economic policy, and in the international economy itself, are still shaped mainly by the economic policies of, and the resulting levels of economic activity in, the industrial countries. It is fairly obvious that if the industrial countries remained preoccupied with "safeguarding vital industries", "reconquering domestic markets", "eliminating intolerable bilateral deficits", or "preserving the folkloric values of traditional agriculture", the best policy reforms that the debtor countries could devise for themselves could not be considered very promising. In that case, the prospects for both the management of the international debt problem and a sustained recovery from the current recession would have to be viewed with considerable caution if not skepticism. In short, if they are to lead to an improvement in the general economic performance, the inevitable domestic policy reforms in the debtor countries must be complemented — accommodated, so to speak — by corresponding policy changes in the creditor countries.
One can understand, even sympathize with, the politician or policy maker who says: "Let's wait. We need a boom of some strength and duration, a decline in unemployment, before we can start talking about making basic policy reforms". In this case, however, what may seem practical politics is impracticable economics. It should be clear that simply muddling through has, at this juncture, only a very small chance of success because the economic situation keeps evolving and demanding important policy decisions. To begin with, a reform of fiscal policies is obviously required. In most industrial countries public budget deficits, which offset private sector savings, are so large that an upswing in investment would be likely to lead, in a short time, to a shortage of investible capital and a renewed rise of interest rates or inflation. Furthermore, protectionist pressures still continue to intensify. So far they have been generated mainly by high levels of unemployment in the economy at large, and by demands from industries in a particularly weak competitive position. Now there is a prospect of a third factor emerging to intensify the pressures in the near future. Should the recovery proceed at different rates in different countries, current account imbalances would tend to widen, and this could become an additional argument for protection. Thus another task of policy concerned with sustaining the recovery is to prevent a further deterioration in trading conditions.

As the whole preceding analysis suggests, however, budget reform and holding the line against increased protection, necessary as they are, are by themselves not sufficient to ensure a sustained recovery. Many issues are involved, but they all ultimately reduce to a need for a new, more coherent conception of trade policy. There is no denying that this area of policy has in the recent past degenerated to what might best be described as "systematic ad hocery".

The traditional function of trade policy was to ensure that all national economic policies would be consistent, with each other as well as internationally. To take an example touching on the two issues discussed here, it is urgent to obtain a better coordination, within each capital, between officials dealing with the international financial problem and the national trade policy-makers. So far, the former have been urging the indebted countries to "tighten belts, export more and import less" so that their current account imbalances can be redressed. At the same time, however, trade policy-makers have been urging the opposite, "export less, buy more from us — to make it easier for you, we shall throw in a few subsidies". No wonder the whole world is worried about the outcome of the international debt problem.

Next, it should be clear that the microeconomic rigidities and distortions which are the root cause of the unsatisfactory macroeconomic performance can persist only
because trade policy effectively shields them, through quantitative restrictions and numerous other by and large equivalent arrangements, from world market pricing and competition. Trade policy reform therefore represents the most effective approach to a rehabilitation of the price system. Given the difficulties of dealing separately with individual industries, the phasing out of the GATT-incompatible restrictions could best be achieved on a linear basis, simultaneously across all industries.

In principle, there is nothing to prevent any one of the major countries from undertaking the needed trade policy reform on its own. But it is difficult to see how governments, which have been retreating before the pressure of innumerable lobbies for so long, could summon the strength to reverse the situation in the time needed to avert a crisis unless they act in concert with one another. It was the original purpose of the GATT, and of the broader concept of international economic cooperation, to strengthen governments against the particularist pressures emanating from national economies. This purpose has almost been lost; a new joint initiative is needed to retrieve it.

CONCLUSIONS

To summarize, trade policy reform can make a three-fold contribution to the solution of the pressing problems described at the beginning of this section. First, there is what may be called the macroeconomic aspect: trade liberalization, at least a credible move toward it, is needed to sustain what may be an incipient but fragile recovery. In the long period of prosperity between 1948 and 1973, when world production was increasing by roughly 5 percent, and world trade by roughly 8 percent per annum in volume, between one-quarter and one-third of aggregate investment in the industrial countries was related to production for export. Since then, narrowed trading opportunities and unsettled import policies in the main trading countries have cast a heavy pall of uncertainty over all potential investment projects whose profitability depends on access to foreign markets or supplies. It is difficult to see by what measures "purely home market" investments could be made to expand sufficiently to offset this disincentive effect, not only in individual countries but in the world economy at large. In important respects the current situation parallels that which existed in the late 1940's. Then, too, there existed a large backlog of structural adjustments, widespread unemployment, inflationary bottlenecks and attitude on the part of many that important policy reforms should be postponed until the more immediate difficulties were overcome. Yet a general liberalization of trade in Western Europe did take place, triggering rapid economic growth and more than two decades of unprecedented prosperity.
Second, there is the microeconomic aspect of trade liberalization — its crucial contribution to restoring the efficiency of the price system. Most of the price rigidities making for inefficient resource allocation and insufficient flows of aggregate investment in national economies can persist only because they are shielded by quantitative restrictions from the influence of world market pricing. In the immediate sense, the effect of lower trade barriers would consist of avoiding both a waste of capital implied by investment in industries facing an inevitable shrinkage of their market share and the appearance of inflationary bottlenecks at the first sign of economic recovery. Allowing a bigger role to competition in the determination of relative prices implies, at the same time, a stimulus to the expansion of each country's export industries. It has been customary to view this stimulus as operating mainly through one country's exports benefiting from a lowering of other countries' barriers. In the present context, however, it is more important to emphasize the stimulus which the removal of import restrictions will provide to the liberalizing country's own exports. 

Last but not least, a serious rethinking and reform of trade policy by the creditor countries is, as already mentioned, a necessary component of the urgently needed joint programme for coping with the unstable international debt situation and thus for stabilizing the whole international financial system. It is the necessary counterpart to the search by the debtor countries for more efficient economic policies. Also, the advice which the developing countries have been receiving from the more advanced countries for so long, as to the great advantages of liberal economic policies, would become more convincing.

It is impossible, of course, to be certain that the old policies will not start working again this time. The monetary stimulus which the economy has received since last summer may well be translated predominantly into increased output rather than predominantly into increased prices. Here we are dealing in probabilities only. But we shall know soon enough; and if the incipient recovery fizzes out in a new wave of inflation we shall, at least, finally know that microeconomic distortions — rather than anything that can be remedied by macroeconomic policy — have been the main obstacle to stable non-inflationary growth. It will be a simple lesson very dearly bought.

3) See GATT's International Trade, 1981/82, pp. 15-18, for an explanation of the process that causes a country's import restrictions to be converted into taxes on its exports.