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Financial Instability and the Failure of Standard Economics

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by

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Upon being told that Clement Atlee was a modest man, Winston Churchill is reported to have remarked that "Mr. Atlee has a great deal to be modest about." The poor performance of economic forecasts and policy since the mid-1960s means that economics, as a discipline, has "...a great deal to be modest about." In particular the credentials of the economists who have been giving policy advice must be questioned. In 1976 Alan Greenspan, Chairman of the Council of Economic Advisors with Presidents Nixon and Ford, did a "Joe Namath"; he "guaranteed" that unemployment would be at or below 7% and falling by year end. The various commercial econometric forecasts - Klein's "Wharton Econometrics", Ecksteins's "Data Resources", and Evans' "Chase Econometrics" were all at least as wrong as Mr. Greenspan. They essentially agreed that a 6% expansion rate and a 6% price rise was in the offing during 1976. Not only did the actual expansion rate in 1976 fall below the forecast rate, but at year end 1976 unemployment was 8% and on a rising trend.

Greenspan, Klein, Eckstein and Evans are reputable professional economists and very bright people. They are supported in their activities by a galaxy of well trained economists and statisticians. Their forecasts and policy advice are always buttressed by a parade of computer print outs. They impress patrons with their mathematical formulae, wealth of numbers, and academic credentials. Nevertheless in spite of their reputations and prestigious positions their most striking common attribute is that they were wrong in 1976.¶ Furthermore this is not the first time they and other establishment economists have been wrong: The years since the middle 1960's are littered with the errors of establishment economists. As a result of the failure of establishment economics policy decisions have been inept. Wrong and inept policy has led to a marked deterioration in the performance of the economy.

Unfortunately it is the unemployed, the poor and the near poor - the hourly rated factory hands - who pay a high price for these failures. Even as they are wrong time and time again, these establishment advising economists become ever more affluent and influential. It is a wry characteristic of our times that as the established forecasting services - Data Resources, Wharton Econometrics, and Chase Econometrics - fall on their faces their billings continue to rise - and their influence in the corridors of power continue to increase.

In a serious discipline whenever experimental evidence disagrees with the predictions of a theory, the theory is either discarded or modified. Each economic forecast and each economic policy decision is like an experiment in science which tests a theory. The failure of forecasts and the failure of the economy to react as predicted to policy actions are evidence that the theory that underlies the forecasting models and the policy advice do not capture essential characteristics of our economy. There is a crisis in economic theory, for the standard theory - which is what the advisors use - seems to be less relevant for our economy with each passing year. The problem of economics is to develop and apply a theory that is relevant for the world in which we live.

Economic theory is a construct of man that is created to explain phenomena in the world. Economic theory - like all scientific disciplines - grows and develops under two types of stimuli. One is the internal logic of the ruling theory. When a theory is doing well in explaining whatever it is supposed to explain then progress in the science takes the form of working within the literature: nit picking rules the roost and preferment goes to the adroit nit-picker. The standard economic theory that underlies the forecasts and the policy advice did well enough in the first twenty years after World War II: today's leading economists cut their teeth as nit pickers.

The second type of stimuli for the development of a science comes from the world. Whenever the ruling theory does not do well in explaining what is happening in the world or the results of experiments - when anomalies abound - then it is necessary to reconstruct theory. New theory grows out of the failures of accepted theory. For this to happen, nit picking within the literature must give way to observation and analysis of real world phenomena. Exploring the implications of new ideas rather than refining old ideas become the order of the discipline's day.

A discipline is in a crisis whenever the inherited body of theory will not do. Economics is now in a crisis and the main task of the discipline is to develop new theory to replace the inherited theory.

The Neo-Classical System

Much is made in the press and in the discipline about the distinction between monetarists and Keynesians; between the economics and the economic policy advice of say Nobel Laureate Friedman and say Nobel Laureate Samuelson; between a Chairman of the Council of Economic Advisors like Alan Greenspan and one like Walter Heller. In truth there is no significant difference in the economic theory used by the above. Monetarists and Keynesians use the same economic theory.

Todays standard economic theory - the theory that underlies the models of both the monetarists and the Keynesians - is usually called the "neo-classical synthesis". This economic theory is largely a creature of the years since World War II. The Neo-classical synthesis was born after the appearance of Keynes' The General Theory of Employment, Interest, and Money in 1936 and integrates some aspects of Keynes' thought with the older classical analysis that Keynes believe he was replacing. It is the neo-classical synthesis that has failed.

Keynes' General Theory is a complex work that explores many facets of a capitalist economy. The essential aspect of Keynes' theory is a deep analysis of how financial forces, which we can characterize as Wall Street, interact with production and consumption forces to determine output, employment and prices. One, but not the most important, result of Keynes' theory is the demonstration that under capitalist institutional arrangements at times the economy will be characterized by persistent unemployment. The neo-classical synthesis seizes upon this result of Keyne's theory. However the most important result of Keynes' theory is ignored in the neo-classical theory.

This most important result is that a capital using capitalist economy with sophisticated financial practices (i.e. the type of economy we live in) is inherently unstable. It is this second result, and the analysis of the economy by Keynes that led to this result, that provides us the foundation for an alternative to the Neo-classical synthesis.

The Neo-classical synthesis is derived by integrating the bare bones model derived from Keynes that explains the way in which an economy may generate persistent unemployment with the labor and commodity market model that was developed in the classical economics. The neo-classical synthesis shows that (1) fiscal and monetary policy measures can eliminate persistent unemployment and (2) there are self correcting forces within decentralized markets that would in time lead to the absorption of unemployment. Thus the neo-classical synthesis, like the white man, speaks with a forked tongue. On the one hand it holds that activist interventionist policy can eliminate persistent unemployment (or chronic inflation) and on the other it holds that if nothing is done the economy will in time and of its own workings settle in a stable price full employment regime. The same theory can rationalize the non-interventionist views of Alan Greenspan and the interventionist views of Walter Heller; it is "A Theory for All Advisors".

It is evident that this "neo-classical synthesis" won't do for our economy in our time. It is designed to deal with equilibrium and equilibrating tendencies, whereas our economy has been increasingly unstable. Three progressively more serious financial trauma, recessions, and critically disruptive movements in interest rates and asset prices have taken place since 1966. Such unstable behavior is foreign to the neo-classical synthesis. Standard economists can offer no satisfactory explanation of what happened in the past decade. The least we can require of economic theory is an explanation of why a financial debacle almost occurred in 1974/75.

In order to do better economists must abandon standard theory and develop an alternative line of thought that pays attention to the institutional detail and disequilibrating relations of our economy. Such an alternative is emerging in what is now called "post-Keynesian" theory. The particular version of "post-Keynesian" theory that will be taken up here emphasizes the financial relations of a capitalist economy. This Keynes theory shows that strong endogenous destabilizing processes exist in an economy that is capitalist, uses capital intensive production techniques, and is financially sophisticated; i.e., our type of economy is inherently unstable.

There is another shortcoming beyond the weakness of its theory to todays standard economics. Over the past thirty years economists have had a romance with econometrics: The cloth of economic analysis has been cut to fit the capabilities for econometric computation. Institutional and evolutionary characteristics of the economy have been neglected. Economists have been granted degrees and turned loose to practice who neither know nor care about economic institutions, their evolution, and how institutions and usages affect market conditions. As a result many modern economists tend to ignore what happens when businessmen and bankers make deals. The forecasts and policies that failed reflect this ignorance.

The money supply is a financial variable that can be readily modeled as a function of known ratios, the availability of reserves, and observable market variables. Furthermore data on the money supply is available. This makes models which use the supply of money and Federal Reserve operations as "tune callers" comparatively easy to handle econometrically. Econometricians are skilled in massaging and mining data and in adjusting the structure of models.

They can obtain results which satisfy econometric tests for models that use the supply of money as the "tune caller". Because so many things in an economy move along together these econometric models are good enough to serve as instruments of analysis and forecasting in an age of tranquility. In an age of rapid institutional evolution and speculative financial interactions, these models fail.

The same phenomena, validity in an age of tranquility and loss of power in an age of instability, is evident for the more complex structural models used by the econometric forecasters and the commercial services. In spite of a vast expenditure in developing these elaborate econometric models, they have not been successful. A common characteristic of the forecasting models is that they virtually ignore financial interrelations: They misspecify the behavior determining relations of our economy.

Adam Smith's Two Questions

In order to do better we have to start someplace. Economists usually start with Adam Smith, and so shall we.

Adam Smith, the founder of economic theory, posed two questions: "How come a decentralized market economy does not result in chaos, i.e., is coherent?" and "How come one country is richer or poorer than another?". The neo-classical synthesis has grown out of the attempt to answer the first question. Marxist economics and the economic theory derived from Keynes that is relevant for our times are mainly concerned with Smith's second question.

Standard economic theory has shown that a decentralized market mechanism will yield a coherent result with respect to the details of production, consumption, and income distribution under a wide variety of market structures (oligopoly, monopoly and competitive markets) and a wide variety of institutions (trade unions, corporations, public ownership). The robustness of the coherence of decentralized markets means that the outcomes may be inefficient and inequitable. A coherent economy need not be a just economy.

Although the standard economic theory of Keynes' day could explain why decentralized markets yield a coherent result - albeit not as elegantly as today's mathematized economic theory - it could not explain the persistence of unemployment and it especially could not explain the incoherence financial markets and the economy in general exhibited in 1929/33 . Keynes' great work, the General Theory, was an attempt to construct an economic theory which can explain why a decentralized market economy is usually coherent but from time to time becomes incoherent. The key to incoherence - the essential flaw in capitalism which makes Laissez-Faire Capitalism a system that cannot work - centers in the investment process in a capitalist environment and the way in which both investment activity and ownership of the stock of capital assets are financed. The flaw in capitalism is due to the essential attribute of capitalism: private ownership of the means of production, trading in capital-assets and financial assets, and a complex, sophisticated financial system.

The Third Question, Keynes' General Theory and Our Economy

A capitalist economy has two institutional characteristics which are critical to the from time to time development of incoherence. One is that there are two sets of prices and two sets of transactions. One set of prices and transactions deals with the production and distribution of current output. This set of prices is the only set of prices considered in the classical economics and the neo-classical synthesis. The other set of prices and transactions deals with capital assets and financial instruments.[11] For the economy to function normally the two sets of prices must be properly aligned. This is so because investment, a part of current output, becomes a capital-asset once it is produced and "at work". Investment goods will not be produced and financed unless it is expected that the price of the finished product as a capital-asset will exceed, by a large enough margin of safety to placate the fears of the unknown future, the cost of the investment good. If the prices of capital-assets and financial instruments are high relative to current output them an investment boom and inflation are likely to result; if capital-asset and financial instrument prices are low relative to current output prices then investment will be sluggish; a recession is likely to occur.

The other institutional characteristic of the economy we are concerned with is that there is a system of borrowing and lending based upon margins of safety. The essential borrowing and lending in a capitalist economy finances investment and positions in the stock of capital-assets. Furthermore the money supply of a capitalist economy emerges out of the borrowing and lending that takes place. Borrowing and lending are always money today-money tomorrow exchanges and because of the nature of time and history, the future is always uncertain. Thus the extent and the nature of the margins of safety required by both the borrower and the lender, as they enter into deals, will depend upon the views of the future.

A debt involves a commitment to make payments either upon demand, at predetermined dates, or if some contingency occurs; a debt sets up future cash flows. There are three possible sources of cash to pay such debts: one is the cash receipts from operations or from the fulfillment of owned contracts, the second is from the sale of assets or from borrowing, and the third is from cash in hand. The excess of the inflow of cash over committed outflow, the excess of the value of assets over that of debts, and the cash that is superfluous to operations owned by the debtor are the margins of safety.

Over a run of good times the view as to the required margins of safety needed for various debts decreases. Furthermore the practice of borrowing with the expectation that the debt will be repaid by issuing new debt increases. In addition idle cash is activated as good times are sustained. The essential instability of capitalism centers around the way in which financial margins of safety are erroded during periods of good times. As the margins of safety are erroded, the price of capital assets rises relatively to the price of current output. The economy will generate an inflationary boom out of its internal operations. However because some of the financing of this boom comes from activating the cash that is held as a margin of safety, an inflationary boom will be accompanied by a rise in interest rates.

In order to be able to borrow to repay debt it is necessary that the present value of the cash that the assets are expected to generate exceed the present value of the debts. If, as happens in a boom, interest rates rise then the present value of long-lifed assets fall relative to that of short-lifed debts. The normal market processes assure that if an economy is characterized by a large amount of borrowing which can only be repaid by future borrowing then a situation will eventually arise in which new lenders will not appear to replace the lenders who need be repaid. Periodic runs on banks and financial markets are normal results of financial practices in a capital using capitalist economy.

The above argument is an expansion and extension of ideas and concepts that are in Keynes' General Theory but which are largely neglected in the development of todays standard economics. Financial instability as the result of the internal workings of the economy is foreign to the economics of the neo-classical synthesis. Whether an economist be labeled Keynesian or Monetarist, liberal or conservative, Republican or Democrat, as long as his economic theory is the standard theory of today he has no way of explaining the credit crunch of 1966, the Commercial paper crisis of 1970, and the multi-dimensional financial trauma of 1974/75.

The neo-classical synthesis is thus a theory that does well enough in explaining the behavior of our economy in an age of financial tranquility such as ruled in the period immediately after World War II. It cannot provide a relevant framework for our type of economy in the past decade.

The Incoherence Since 1966

In the autumn of 1966 a near miss with respect to a financial crisis took place. This so called credit crunch was the first event of its kind since the era of the great depression. In 1970 in the aftermath of the failure of the Penn-Central Railway another near financial crisis occurred. In 1974/75 there was a spate of bank failures - including the failure of the $5 billion Franklin National Bank - and a virtual bankruptcy of the entire Real Estate Investment Trust industry. These three financial crises were resolved by means of "extraordinary" actions by the Federal Reserve System. These extraordinary actions are the lender of last resort intervention by the Federal Reserve: In order to understand how our economy works we have to understand how conditions conducive to financial crises are brought about and how the Federal Reserve can intervene to resolve such a crisis.

A financial crisis takes place when a run occurs on a set of financial institutions or markets. These financial institutions and markets have short term debts outstanding and they use this short term debt to finance positions in longer term assets. The short term financing of holdings of long term assets is the essence of speculative finance. Both the unit which engages in speculative finance and its lender expects new debt to be issued to repay matureing debt; debt is expect to be rolled over. The continued viability of a unit engaged in speculative finance depends upon the normal functioning of those financial markets in which its debt will be rolled over. The normal functioning of a financial market can be disrupted by any event which makes the suppliers of funds to these markets suspect that the funds they place in this market or instrument may either be "lost" through default or that payment may be stretched out.

The Credit Crunch of 1966

The credit crunch of 1966 was the first financial difficulty since the 1930's that involved a run on a financial instrument or set of institutions and which required special Federal Reserve action. The credit crunch of 1966 was a normal outgrowth of the uninterrupted expansion of the economy since early 1961 in the context of a longer post-war period in which there was no significant recession: Under capitalism a protracted period of good times leads to first a boom and then a crisis.

A crunch or financial crisis can only occur when the "margins" of safety in portfolios have been eroded. As a result of the financial legacy of a great war that came immediately after a great depression, the first twenty years after World War II were characterized by robustness in financial markets. In this period most banks had significant amounts of Federal government debt in their portfolios beyond what was needed to satisfy the requirements of various types of government deposits that require collateral. In these circumstances if a bank had a transitory reserve excess or deficiency it bought or sold government securities; it substituted one asset for another.

In the middle 1950s the very largest banks in New York, Chicago, and other major money centers ran out of excess Treasury debt and began to borrow funds from banks with excess deposits at the Federal Reserve Banks. This Federal fund market in which banks trade "reserve" funds had been active prior to 1929 but had disappeared during the depression, the years of World War II, and the early post war years.

A bank, or for that manner any financial or non-financial institution, supports or finances its asset holdings by means of its liabilites. In the aftermath of World War II, the liabilities of commercial banks consisted of demand and time deposits (along with the owner equity investment) and the assets were heavily dominated by Treasury debt. As the postwar era progressed the ratio of business borrowing to Treasury debt in bank portfolio's increase; business loans increased by means of substitution in portfolios as well as by increasing the total of assets and liabilities. An increase in business loans tends to sustain asset prices, investment, and business activity.

As long as banks had an excess of Treasury securities over what was needed as collatoral for deposits, adjustments in bank needs for cash, what bankers call position making, were made by dealing - buying and selling - Treasury securities. These position making activities were operations on the asset side. A bank's major managerial problem in the first part of the post-war period centered around managing its assets, its loans, and investments.

As the giant banks ran out of the excess above collatoral requirements of Treasury Bills in the middle 1960's, they began to trade in deposits at the Federal Reserve banks; they began to borrow and lend Federal Funds. Such borrowing and lending supplemented and replaced dealing in Treasury Bills as the position making activity of banks. The use of Federal Funds to make position meant that the borrowing banks now increased their liabilities when they made up a cash deficiency.

The use of Federal Funds to make position was but the first step in the transformation of banking in which operating upon the liability side became the dominant position making technique. In 1960, with Chase National Bank taking the initiative, banks introduced negotiable (saleable) Certificates of Deposits. This is a short term debt instrument of banks which they could actively market and which the owner could, if need be, sell. The active pursuit of idle funds through the issuance of these certificates of deposit became the preferred way of meeting cash needs of banks during the 1960's the rapid growth of this liability enable banks to increase their lending at a faster rate than the growth in their reserve base. Although in terms of the growth rate of the reserve base and the money supply the Federal Reserve was pursuing a rather moderate path in the 1960's, bank lending which was growing at a more rapid rate, was fueling an inflationary boom.

During the middle 1960's there was a pattern of ceiling rates on various types of deposits. Furthermore there was a pattern of saving deposit interest rates in which eastern commercial banks paid lower interest rates than westcoast savings institutions. As the boom of the 1960's developed, the demand for funds outpaced the supply of funds, even though the Federal Reserve was feeding reserves into the banking system at a significant rate and the institutional changes in financial markets allowed bank loans to increase at a more rapid rate than bank reserves. As a result of demand outpacing supply, interest rates rose. Furthermore the increase in corporate investment demand, especially the externally financed investment, meant that prices rose.

The Federal Reserve loves to fight inflation, which is rather surprising because they do it so poorly. In the midst of the 1966 investment boom the Federal Reserve progressively slowed down the rate of growth of the reserve base from 6.8% in Dec. 65/April 66 to 2.6% April 66/July 66 and -4.3% July 66/Dec. 66. The funds available for banks to use in fulfilling their interbank payments and to make positions decreased.

An investment boom once under way cannot be turned off easily, for the projects in process must be financed as they progress. A rise in interest rates while an Alaska pipeline, a nuclear power plant,or a resort condominium is being built will not shut off the need for largely short term funds to finance the bits and pieces of the project in various states of production. An attempt by the Federal Reserve to slow down an investment boom will always be met by a sharp rise in interest rates, for the financing needs of investments in the pipe line will continue to increase as work proceeds ; rising interest rates can choke off the demand for financing of investment only as it affects new starts or the pace at which work proceeds on projects already under way.

The decrease in the reserve base instituted by the Federal Reserve and the investment boom therefore combined to lead to a sharp rise in interest rates. As a result of the rise in rates, the institutions that are financing investment in progress will raise the rates they are willing to pay for funds. As a result the interest rates on various bank certificates of deposit and money market instruments rise. Even though the Federal Reserve raised the interest rates banks were able to pay, these interest rates fell below the market rates on commercial paper and Treasury debt. As a result holders of large certificates of deposit allowed them to run out; the total of bank liabilites were under pressure.

Toward the end of June 1966 the price of large C.D.'s carrying the ceiling rate of interest went to a discount. This effectively stopped the issuance of such C.D.'s, Beginning in August the amount outstanding fell rapidly. This fall in the amount of C.D.'s outstanding constituted a run on the large commercial banks. However the banks had loan commitments to business. The run on the banks , the decline between July and December of 1966 in the reserve base, and the loan commitments made each bank individually seek more funds.

Two steps that banks took to acquire reserves spread the dislocation from the commercial banks to other parts of the financial system. Some New York City banks - with Franklin National in the lead - began to offer negotiable certificates of deposits in smaller denominations, spreading the benefits of high interest rates to the holder of smaller amounts of funds. In particular these "retail" certificates of deposit were at a higher yield than savings institutions were able to pay, particularly the Mutual Savings Banks in New York City with their portfolios of low interest mortgages. Furthermore these high interest rates induced a "repatriation" of funds to the east from the West Coast, largely Californian, Savings and loan associations. Thus the run spread from the banks which issued large denomination certificates of deposit to the savings institutions.

The alternative to the substitution of another liability for the liability that is running off is the sale of assets. In 1966 as the run on certificates of deposit developed, the banks had few Treasury instruments to sell in order to make position. The way around this dilemma was to try and sell other securities. Large money market banks began to sell off tax exempt municipal (state and local government) securities.

Commercial banks normally take about one-third of the new issues of municipals. As the crunch developed commercial banks withdrew from bidding on new issues. By the end of August, as a result of the combination of commercial banks withdrawing from the new issues market and the attempt of banks to make position by selling from their holdings of municipals, the market for municipals was 'disorganized', to say the least. The yield on high grade municipals - which are tax exempt - reached 5 percent - and even at these rates the market was thin.

Throughout this period the Federal Reserve, while maintaining a nominal rediscount rate of 4 1/2 percent, allowed but a slight increase - some $300 million during the first half of '66 - in borrowings at the discount window. The window was so tightly administered during July and August, when market rates increased rapidly, that on the average, member bank borrowings at the Federal Reserve did not increase. The money-market banks believe that the discount window was effectively closed to them.

By the end of August, the disorganization in the municipals market, rumours about the solvency and liquidity of savings institutions, and the frantic position-making efforts by money-market banks generated a controlled panic. The situation clearly called for Federal Reserve action. A money market panic is ephemeral, compounded out of a combination of real liquidity stringency and a precautionary demand designed to protect against some awesome, unknown contingencies. As was true for some of the money panics of the 19th century, the air of crisis evaporated when the authorities sent a letter.

On September 1, 1966, the President of each of the twelve District Reserve Banks sent an identical letter to every member bank in his district which stated that accommodations were available at the discount window to banks whose policies corresponded to Federal Reserve objectives. In particular accommodations were available to finance current holdings of municipal securities for those banks which showed evidence that they were constraining the expansion of their business loans. In addition, the letter stated that they recognized '...that banks adjusting their position through loan curtailment may need a longer period of discount accommodation than would be required for the disposition of securities'. The import of the letter is that the Federal Reserve acted in defence of municipal securities, and by allowing municipals to be used at the discount window effectively set a floor to their price. As the money-market banks had been actively trying to restrain the expansion of their business loans even before ceiling rate Certificates of Deposit went to a discount, each bank, in its own mind, believed it was eligible for such accommodations. The discount window, previously assumed closed, was now provisionally open.

When the Federal Reserve's letter of September 1, 1966 was a "lender of last resort act", it recognized that disequilibrating factors were dominating financial markets and it provided access to Federal Reserve borrowing to refinance the positions that were being exposed by the run on bank Certificates of Deposit.

The opening of the discount window worked. The pressure on the Certificate of Deposit market abated. The Congress quickly passed a law allowing the Federal Reserve to set different ceilings in certificates of deposit according to the size of the certificate and the Federal Deposit Insurance Corporation and the Federal Home Loan Bank Board were given the authority to set ceilings and differential interest rates for institutions under their jurisdiction. The pattern which rules to this day in which retail (under $100,000) Certificates of Deposit carry lower rates than wholesale certificates was established. The housing market financing institutions were in part insulated from money market pressures, although this insulation did not prevent mortgage interest rates from rising to the 9% level in the decade following 1966.

As a result of the crunch gross private domestic investment decreased at an annual rate of 26 percent between the 4th quarter of 1966 and the 2nd quarter of 1967. However this decline in private investment did not lead to a fall in aggregate income because spending on the war in Vietnam increased just as civilian expenditures tapered off. The crunch was the way in which resources were made available for the war; the private investment slump was in lieu of a tax increase to finance the war.

The crunch of 1966 was the first serious financial disruption of the postwar era. It was not taken as a signal for a deep analysis and reform of the financial system. The difficulties were papered over with the cosmetic changes that allowed interest rate ceilings to vary with the size of the deposit. An inadvertent but apt use of fiscal policy prevented a recession.

The crunch of 1966 did assure the money market that banks which used a money market instrument such as negotiable certificates of deposit would be protected against a run on this instrument by Federal Reserve behavior. The action of the Federal Reserve in 1966 legitimized the use of negotiable certificates of deposit by banks.

The Liquidity Squeeze of 1970

The second post-war financial disturbance that required Federal Reserve lender of last resort intervention occurred in 1970. This time the market in distress was the commercial paper market and the Federal Reserve's intervention took the form of allowing banks to acquire funds from the Federal Reserve so that a run on commercial paper could be refinanced.

Whereas in the early 1960's the growth of bank negotiable certificates of deposit was the wonder instrument, the growth of commercial paper was the wonder instrument of the late 1960's. Commercial paper is the unsecured note of a business corporation that is issued for a set period - say 90 or 180 days - and is sold to some holder. The large finance companies - such as General Motors Acceptance Corporation - sell their own commercial paper. Other companies use dealers to sell their paper.

At the beginning of 1966 about $10 billions of commercial paper was outstanding. By mid-year 1968 the figure had doubled to $20 billions and by the end of May 1970 some $32 billions of such paper was outstanding. This paper proved to be the vulnerable point in the emergence of the crisis.

When the Nixon administration took office in early 1969 the Unemployment rate was about 3.5% and the consumer price index had increased at some 4.2% in 1968. The Federal Reserve and the administration undertook to fight inflation by monetary policy. As a result the rate of growth of bank credit was cut from about 10% in 1968 to 5% in the first half of '69 and to 3% in the 2nd half of 1969 and the first part of 1970. This slowdown led to a rise in the sensitive Federal Funds interest rate from 6% at the end of '68 to 9% by midyear 1969. It stayed in the vicinity of 9% into early 1970, when it began to track down. Other interest rates also rose; the conventional mortgage rate hit 9% early in 1970 and stayed above 9% thoughout the year.

In a situation characterized by high interest rates and the stock market decline associated with the escalation of the war in VietNam, the Penn-Central Railroad filed for bankruptcy and defaulted on some $82 millions in outstanding commercial paper. This led to a "run" on the commercial paper market; some $3 billion - about 10% - of the outstanding commercial paper ran off in a three week period. The Federal Reserve Bank of New York and the Federal Reserve Board of Governors aided the creation of a syndicate which refinanced a major automobile finance company. Over the month of July member bank borrowings rose by $1/2 billion and in addition the Federal Reserve pumped funds into the market by means of open market operations.

By its actions in 1970 the Federal Reserve System extended its protection to the commercial paper market. In the period after the liquidity squeeze of 1970 it became an institutionalized procedure for the borrower on commercial paper to have sufficient outstanding lines of credit at banks to repay all of its outstanding commercial paper. A situation developed in which the Federal Reserve was the lender of last resort to the commercial banks and the commercial banks were the lender of last resort to the commercial paper market.

Once this formalization took place commercial banks had both overt and covert liabilities and outstanding commercial paper was a covert liability of commercial banks. The economy in effect had an increase in bank liabilities, but these liabilities never appeared in the bank credit data. The use of lines of credit as a substitute of a bank credit and the lack of control of such covert bank liabilities meant that after the Federal Reserve legitimized the use of bank lines as a back up to commercial paper there was an uncontrolled, market determined component to the effective money supply.

Aside from the institutionalization of the condition that unused bank lines of credit be open to cover outstanding commercial paper, no reforms of banking were undertaken in the aftermath of the squeeze of 1969/70. This was so even though 1969/70 was a bona-fide recession; at year end 1970 unemployment was 6% - and the G.N.P. deflator rose by 6% in the fourth quarter of 1970. The policy of using monetary constraint to control inflation obviously had not worked and the crisis in the commercial paper market had well nigh forced a serious recession on the economy.

The Financial Traumas of 74,75...

In the world inhabited by establishment economists and Central Bankers nothing succeeds like failure. The failure of monetary constraint to achieve more than transitory success in halting inflation in 1966 and 1970 and the success of monetary constraint in triggering financial traumas that threatened a deep depression in these years meant that monetary constraint was sure to be the principal weapon of an anti-inflationary policy in 1973/74.

The most serious financial crisis, the highest unemployment, and the deepest recession since World War II took place in 1974/75. This followed fast upon the highest interest rates in modern times. Only decisive lender of last resort actions by the Federal Reserve and cooperating commercial banks together with the income and financial stabilizing effects of big government prevented the bad of 1975 and 1976 from being worse. The steps taken to avert the worst that could have happened planted "time bombs" in the economy that have been going off during 1976, and which threaten an even worse financial crisis in the not distant future. Because the economic theory that guides policy makers does not recognize the existence of financial crises, there is no way in which standard economic theory can act as a guide to a reconstruction of the economy that defuses the financial "time bombs" that are ticking away.

The Federal Deposit Insurance Corporation was established in 1935. From that date until the 1970's the banks that failed were typically very small banks. In 1973, 74, and 75 four banks in the billion dollar class failed, were "merged", or were sustained by extraordinary Federal Deposit Insurance Corporation action. The Franklin National Bank, which was the 20th largest bank at the end of 1973, with $5 billions of total assets, failed in October 1974. It was by far the largest bank that ever failed in the United States and its failure may be symbolic of what awaits us.

Franklin National Bank was really three banks in one: It was a $3 billion retail bank mainly on Long Island, a $1 billion Wall Street bank, and a $1 billion London Bank. Although none of the three parts of Franklin National qualified as a particularily well managed bank, the Long Island operations were reasonably profitable. The Wall Street operations suffered from a pressure to become "big" and had a marginal portfolio. The London bank paid premium prices for money and often entered upon deals that had been rejected by other banks.

In May of 1974, Frankling National's holding company was unable to pay a regular dividend. It was also announced that the bank had had substantial losses in foreign exchange transactions. Although the announced losses were not large enough to seriously impair the equity position of an adequately capitalized $5 billion operation, the announcement of the losses caused a run on the weakly capitalized Franklin National. In particular as outstanding negotiable certificates of deposit at the London branch matured the London branch could not purchase money in the market to refund this paper.

The only source of money for the London Branch was the New York Office of Franklin National. However the same information that caused the run on the London Branch made it impossible for Franklin National to roll over its outstanding New York Certificates of Deposit. The only source of funds for the Franklin National Bank was the discount window at the Federal Reserve Bank of New York. In the two weeks to May 17, 1974 Franklin National's borrowings at the New York Federal Reserve Bank rose from 0 to $960 millions; by mid-July Franklin National had borrowed $1.4 billions at the Federal Reserve. When the Franklin National was finally closed some $1.7 billions of its $3.6 in assets was supported by Federal Reserve Loans.

As a result of this massive infusion of funds by the Federal Reserve all of the deposit type liabilities of Franklin National Bank, including the Certificates of Deposit at the overseas branch, were validated. By its action in 1974 the Federal Reserve extended the protection of the Federal Reserve System to all deposits at overseas branches of United States banks. But these overseas branches do not keep reserves at the Federal Reserve banks for their deposits and their operations are not subjected to regular surprise examination by the various authorities. By its action in allowing the Franklin National operation overseas to pay off its private depositors by borrowing at the Federal Reserve, the Federal Reserve was in effect making every dollar of deposits at an overseas branch of a United States chartered bank a potential deposit in a United States bank. In effect the Federal Reserve abdicated any responsibility it had for controlling the growth of the United States money supply.

In 1974 the Federal Reserve had three alternative paths it could have trod. It could have made the depositors in overseas branches of the Franklin National bank take their lumps. Franklin National would have failed in May. The Federal Deposit Insurance company would have protected the small domestic depositors. The holders of domestic deposits in excess of the insured amount and the holders of deposits in the foreign branches in excess of the insured amount would have had to wait in line for the liquidation of Franklin National's assets. Such a path would have triggered a major run on the foreign branches of a number of banks that were assumed to be relatively weak. The Federal Reserve would then have had to intervene as a lender-of-last-resort or see a crumbling of the international financial structure that would be certain to lead to a deep depression.

The alternative was to intervene and protect Franklin National's overseas and domestic deposit holders. This was done but after doing this the Federal

Reserve had two alternatives. One was to do nothing more and allow its implicit guarantee of overseas deposits to stand. This in fact is what the Federal Reserve has done. The alternative was to follow up the Franklin National fiasco by imposing strong asset, liability, and capital requirements for overseas branches. That is the Federal Reserve had to recognize that a new and better system of regulation of overseas branches of United States banks was needed. However a reform and tightening of regulations ran against the fashionable sentiment that regulation was bad.

As a result of the validation of deposits in overseas branches of United States banks the two years since October 1974 have seen a huge expansion of the liabilities of United States branches overseas to foreigners. In October 1974 the liabilities to foreigners of U.S. Branches overseas stood at $129 billion. In October of 1975 this was some $143 billions and in August of '76 this liability stood at 163 billion dollars. In slightly under two years the liabilities of foreign branches of United States banks to foreigners had grown by some 26%. Over the same period the domestic money supply measure that includes time deposits grew only 17%, and the narrower money supply grew by 5%.

The Franklin National failure was not the only bank failure of note in this traumatic period. In addition to bank failures the 1974-75 period was characterized by the failures and near failures of many large businesses, and the near bankruptcy of New York City. In addition the period 1973IV and 1974III saw an entire financial industry - The Real Estate Investment Trust Industry - in a virtual collapse.

The real estate investment trust that we are concerned with mainly raised monies by bank borrowing, commercial paper, stockholder equities, and longer term debts to finance the construction of large scale housing and commercial projects. The condominium retirement complexes and vacation condominium complexes were favorite objects of REIT financing. In some ways the financing of condominiums complexes is no different than the short term financing of any good in the process of being produced, for the receipts from the sale of the finished product will pay off the debt entered in to finance its production. Condominiums differ from T.V. sets or women's underwear only in the time it takes to sell a finished product, the price of the finished project, and the use of mortgages to finance the purchase of the project.

The REIT's grew at an explosive clip during the Nixon years. At the end of 1968 the total assets of the REIT's were approximately $1 billion, at the end of 1973 total assets were $20.2 billion. This explosive growth of the REIT's was an essential element in the construction boom; the growth of the sun belt and of suburban condominium and rental complexes was dependent upon REIT financing.

At year end 1973 the REIT's had $20.2 billions in liabilities of which $4.0 billions were commercial paper. At the end of the third quarter of 1974 the REIT's had $21.5 billion of liabilities of which $0.9 billion was commercial paper. A run of about $3 billions had taken place. Over this same period commercial bank lending to REIT's rose by $4.1 billions.

The high interest rates, the bottle necks in production, and the high mortgage rates of 1973 meant that there was a substantial increase in the costs of underlying construction projects and a slowdown in the sale of finished units. When the expected profitability of the construction projects that underlay the REIT assets deteriorated, the lenders on commercial paper to REIT's reconsidered their commitments to REIT's. The REIT's during 1974 were not able to roll over their commercial paper.

As an aftermath of the 1970 Penn-Central/Chrysler crisis in the commercial paper market it became usual for borrowers on commercial paper to have unused lines of credit at commercial banks large enough so that commercial paper could be "paid off" if it could not be rolled over. Even though the questionable viability of REIT's was evident in 1974, the commercial banks honored their commitment. The commercial banks acted as a central bank when they took this questionable paper into their portfolios in 1974. This action averted wholesale bankruptcy in the REIT industry and a panic in the commercial paper market and thus avoided a financial situation that was sure to lead to a deep and serious depression. However it left the banks with assets of questionable value and throughout 1974, 1975, and 1976 commercial bank difficulties can be traced to the real estate loans in their portfolios. In averting the worst that might have happened in 1974 the commercial banks put themselves in a position where losses would occur throughout 1975 and '76. The sluggish performance of the economy in 1976 was due to the continued weakness of banks and thus in the quality constraint that banks placed upon their financing activity.

Thus the resolution of the 1974/75 financial difficulties saw a test of the process that had developed after the Penn-Central/Chrysler commercial paper fiasco of 1970. The process which used commercial bank lines of credit to assure refinancing for units that use commercial paper passed the test. Covert liabilities of commercial banks became as good as overt liabilities.

In addition the 1974/75 trauma saw the extension of Federal Reserve protection to the deposits, regardless of size, in the overseas branches of United States banks. As a result of this guarantee the liabilities of these branches continued to grow even in the recession of 1975 and the sluggishness of 1976. This continued growth of deposits at the overseas Branches of U.S. banks financed the deficits of some of the poor and some of the near poor, rapidly developing countries. There is now some question as to whether these countries can meet the contractual commitments on their debts.

If a run occurs on the deposits at overseas branches of United States banks then the Federal Reserve is committed,by the precedent of its 1974 action,to create enough reserves so that deposits at domestic offices of United States banks will be available to pay off the overseas deposits even as the Federal Reserve acquires title to the assets of the overseas Branches. In essence the guarantee of deposits in overseas branches means massive foreign aid transfers can be made by the profit seeking commercial banks.

The Lessons from the Runs

In the decade following 1965 three serious runs occurred on financial markets or banks. In 1966 a run occurred on bank certificates of deposit, in 1970 one occurred on the commercial paper market, and in 1974/75 two runs occurred, one on the commercial paper of REIT's and the second on the overseas deposits of the Franklin National Bank. Each time a run occurred an instrument or an institution that had grown rapidly over the preceding boom was the focal point of the disturbance. Each time a run occurred the Federal Reserve intervened to facilitate the refinancing of the threatened position. Thus the Federal Reserve legitimized by its protection the new instrument or the new institution. In 1966 and 1970 minor institutional and usage reforms were ventured after the near crisis. No serious effort at reform of the overseas operations of United States banks occurred after the 1974 Franklin National fiasco.

The growth and history of certificates of deposits, commercial paper and the accompanying covert bank liabilities, and the liabilities of overseas branches of United States banks shows that the elaborate mechanisms of the Federal Reserve System, F.D.I.C., and the Comptroller of the Currency are not capable of controlling the disruptive and destabilizing behavior of the giant banks. Because present policy makers wear blinders due to their acceptance of neo-classical theory which does not allow for financial instability, they cannot visualize the reform of banking and finance that is needed if a more stable, more nearly fully employed, and less inflationary economy is to be achieved.

Some Modest Proposals for Reform

Giant banks and multi-billion dollar financial markets outside of banks must be brought under control. As things now stand the Federal Reserve and the other authorities are periodically confronted with a decision as to whether they will validate and protect the positions of the giant banks or whether they will allow a giant, world wide depression to occur now. The choice of the banking authorities and the political leadership when faced with these alternatives is preordained: they will do all they can to bail out the financial markets and institutions that are threatened. The process of the bail out assures that another inflationary round followed by another crisis will occur unless, in the interval after the "bail out", serious reforms of the financial structure are undertaken.

Because the standard economic theory of our day cannot explain financial crises, to the economist adviser and gray eminence they do not exist. The inflation/threat of crisis are explained by errors in the manipulation of the money supply and in fiscal variables. The spectacle of the transition period to the Carter administration is evidence of the superficial nature of the current political discourse. The questions that were debated relate to the size and the presumed beneficiaries of a tax cut and whether the money supply, whatever that may be, should "grow" at one rate or another. No question was asked about why our economy has become a chronic labor surplus economy and why our economy is so given to fluctuations.

Post-Keynesian theory of the kind that is emerging as the alternative to the neo-classical synthesis leads to two propositions that should guide reform and reconstruction of our economy. The first is that decentralized markets lead to a coherent result. The second is that the financial institutions of capitalism are fundamentally destabilizing. The first proposition implies that planning of a detailed nature is not necessary and that the market mechanism, because it leads to a coherent but in no sense a best result, can and should be used as an instrument for achieving social objectives. The second proposition implies that if strongly disruptive business cycles are to be avoided, the banking and financial system must be constrained and controlled as well as protected by the Federal Reserve.

As things now stand the Federal Reserve System has no effective control and has no means of constraining the giant money market banks. There are some nine banks in the United States, six in New York City, two in Chicago, and one in California which operate large scale overseas branch systems, which have total assets in excess of twenty billion dollars each, and which have huge trust and other specialized money management operations. These giant banks also have very thin owners equity to total assets ratio. The first step in constructing a financial system that is more conducive to stability is to bring these giant banks under controls. The only way this can be achieved is by reducing their size to manageable proportions. The rule of thumb is that no bank or financial institution can be so big that the Federal Reserve would not allow the institution to fail. Thus no institution can be so big that its failure is likely to trigger a debt deflation process which leads to a big depression. The failure of the Franklin National Bank, which was a $5 billion institution, was almost enough to bring about a big depression; it certainly had serious income and employment consequences. As a rule of thumb the maximum in total assets that any bank or financial institution can control can be set at the Franklin National size; i.e., $5 billion or so. In terms of the banks in the United States this means that the top twenty or so banks are too big.

The first step in bringing the giant banks under control is to separate the three functions -- domestic banking, overseas banking, and trust activities -- into separate organizations. When this is attempted the glaring weakness of the capital position of the giant banks will be revealed. Whereas the banking authorities force the smaller banks to keep an 8% capital/assets ratio, the giant money market banks, which often are more speculative than the smaller country banks, are allowed to get by with as little as a 3% capital/~~equity~~ ratio. If the giant banks were to have a 6% capital/equity ratio - which is a ratio that might well be extended to all banks - then a massive infusion of capital into the largest banks is needed. A Bank Refinancing Agency, independent of the Federal Reserve, should be organized which will buy the equity required to bring the capital/asset ratio of banks up to 6%. The Bank Refinancing Agency will have representation in the Board of Directors and inputs into management proportional to its equity position.

The second step is to break the giant banks into manageable pieces. The first step in doing this is to separate the domestic banking, overseas banking, trust operations, and non-banking financial businesses of banks into different organizations. The second step in creating banks of manageable size is to separate the wholesale, money market business of these giant banks from their retail financing of modest size business activities. A third step in breaking up the giant banks would be to separate the various banking parts into units in the $5 billion class.

A third step is to unleash and put on even terms with the giant banks the smaller banks. As this now stands the smaller banks, those with between $50 million and $1 billion in total assets are more highly constrained than the big banks. The regulatory authorities do enforce a capital/asset ratio in the neighborhood of 8% for these banks. They should be allowed to lower their capital/asset ratio to the same 6% ratio that will be imposed upon the giant banks. As a result of this lowering of their capital/asset ratios the profitability of smaller banks will increase. As a result of this equalization of capital/asset ratios among all banks, the financing charges for the smaller businesses, who use smaller banks, and the giant businesses, who do not use the smaller banks, will tend to equalize. One of the advantages of the giant businesses will disappear in a program that favors the smaller banks over the larger ones.

Another reform that is needed is to remove the prohibition against merchant or investment banking from these smaller, i.e. less than $1 billion in total assets, banks. This prohibition was based upon the misuse of power by the giant Wall Street banks and in real ignorance of the comprehensive financing role that bankers of necessity play on Main Street. Any program designed to make market capitalism work by structuring financial markets in favor of smaller sized firms must come to grips with the barrier to the adequate financing of smaller units that results from the prohibition of investment banking activities by smaller banks.

No system of structural institutional reform can promise eternal bliss; in an evolutionary environment such as an economy all reform can do is promise better. The fiscal policy proposals that followed from the standard reading of Keynes' General Theory did give us twenty to thirty years in which we had a closer approximation to full employment than hitherto.

Over this period of relative tranquility destabilizing forces which are always characteristic of capitalism gained weight in the financial sector. It is now quite clear that without substantial reform of the banking and financial system the degree of approximation to full employment achieved in the first post war era will not be attainable.

Reforms to constrain those banks which are so big that they can force the hand of the Federal Reserve are in order. The only effective control is dissolution. In particular it is urgent that the foreign branch system of U.S. chartered banks be separated from the domestic branches and some absolute limitation on the size of banks and banking institutions be developed. As regulation is now organized the giant banks are favored over the big banks which in turn receive more favorable treatment than the smaller banks. A redress of this bias is called for.

It is perhaps utopian to expect meaningful reform in the absence of a major crisis. So far, in spite of the three crises of increasing seriousness in a decade the fiscal policy/big government/lender of last resort bail outs of the Federal Reserve have combined to prevent a great depression, although we certainly have experienced a severe recession. By raising the issue of the need for serious reform in a period of a limping adequacy to the performance of banking and finance, the ground can be prepared for reform of banking and finance after the next crisis.

Coda:

Whereas the events of 1966, 1970, and 1974/75 that have been sketched are anomalies from the point of view of the neo-classical synthesis they are normal events within the alternative theory based upon Keynes' analysis of our type of economy. In the Keynes theory it is to be expected that tranquil good times will lead to a boom that will lead to ever increasing ratios of speculative financial relations. This will continue until the rising financial commitments, made worse by rising interest rates, cannot be sustained by the underlying income generating process. At that time a break will occur and with the break will come a threat of a deep depression.

The combination of lender-of-last resort action by the Federal Reserve and the impact of the big government meant that a big depression did not occur following the crises of the sixties and seventies. In order to prevent the future from being characterized by accelerating inflation and deepening recessions the disruptive influences of finance, and in particular the giant banks, must be reduced. The only way in which this can be done is by breaking up the present giant banks into units of controllable size.

Dissolution of the giant banks is not a solution of the economic problems for all time. In truth deeper structural reforms which eliminate the dependence of the economy upon giant capital intensive corporations are also needed. But because of the existing unstable international financial system that has developed since the Federal Reserve accepted responsibility without power after the Frankling National fiasco, there is an urgency to the need to understand how finance and instability are related so that effective control of the destabilizing forces can be achieved.