

**RECORD OF SOCIETY OF ACTUARIES
1982 VOL. 8 NO. 4**

**THE PATH TO ECONOMIC RECOVERY — MONETARISM OR
SUPPLY SIDE ECONOMICS?**

Moderator: MICHAEL COHEN. Panelists: HARVEY D. WILMETH, PAUL CRAIG ROBERTS***

MR. MICHAEL COHEN: The last decade has been a poor one in terms of economic performance in most countries, Canada and the U.S. being no exception. Inflation that has halved the value of the dollar and even more in some European countries, unemployment that has been constantly increasing and now approaching highs not seen since the depression and a very indifferent record of real GNP growth and productivity gains.

Economic theory seeks to explain these phenomena, but also seeks to guide policy makers in their decision on how to steer the economy onto a more stable and desirable course. Evidently, the past decade has shown that neither of these roles has been fulfilled with any dazzling degree of success.

The 70's started still under the influence of Keynesian economics that guided us in earlier and apparently more successful years, the so-called demand management. Fiscal and monetary policies could be jiggled like the controls of your stereo set to "fine tune" the economy until we found out that the economic woofers and tweeters were no longer connected. Keynesianism was gradually supplanted by monetarism - get control of the money supply and everything will right itself. Economists chased after monetary aggregates M-1, M-2, M1A and so on. While few seem to doubt that this type of economic medicine will eventually work there are serious doubts whether the patient can survive the ever-increasing doses of monetary restraint that the economy seems to require.

Finally, we come to the latest theory, supply-side economics, variously called Reaganomics or the trickle down theory. Certainly to me, and very possibly to many of the participants here today, this is no more than a name associated with the present Administration tax cuts and not much else. If asked to define it, I would guess it to be the mirror image of demand management inflation not caused by overheating but caused by over-cooling the economy. If we can somehow get the economic machine on the move again we will miraculously bring down inflation by increasing the supply of goods, bringing down unemployment at the same time and getting some GNP growth too. Perhaps it is just the economic application of "think positive."

We are most fortunate this morning in having with us two eminent economists who will no doubt put me right on my erroneous notions

* Mr. Wilmeth, not a member of the Society, is Vice President and Economist of the Northwestern Mutual Life Insurance Co.

** Dr. Roberts, not a member of the Society, is Professor of Economics, Georgetown University.

regarding their economic theories and try to indicate to us how economic policies can return the wayward economies of the U.S. and possibly Canada to a stable growth-path.

Our first speaker will be Harvey Wilmeth, who intriguingly calls his theory "Supply Side Monetarism". Mr. Wilmeth graduated from the Purdue University with a degree in chemical engineering and did graduate work at the Indiana University Graduate Business School before joining Northwestern Mutual in 1947. Mr. Wilmeth was elected to his present position as vice-president and economist at Northwestern Mutual in 1977. In his current position, he has full responsibility for developing extensive economic research with particular emphasis on the effects of inflation on company operations.

Our other speaker will be Dr. Paul Craig Roberts whom many regard as a father of supply-side economics. Dr. Roberts was educated at the Georgia Institute of Technology, the University of California at Berkeley, the University of Virginia where he received his PHD in economics and at Oxford University where he was a member of Martin College. He has authored two books and a number of articles and has recently served in the current administration. Dr. Roberts currently holds the William E. Simon chair in political economics at the Center For Strategic And International Studies at Georgetown University.

MR. HARVEY WILMETH: I am delighted to have the opportunity to speak again at one of your annual meetings, and to have such a distinguished fellow panelist as Dr. Roberts. He can offer an insider's evaluation of the Reagan economic program, whereas I can only offer an outsider's point of view. But perhaps I can provide a different perspective on our economic problems that will help each of you to form your own opinion on the outlook.

The economics profession has much to be modest about. None of the established theories really explain our current problems, so we should not be too critical of political leaders who get confused over the issues. There is no viable synthesis of economic theory today. The neo-classical synthesis is dead, but no successor has assumed the throne. There are bits and pieces of theory, but no overall synthesis. Important policy decisions are being made on the basis of those bits and pieces, plus much wishful thinking, some prayer and a hope that the memory of the public will be short. We are not going to like the results.

The proposed constitutional amendment to require that all capital investment by the federal government be paid for out of current tax revenues is an illustration of faulty economic analysis. Most supporters of this proposal do not understand that the federal budget does not distinguish between an ordinary operating expense and a long-term capital investment. The proposed constitutional amendment would require that current tax revenues not only cover all ordinary operating expense, but that they also produce enough profit each year for the federal government to pay cash for all of its net long-term investment.

Few businesses can earn enough profit each year to pay cash for their capital investments. And how many families can save enough from current income to pay cash for a new car, or a new house? Increased profits for

the federal government would be at the expense of reduced profits for private businesses, and reduced savings for private households. Reduced debt for the federal government would be at the expense of increased debt for the private sectors, and reduced financial liquidity.

In the absence of a cohesive set of overall economic principles, it is not surprising that governmental economic policies seldom add up to a viable overall program. Too much of the essential understanding is missing.

Supply side economics focuses on incentives for capital investment and increased productivity. It ignores monetary causes of the general deficiency in market demand. Few businesses can cost justify new plants when existing relatively-modern plants are substantially underutilized. Therefore, supply side incentives are not working well. A prolonged shift to monetary ease would not work either. It would simply rekindle inflationary forces within a few years. There are no simple conventional solutions for the complex financial imbalances that exist today. A new synthesis of economic theory is needed to explain the coordinated innovative actions that are needed. The outlines of such a synthesis are gradually becoming visible. It's major features include:

1. A respecification of Say's Law that helps define the basic problem of capitalistic economies.
2. A recognition of the Transaction Function Illusion as one of the major obstacles to economic understanding.
3. A new monetary theory based on the Principles of Sustainable Finance, with new paradigms for the price level, interest rates and capital investment.

SAY'S LAW RESPECIFIED

PRODUCTION INCREASES OWNERSHIP INTERESTS IN WEALTH

EQUAL TO THE WEALTH PRODUCED,

BUT DOES NOT GENERATE STABLE MARKET-CLEARING DEMAND.

In the mythology of capitalism, production is expected to create its own demand. This concept is known as Say's Law. Believers in Say's Law argue against the need for governmental actions to reduce unemployment. They maintain that the invisible hand of the market will cure excessive unemployment if just given a chance to operate. There is some merit to this argument. Given sufficient time the market will correct its imbalances. However recessions, depressions, and perhaps even wars must be viewed as a part of that corrective process.

It is time to restate Say's Law. Production increases ownership interests in wealth equal to the wealth produced, but it does not generate stable market-clearing demand. Those ownership interests may take the form of financial assets such as bank accounts, money market funds, etc. that

result from the financing of the output. Whether or not the holders of those financial assets choose to use them to buy the goods and services that are available is the principal determinant of market demand. Any financial income that is saved must be offset by other spending if the system is to function properly. The offset can be provided either by debt-financed purchases by others, or by the spending of financial savings accumulated previously.

If financial saving by one group is not offset by debt financed spending or dissaving by others, then market demand will be insufficient and unemployment will rise. Excessive retention of financial savings creates unemployment. How can it be prevented?

An appropriate balance between financial saving and its offsets is dependent upon a number of different relationships such as the money supply and the rate of debt expansion, interest rates and inflation rates, monetary and fiscal policies, the rate of capital investment, and even foreign exchange rates and the foreign trade balance. Governmental actions have a strong effect in all of these areas. Our current high inflation rates, high interest rates and high unemployment all indicate that we have not yet found the right mix of market forces and governmental policies.

TRANSACTION FUNCTION ILLUSION (TFI)

The "TFI" Syndrome:

1. Focuses attention on an obsolete monetary paradigm: $M \cdot V = P \cdot Q$
2. Obscures the real functions of money, near money, and debt.
3. Blocks the development of a new synthesis of economic theory.

The Quantity Theory of Money emphasizes the transaction function as the basic channel through which the quantity of money affects the price level. This view is compatible with our everyday experience, and is reinforced by academic teaching and various authoritative statements. But is it really true, or is it simply an illusion? I have come to believe that it is an illusion, and that Transaction Function Illusion is one of those misleading over-simplifications that has done great damage to our society because of its adverse effect on governmental policies.

Think about it for a minute. Is the transaction clearing function of money central to economic activity, or is it peripheral? Does it make any difference how we clear our transactions so long as there is adequate clearing capacity? Modern, financially sophisticated economies are always going to generate adequate transaction-clearing capacity. That capacity acts like a pipeline. So long as the pipeline is large enough, the size of the pipeline will not affect the flows through it. The sources of those flows and their uses is what counts, not the size of the pipeline.

In over a third of a century at Northwestern Mutual, I cannot think of a time where we were unable to close a transaction that required a shift from temporary cash investments to money long enough for the transaction to clear, after which the funds were usually put back into some interest-bearing form. Looking through the transaction function illusion, any kind of liquid asset can be used as readily available purchasing power, and all types are so used. If all interest-bearing assets are classified as bonds, then in effect transactions are closed with bonds even though the clearing mechanism may temporarily utilize money. The person receiving the bonds has no funds to invest, the funds are already invested.

If the transactions function of money is not central to economic activity, then how does money affect the economy? A new monetary theory offers three new paradigms as the answer to this question. Those three paradigms provide the basis for a set of principles that must be satisfied in order to finance economic activity on a sustainable basis. I call those the Principles of Sustainable Finance.

PRICE LEVEL PARADIGM

$$k \cdot D = P \cdot Q$$

Where: k = Constant (approximately .71)

D = Non-financial Debt

P = Equilibrium Price Level

Q = Real GNP

The price level paradigm is a balance sheet relationship. Non-financial debt times a constant equals the equilibrium price level times real GNP. Economists have known about this relationship for some years, but have not thought of it as the basic determinant of the price level. That is not surprising. The supporting theory had not been developed, and the historic Quantity Theory still claims the price level as its own turf.

The new price level paradigm contains an important message. It says that all expansion of debt must either be validated by equivalent growth in real income, or it must be repudiated by inflation or bankruptcy. This is one of the basic principles of sustainable finance.

INTEREST RATE PARADIGM

$$AAA = a + bVM$$

Where: AAA = Equilibrium yield of high grade, long term bonds

VM = Financial investment velocity of non-interest-bearing money

Interest rates are determined by supply and demand forces in financial markets. The net increase in debt provides the supply side of this relationship. The basic market for the net supply of new debt is the non-interest-bearing money supply. The pressure of supply on demand is measured by the ratio of the increase in debt to the money supply. That ratio is the financial investment velocity of money.

The equilibrium yield of high grade, long term bonds appears to be determined by a simple function of the financial investment velocity of narrow money. Equilibrium yields are equal to a constant, plus a coefficient times the financial investment velocity.

Cyclical fluctuations occur between actual long-term rates and their equilibrium levels. A substantial portion of those cyclical fluctuations can be captured by adding another term to the equation.

Chart no. 1 shows the actual vs estimated AAA yields based on the expanded specification. Considering all of the cyclical effects that were not captured by the equation, the correspondence is remarkable. When the estimated rates were regressed against the actual AAA rates, an R^2 of .965 was obtained.

Actual AAA yields vs their equilibrium yields are shown in Chart no. 3, both plotted against the corresponding financial investment velocities. The typical cyclical patterns of variance are evident.

During the span of years covered by this chart, 1953-1981, the financial investment velocity of money increased from \$.25 of increased debt per dollar of money, to over \$1.00 and interest rates increased accordingly. About half of the increase in financial investment velocity resulted from increased rates of credit expansion, and the balance from the long-continued decline in the economic size of the money supply.

There is a message here for the Reagan administration and the Federal Reserve. Interest rates cannot be reduced permanently without permanently reducing the financial investment velocity of money. Present monetary control mechanisms cannot achieve that goal without the assistance of a prolonged deflationary depression.

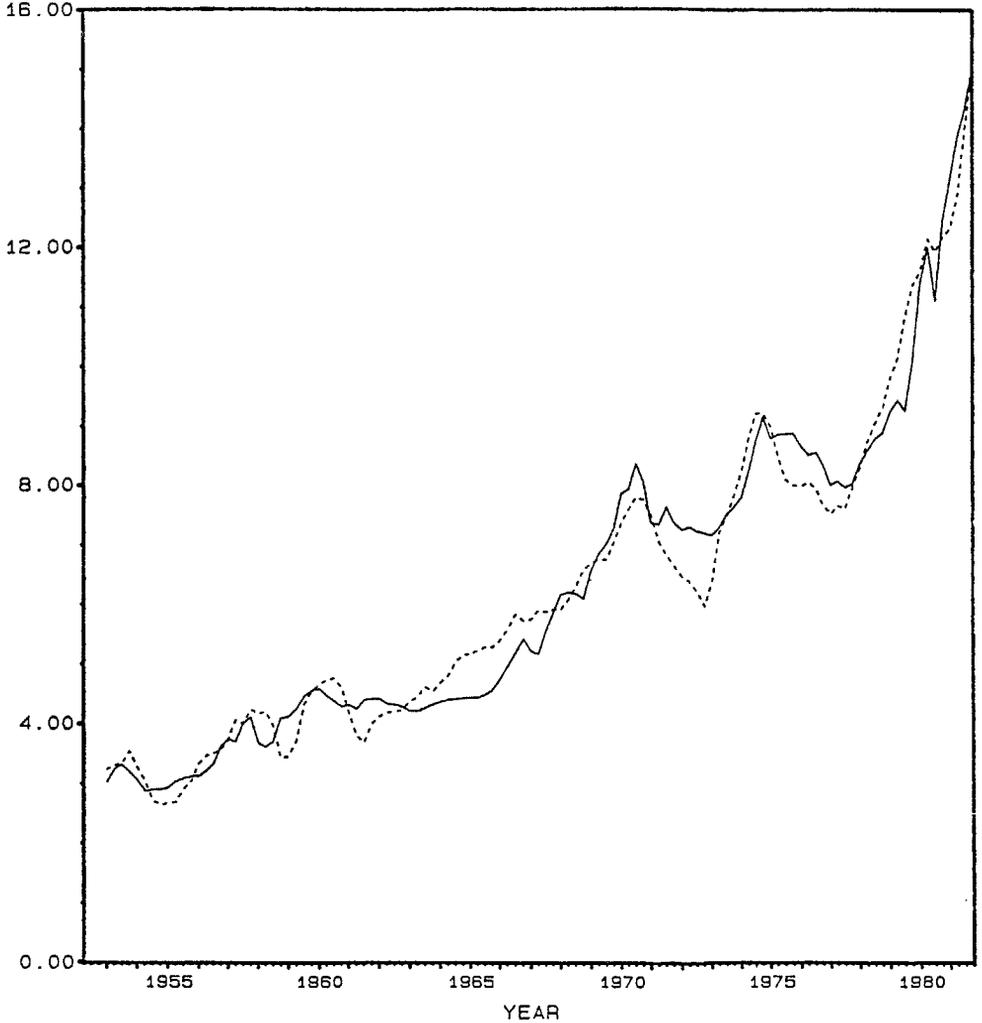
Interest rates are critically important to the functioning of market economies. High interest rates crowd out principal repayments on existing debt. Low repayment rates on existing debt reduce the funds available for new loans. Most of the funds for new loans need to be supplied by loan repayments in order to avoid excessive debt expansion. Our major problem today is that interest rates are so high that little is left over to repay principal balances.

The growth of interest payments on outstanding debt over the past twenty years has been phenomenal. Excluding any interest paid by banks or other financial intermediaries, interest payments increased from \$38 billion in 1960 to \$443 billion in 1980. They increased over a hundred billion more to \$554 billion in 1981. Interest payments at this level have a severe depressing effect on the economy unless offset by inflation. Inflation reduces the real value of debt, thus is a substitute for principal payments.

ACTUAL VS. ESTIMATED AAA YIELDS

QUARTERLY 1953-1981

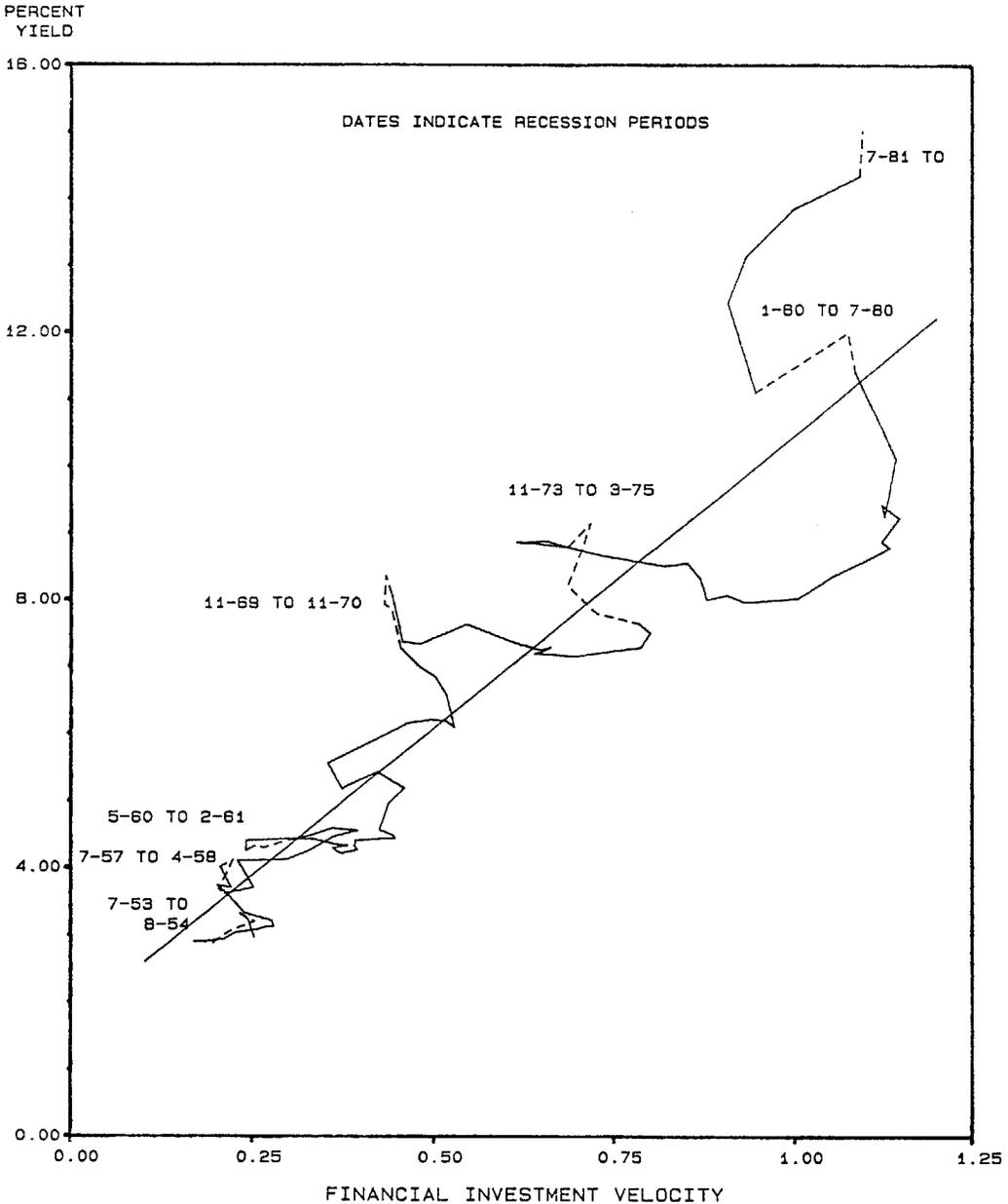
PERCENT
YIELD



— ACTUAL MOODY'S AAA
- - - ESTIMATED MOODY'S AAA

ACTUAL VS. EQUILIBRIUM AAA YIELDS

QUARTERLY 1953-1981



LINE SHOWS ESTIMATED AAA RATES NORMALIZED FOR CYCLICAL FLUCTUATIONS.

High interest rates on outstanding debt in a low-inflation economy is a formula for a depression. The monetary policies started by the Carter administration and continued by Reagan have reduced the inflation rate substantially. Unfortunately, the high average interest rates on the approximately \$4,800 billion of non-financial debt outstanding will be slow to decline. Interest rates on new loans have dropped below their recent peaks, but remain exceptionally high by all historical standards. They are also exceptionally high relative to the current and prospective inflation rates. This spells continued trouble for the economy.

CAPITAL INVESTMENT PARADIGM

$$I = A \Delta D + VMA \cdot MA$$

Where: I = Capital investment

AAD = Increase in debt used to finance capital investment

MA = Monetary Assets

VMA = Capital investment velocity of monetary assets

Here is the capital investment paradigm. It includes another new velocity concept: the capital investment velocity of monetary assets.

Gross capital investment is equal to the portion financed by an increase in aggregate debt, plus the portion financed by the turnover of existing financial assets. In a non-inflationary economy, the turnover of existing financial assets must provide over 80 percent of the funds for capital investment. That turnover, the capital investment velocity, includes:

1. funds from current income,
2. funds from the liquidation of previously accumulated financial assets,
3. loans from funds provided by repayments on existing debt, and
4. funds from new issues of stock.

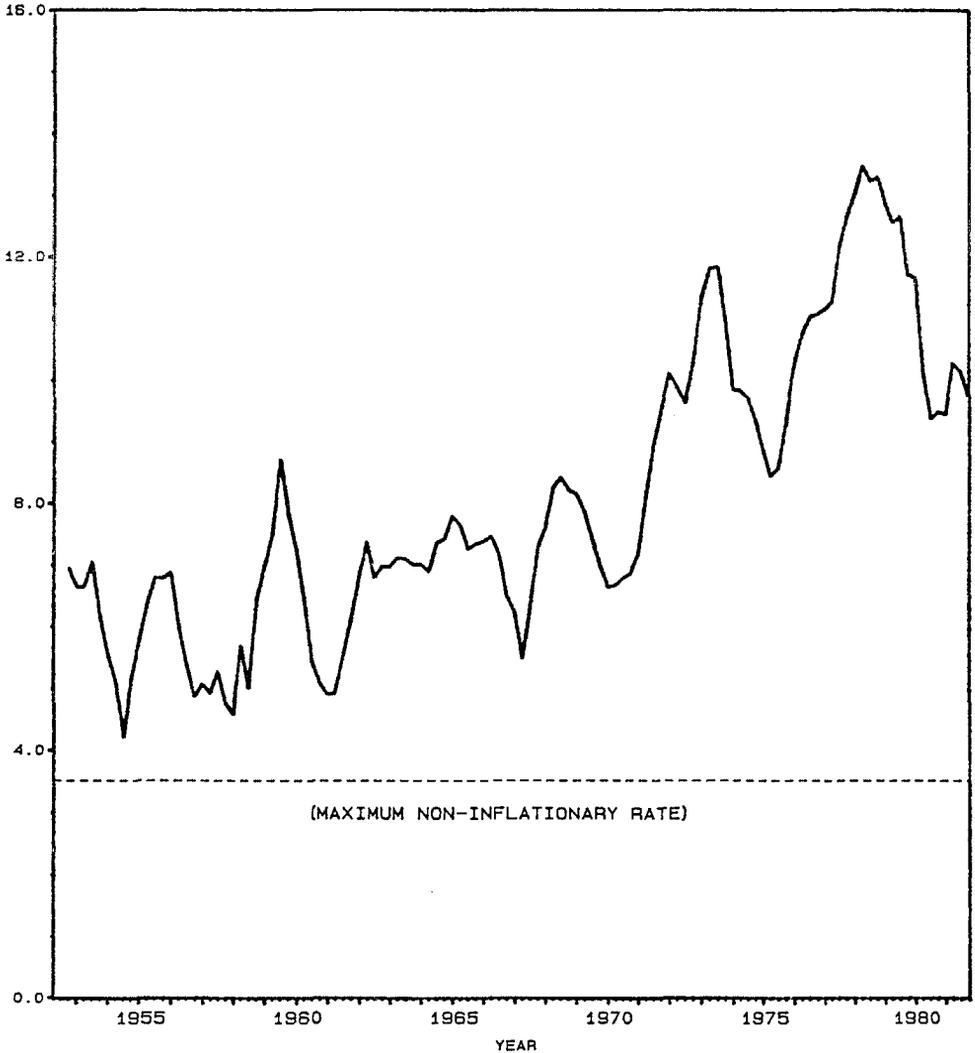
The criteria for sustainable finance limit the amount of capital investment that can be financed by a net increase in debt.

Chart no. 3 shows the growth rates of non-financial credit-market debt since 1952. If normal real growth of the economy is about 3 1/2 percent per year, then any growth rate of debt in excess of 3 1/2 percent would increase the overall debt burden if not offset by inflation.

We all know what has happened. As the chart shows, the growth rate of debt has increased progressively from business's cycle to business cycle. The need for inflation in order to stabilize the debt burden has increased correspondingly, and the political process has accommodated that need. What will happen next?

ANNUAL RATE OF GROWTH IN NON-FINANCIAL CREDIT MARKET DEBT*

ANNUAL
PERCENT
GROWTH



* Four quarter increase based on not seasonally adjusted data.

If a new acceleration in the rate of debt expansion is permitted, comparable to the expansions following the 1970 and 1974-1975 recessions, then debt will be growing at about one trillion dollars per year by 1985. If that kind of acceleration in debt expansion is permitted, we will blow the lid off both interest rates and inflation rates within a few years. I do not think that is going to happen.

On the other hand, if the rate of debt expansion is held close to current levels, say 9-10 percent, then any early recovery in the economy will be quite limited.

We need to continue a strong anti-inflation program, but new disciplines to prevent excessive debt expansion are essential. Those disciplines could permit the creation of the market forces needed to generate a long-term, progressive, permanent decline in interest rates, and that decline could be achieved without the need for a depression.

Let me close on a note of optimism. There are answers to our economic problems. The new synthesis of economic theory needed to explain those answers is likely to become widely recognized within this decade. The expansion of data that describe the functioning of the economy, and the increased ability to process that data offer hope for an early recognition of the new relationships. Once we learn how to make our mixed economy function properly and demonstrate that the innovations work, we can export that know-how to other countries with poorly functioning mixed economies. Some that do not have democratic government today might be able to achieve the political stability necessary to make the transition. That could offer hope for both peace and prosperity in the world of tomorrow.

DR. PAUL CRAIG ROBERTS: Reaganomics is a compromise between three points of view. The supply-side point of view which stresses the after-tax rates of return on investments and the incentives in the system that have been ignored by policy makers for decades, The monetarist's point of view which was primarily concerned with restraining the inflation rate and the growth of credit and the traditional republican point of view which focused on balancing the budget. These three points of view were rolled into one and called Reaganomics.

The budget was to be balanced not through the application of austerity measures to the economy but through economic growth. The tax cuts and the monetary restraint fitted together quite well. One of the purposes of the tax cuts was to provide liquidity through the tax system to households and business so that it would be possible to gradually restrain the growth of money without provoking a liquidity crisis or a recession. In principle we have these policies, but in practice but we do not.

Let us look at the situation in January 1981. The whole nation had been turned into a collection of debt junkies and this was the fault of the tax system. In 1965, the medium income family faced a top federal tax bracket of 17%. A family with twice the medium income faced a top federal tax bracket of 22%. By 1980-1981, the medium income family was in the 28% federal bracket, a 65% increase in the rate of tax on additions to the family income. The twice medium income family faced a 43% bracket, almost a 100% increase in the marginal rate of taxation. During those 15 years, the Social Security tax had risen substantially and many states added

state income tax such that the medium income family in an average tax state like Maryland was in the 40% bracket. In other words, the medium income family was being taxed at rates once applicable only to the rich.

This upper movement in the tax brackets affected work attitude and the savings rate. Work attitudes declined, absenteeism rates rose and willingness to accept overtime declined. In fact, as recently as 1980, International Harvester had a big strike where one of the main points of the strike was whether or not the company had the right to assign overtime and expect the employees to show up for work.

This upper movement of the tax rate also affected the savings rate. The decline in the personal savings rate between 1975 and 1980 was two full percentage points and cost the capital markets 150 billion dollars. The same thing was going on with business savings. The way the old tax law interacted with inflation served to confiscate the real value of business depreciation allowances. The depreciation allowances over that five year period put on a replacement cost basis with business tax aside, resulted in business cash flow being reduced from overtaxation by 200 to 300 billion dollars. The reduction in business savings over the five year period combined with a reduction in personal savings resulted in a loss of between 350 and 450 billion dollars in private sector savings that did not materialize because of taxes.

The decline in personal and business savings is thus related to the real interest rates. So there were very good reasons for reducing the marginal rates of taxation and/or increasing the business depreciation write-offs.

Over the same period, the growth of money and credit rose and the rate of inflation with it. As the rate of inflation moved up, so did the interest rates and as the expectation of inflation rose interest rates ended up rising faster than inflation. The Reagan administration approach to this situation was to reduce the rates of taxation in order to improve the incentives and the rate of return after taxes and to add liquidity to households and business through the tax system.

On the monetary side, the money supply would be gradually reduced over a four to six year period. The rate of growth in the money supply would be reduced by 50%, such that if the money supply was growing at 10% in 1980 it would be growing at 5% in 1985. If the tax changes to the higher after-tax returns on investments and work effort improve the rate of real economic growth, as they have always done in the past, then the higher rate of economic growth would make it possible to bring the budget into balance.

The budget deficit is a residual of the economy's performance. A poorly performing economy does not generate tax revenues but does generate many budget expenditures for income support programs. An improvement of the performance of the economy will close the deficit from both ends, both the revenue side and the expenditure side. What happened to this program?

When this program was announced, the critics claimed that it was wildly inflationary. The tax cuts would overwhelm any possible restrictive monetary policy and, according to the critics, we are supposed to be having 25% inflation rates right now. These charges of inflation, and the

hysteria that was generated in the winter, spring and summer of 1981, when the administration was trying to get this program passed, did two things. It caused the administration itself to delay and scale back its tax package. Instead of beginning in January 1981, it was moved to July and October and reduced in half. The net final result was that the personal income tax rate reductions were delayed 18 months and basically will affect the second part of the Reagan administration. On the business tax side, a great deal of what was passed in August 1981 was repealed in August 1982, such that the changes are not there either.

At the same time, perhaps, the fears of inflation caused the Federal Reserve to over-react and deliver one of the tightest monetary policies in the post-war era. Instead of gradually reducing the growth of M-1 over a four to six year period by 50%, the Federal Reserve produced 75% of that reduction in money growth the first year. For six months of 1981 the money supply was held flat at a zero rate of growth. In fact in October-November of last year there was less money in the economy than in the previous April. To be exact, 300 million dollars less. Instead of producing a steady, predictable, moderate growth in money the Federal Reserve produced a first quarter growth of about 13%, a second quarter growth of zero, a third quarter growth of zero and again a fourth quarter growth of about 12%. When we discuss this with the Federal Reserve, Paul Volcker would say that the average of 12, 0, 0, 12 is 6, and that they had their target. That is not the way you make the target and gradually bring down the growth of money.

The very strong volatility in those figures also accounted for the stickiness of the interest rates downward because no one really could tell exactly what the monetary policy was or the direction in which it was going. During the period of the 1970's, the financial markets were taught that generally unemployment results in an expansion of money. Therefore, it does not pay to buy long term bonds at low interest rates in a recession because sooner or later, and most likely sooner, you find a deflation to fight the unemployment and therefore your purchases turn into capital losses. This explains the long stickiness of the interest rates downward over the past couple of years.

In other words, there is no Reaganomics, which had offered an opportunity to get off the so-called Phillips curve which trades off inflation and unemployment. The way to get off was not to stimulate the economy in the time honoured demand-increasing raise, but in improving the incentives to work, save and invest, to increase the after-tax rates of return to all forms of economic activities and in the process provide cash flow or liquidity that would allow a gradual reduction in the growth of the money supply. We do not know if that would have worked or not since we did not obtain it. We had instead a delayed tax cut, in the name of fighting inflation and balancing the budget, and an old-fashioned monetary slam on the brakes. Any time you go through an old fashioned slam on the brakes, you end up with a recession and anytime you have a recession you end up with large budget deficits. These budget deficits have served to reinforce the focus on balancing the budget, not by lifting the economy, but through the application of austerity, such as higher taxes and reductions in government spending.

These approaches are deflationary. Let me say something about the deficit issue. In Washington today the Keynesians have no influence and in fact they are even guilty of betraying their own doctrine. They have sat on the sideline and delayed the application of austerity to an economy in a recession. The monetarist has no influence because Paul Volcker has never been within his target range for any sustained period. Supply-side economics is not in practice either. What we have is what John M. Keynes called the Treasury View. He was referring to the Treasury View in Britain in the 20's and 30's and attributed this view as the cause of the great depression. The Treasury View argues that deficits drive the economy down because they impair business confidence. This seems to be the doctrine that is now formulating economic policy in Washington.

Let me just briefly review. The first criticism was that Reaganomics would be inflationary. When the inflation rate collapsed, in spite of the fact that the deficits were rising, that argument had to be abandoned. Since the interest rates lagged the decline in inflation because, in my view, of the total uncertainty of monetary policies, the critics found a new argument. This argument was that the deficits cause high interest rates and, unless taxes were raised to balance the budget or to reduce the deficits, the high interest rates would cause the recession or prevent a recovery. This argument started in early August of last year and the tax increase passed in August of this year. What was happening over that period to the projection of the deficits?

They were mushrooming. For example the 1983 deficit had been estimated in March 1981 at \$22.8 billion. By September 1981 the deficit was measured at \$62.9 billion. By February the projection of the deficit had risen to \$91.5 billion. By July of 1982 the deficit was estimated to \$115 billion with unofficial estimates placing it at \$140 billion. During this period of time the projections for the deficit more than doubled rising from \$63 billion directly to \$140 billion. According to the theory that deficits cause high interest rates, the interest rates should have been rising. Yet, during this period, the interest rate on Treasury bills fell 6.25 points, from 15.5% on August 13, 1981 to 9.25% on August 13, 1982. The one year Treasuries fell 4.5 full points, the three year Treasuries fell 3 full points, the ten year Treasuries were down 1.5 and 20 year bonds were down a full point. Federal funds were down 7 full points from 18 to 10.9, the prime rate had declined 6 full points, 6 month commercial paper was down 5.25 points.

Obviously, the markets did not believe the theory that large and rising deficits cause high interest rates. Since the very year that the deficit projection ballooned, the interest rates fell substantially. The crowning blow to the theory that the deficit causes high interest rates occurred during the recent financial market rally. On September 1st the congressional budget office revised its estimate of the 1983 deficit upward from \$118 billion to \$150 billion and the Solomon Brothers firm issued a deficit projection of \$178 billion. This had no effect whatsoever on the rally in the financial markets which continued unabated.

By chasing the budget deficit, we have abandoned a program that provided an opportunity, perhaps an untested one but nevertheless an opportunity, to reduce inflation without provoking a serious recession or a liquidity

crisis. Since that program was abandoned we now have a recession and a liquidity crisis. The question is where do we go from here? The other speaker offers us little hope other than to continue with the recession.

Politically it will be very difficult to live through a long recession. Therefore, at some point, the pressures to deal with this recession by reflating will become dominant. Therefore, we would have been much better served to stick to our course to improve the incentives up front, not two years into the Reagan administration, to improve the cash flow up front through the tax system and to gradually bring down the rate of growth in money and credit.

When the President came into office, the Federal Reserve increased the growth of money through April. Early in 1981 interest rates were falling but ceased falling and began rising. After this increase, the money supply declined from a 13% annual rate of increase to a zero annual rate which was held for 6 months. After 6 months the money increased again. The money supply was thus never in the target range. The assumptions of the Reagan administration, which underlied its outlook on the economy, were that M-1 would be in that target range. Since this was not the case, the outlook of the Reagan administration could not be sustained.

Another factor which points to deflation, at least over the next year, is the international liquidity problem. There are enormous debts undertaken by third world countries, most of which are in doubt and which were incurred by bankers who expected that rising commodity prices would service the loans. Next year, almost half of third world debt matures. There is no prospect of that being paid. We are faced, therefore, with the roll-over problems which often bring restrictive IMF conditions which further deflate these countries. Thus, bringing a rolling ball of deflation over the immediate future, unless the Federal Reserve has already decided to be more generous with the growth of money. With the kind of erratic behaviour of the growth of money you cannot, within any confidence, predict monetary policies. Neither can we predict tax policy because the largest tax cut in history was followed a year later by the largest tax increase in history. We are now facing proposals to handle the Social Security problem by raising the Social Security tax. That, of course, is a tax on employment, and you do not normally raise the tax on employment when the unemployment rate is rising. Maybe the Federal Reserve will try to offset the deflationary tax policy with a great burst in money. This is the opposite of what they did last year, when they tried to offset the tax policy and did successfully with a very deflationary monetary policy. With that I will conclude my remarks.

MR. COHEN: I must thank the two speakers on behalf of the Society for coming here. If there are questions and discussions as well as opposing theories or comments the two gentleman would be very glad to hear them. I will leave the floor open to the first speaker.

MR. DOUG VAN DAM: I had a question for Mr. Roberts. Mr. Wilmeth made his views known on the balanced budget amendment. You were saying that the current deficit was not bad. What is your view on the balanced budget amendment?

MR. ROBERTS: The balanced budget amendment when it first began its political life some years ago was basically fighting the notion that you could stimulate the economy towards prosperity through heavy deficit spending. Today, there has been a wider acceptance of the need to reduce the rate of growth in government spending. No one is much in favour now of government spending growing faster than the economy. This was not the case a couple of years ago. The supply side policy brought this concern on the growth of government spending because it was possible, by cutting taxes and restraining the growth in government spending, to let the economy balance the budget. At this point the balanced budget amendment, should it be law, would present us with a dilemma because in a recession deficits automatically widen. Deficits can be a result of a Keynesian demand management policy which says "let's throw all this deficit spending into the economy and stimulate it". On the other hand a deficit can simply be a residual of the economy's performance. If the economy is doing badly, incomes are down, therefore the tax base is down, therefore tax revenues are down, and if the economy is doing poorly all of the budget expenditures for income support programs rise.

Therefore, in a recession if you were faced with the balanced budget amendment it is not clear how you would proceed. You would have to either raise taxes which cannot help the economy in a recession and which most likely would worsen it, thereby tending to widen the deficits that you are trying to close. Whatever kind of tax you have, it does not positively impact the production of income and, therefore, the production of income declines and widens the deficit. The other choice would be to cut programs in the budget. But, if you cut programs in the budget you are doing two things. You are reducing spending supported by Public funds; thus, you are reducing demand in a recession.

You are also faced with a very serious problem of what kind of spending can be reduced by any magnitude. You would have to more or less rewrite the Social Security laws if you wanted to take it out of Social Security spending. You would have to get rid of unemployment compensation if you want to take it out of that. You would have to give up the National Defense if you wanted to take it out of that. A law to balance the budget in a recession is a politically impossible situation. Therefore, the congress would simply elect to override the balanced budget amendment because they can do that with a two-thirds vote. Government spending grew much faster than the underlying economy that supported it over a number of years in the 70's, such that we now have huge obligations accrued for future spending under all sorts of programs. It might have helped us not to get in that situation but, I am not sure that it can help us get out of it.

MR. SAM ECKLER: I have two questions, one addressed to Mr. Wilmeth and another to Dr. Roberts. In listening to Mr. Wilmeth's observations about Say's law, and his other observations, I thought I was rereading Keynes' general theory. The varied comments that you made are almost identical with the comments that were made by Mr. Keynes at that time. I guess my question to you is a two fold:

- 1) Have I misunderstood you?
- 2) Could you in just a few words summarize for us where do you think we're going, or what should we be doing?

The question to Dr. Roberts is a different one. I got a strong message from his remarks that the bad wolf in the Washington scene is the Chairman of the Federal Reserve Board. He said that it is very difficult to fine tune the monetary supplies. In practice, could he have done much more than the Chairman of the Federal Reserve Board?

DR. ROBERTS: I cannot say that Volcker is a bad wolf. I can say he did not meet the conditions of a monetarist policy. He acknowledged that this was not his goal, to be within that target range. Now the question is why? Well, if you are monetarist then there is no excuse. If you are not a monetarist or doubtful about whether or not the money supply can be controlled very accurately, or you are doubtful that it can be measured accurately, then you can start making those excuses. Unless you were a monetarist on the Federal Reserve Board trying to do that policy, you would not really know the answer and since there is no monetarist on the Board you are not likely to ever know why they did not operate in the target range. I suggested that one of the reasons may have been the hysteria that was generated about the alleged inflationary effect of Reaganomics. No more than a year ago, the expectation of the financial community was that this program was going to set us off on a sustained high inflation. Those charges more or less defeated the President's program. It could well be that those charges influenced the Federal Reserve. Therefore, they slam on the monetary brakes. That is a possibility.

Now it leaves the wider issue of the effort to have monetary targets. We had it only since October 1979. Prior to that we had about ten years of trying to peg the interest rate. We went off any last connection to gold early in the 70's, and therefore, we have been in uncharted monetary waters. Most of our experience was lived under a gold standard. It was not perfect, but we lived under it. The argument was made by all of the economists and all the enlightened people that the trouble about the gold standard was that it was automatic and did not give any room for discretion. If only the discretion could be turned loose they could manage much better than this automatic gold standard. These arguments were the favorite arguments of the Keynesian. Well the discretion has not turned out to be very successful either. Our current monetary system does not define the value of the dollar. It is not defined as equal to anything, and therefore you can only try to predict its value by not printing too many of them. Some people believe that if you had a price rule instead of a quantity rule and the dollar was defined as equal to something, for example, if you return to a gold standard, it would commit the government to the protection of that value. People would have confidence in the currency and would be less concerned about the rates of growth in the money supply. All we do know is that we have been in uncharted waters for monetary standards for the last decade and it is not working out very well.

MR. WILMETH: Keynes was a brilliant economist. I think that had he been privileged to live twenty-five years longer and have access to the kind of data that is available today, he might have really written a general theory. But, what he did write and what he called the general theory was not, as we know today, anything approaching a general theory of economic activity. You will not find in Keynes' famous work any reference to the relationship of aggregate debt to the price level. Now we have in the United States today approximately 60 years of good statistical data concerning the aggregate debt burden, we know that during the last 60 years the price level paradigm that I showed you has held. It would take a tremendous weight of evidence

to suggest that this was not the case. Keynes had a number of other things within his famous work which we know differ from actual experience.

When I talked about the hope for the future, I was thinking in terms of some very fine work being done these days in the Federal Reserve by the Flow of Funds section which has developed balance sheets for the U. S. by sector. These balance sheets include not only the financial relationships but also tangible assets changes. Did you know, for example, that historically there is a stable relationship between the aggregate amount of tangible assets and the gross national product capacity associated with that stock of tangible assets? The four basic categories of tangible wealth are land, structures, durables of all types and inventory. There is parallel growth between aggregate tangibles wealth, aggregate GNP capacity and monetary assets. One person's bank account is somebody else's debt. There has been some discussion about attempts to reliquify the private sector.

Does everyone here understand the basic reason for this prolonged decline in liquidity of all the private sectors of the U. S. economy over the last 30 years? The overwhelming reason is a progressive shift in the liability structure of the economy. Par is about \$1.40 of non-financial debt per dollar GNP capacity. This has been stable for the last 60 years with cyclical fluctuations. At the end of the second world war, federal debt represented almost \$1.20 of that \$1.40. The proportional amount of federal debt has been declining steadily and has now declined by over 75% since the end of the second world war. That was historically high and it should not have stayed at that very high level. Today it is less than 30c. All of that decline in the proportional amount of federal debt has been replaced by an increase in the proportional amount of private debt. Therefore, all of the private liquidity measures have deteriorated progressively.

Think of the implications of a balance cash basis federal budget. As all of you actuaries know when some variable stops growing in a growth economy it eventually approaches zero. Approximately one trillion dollars today of private financial assets is represented by private holdings of federal debts. A quick way to achieve what a balanced federal budget would achieve over 15 or 20 years, would be to have a capital levy of a trillion dollars. That would mean, if it were applied to financial assets, a capital levy with a little over 20% of present financial asset holdings, and that could be used to redeem that much federal debt. At that point there would be no federal debt, there would be no private financial asset based on the federal debt and it would be an economic disaster. There are any number of relationships in our economy. When we get into looking at the inter-relationships, the balance sheet relationships along with the flow relationships, then we begin to perceive reality. I think there is hope but much work to do.

DR. ROBERTS: This great build up in debt mobilities and deterioration in private liquidity is primarily the result of the tax system. This is one of the reasons that supply-side economics wanted to restructure the tax system. In spite of the 1981 individual income tax reduction of 5% in October, individual income tax rose 15 billion dollars that year. In 1982, the 10% tax reduction is washed out by the rise in Social Security. There is no prospect of any net tax reduction out of that tax cut in 1983. It would not last unless the indexing provision of the personal income tax, which is supposed to begin in 1985, is retained. This is one of the tax

measures they are talking about repealing in the name of balancing the budget, in which case there would be simply no effect of the Reagan personal tax cuts. The business tax cuts were repealed almost as quickly as they were passed. The accelerated capital cost recovery provisions were repealed for all assets of five years and under and cut back for all assets over five years. Depending on the category of asset, between 55% and 95% of it was repealed. What this has managed to achieve was mainly a new focus. If we continue in trying to chase the balanced budget by raising taxes, then we will continue to worsen these private liquidity problems and make people ever more debt dependent. If you are making people debt dependent through the tax system, while you are trying to restrain an inflationary growth of money, then you are going to have a deflation, and there is absolutely no way around it.

MR. MICHAEL COWELL: I must say, I share the frustration of many of us out in the business world in seeing two basic schools of economics, monetarist and supply-side, each more or less arguing that because a little of their theory did not work, a massive dose will set us all straight. I think there is a danger in assuming that there is one grand theory. A lot of work being done by cosmic physicists is suggesting that perhaps there does not exist one grand theory. There are different theories to operate in different phases of space and time, and I would suggest to our two speakers that one of the problems we are facing is that economists are looking for one grand theory to explain all of this when in fact one does not exist.

DR. ROBERTS: We were not operating on the basis of one grand theory, but on a conglomerate of several grand theories. It did not work because we did not get any of the proposed changes. The policies were separated in time. The reduction in money was supposed to go hand in hand with a tax cut. It was not supposed to be a terrific reduction in money and then a little bit of tax cut. It was supposed to be a gradual reduction in money and a substantial tax cut. It did not happen because the traditional ways of thinking were too powerful. It was too easy to characterize those of us who were trying to bring changes as being some kind of radical, and therefore, nothing changed. What you have is the consequence of the absence of any changes. The vested interest in the status quo is powerful, as well as the envy of anyone who would bring about a change, and the two together tend to block changes. Therefore, things tend to go along as they have before and the question that we face is: Is that what is happening now?

MR. WILMETH: I think the point was an excellent one, that there are different systems of political structure. Basically, in the world today we have a conflict between capitalism and communism. The plain truth is that in a relatively pure form both of those systems work so badly that they are not compatible with democratic government. What we are trying to seek is that kind of mixed economy which will work better than either of those two extremes. If we hope that our children can live at peace in the world of tomorrow, we had better hope that there can be an accommodation between capitalism and communism, with that accommodation being somewhere in the middle of the two.

