Financial Crises:
Systemic or Idiosyncratic

by
Hyman P. Minsky*

Working Paper No. 51

April 1991

Prepared for presentation at "The Crisis in Finance," a Conference of
The Jerome Levy Economics Institute
Bard College

*The Jerome Levy Economics Institute of Bard College
I. **INTRODUCTION.**

The presentations at this conference are by economists from Academies and economists who professionally confront real world problems, either in private finance or in public policy. As economists we accept that the remarks made by Keynes in the closing passage of *The General Theory* are true:

"... the ideas of economists and political philosophers, both when they are right and when they are wrong, are more powerful than is commonly understood. Indeed the world is ruled by little else. Practical men, who believe themselves to be quite exempt from any intellectual influences, are usually the slaves of some defunct economist. ....I am sure the power of vested interests is vastly exaggerated compared with the gradual encroachment of ideas. ... Soon or late it is ideas, not vested interests, which are dangerous for good or evil."\(^1\)

We like this assertion not only because it makes us important but also because it makes good sense.

The ideas that Keynes refers to are theories. A theory of system behavior is a prior for rational action. A proposed action, whether by individual agents in households or firms, a bank, a government agency or a legislative body is appropriate action only as a theory connects the action

to the desired result. Because some institutions, such as
deposit insurance, the savings and loan industry, and a
number of the great private banks, that served the economy
well during the first two generations after the great
depression, seem to have broken down, the need to reform and
to reconstitute the financial structure is now on the
legislative agenda.

As we try to fix the financial system three questions
should be asked of the pushers of a policy proposal:
1. "What is it that is taken to be broke?",
2. "What theory about how our economy works underlies the
proposal?"
3. What are the dire consequences of not fixing that which
you assert is broke?

In what follows I will take up three points
1. Two views of the results of the economic process
2. Systemic and idiosyncratic sources of financial crises
3. Some ideas about the scope for policy in the present
"crisis".

II. TWO VIEWS OF THE RESULTS OF MARKET PROCESSES

2. The essence of the rational expectation revolution in
economic theory can be summed up in the proposition that the
actions economic agents take reflects their understanding,
i.e. theory, of how the economy functions.
There are two fundamentally different views about the results that a market economy achieves. One, as stated by Adam Smith, is

"As every individual, therefore, endeavors as much as he can both to employ his capital in the support of domestic industry, and so to direct that industry that its produce may be of the greatest value; every individual necessarily labours to render the annual revenues of the society as great as he can. He generally, indeed, neither intends to promote the public interest, nor knows how much he is promoting it ... and by directing that industry in such a manner as its produce may be of the greatest value, he intends only his own gain, and he is in this, as in many other cases, led by an invisible hand to promote an end which was no part of his intention."\(^3\)

The second, as stated by John Maynard Keynes, is:

"If I may be allowed to appropriate the term speculation for the activity of forecasting the psychology of the market and enterprise for the activity of forecasting the prospective yield of assets over their whole life, it is by no means always the case that speculation predominates over enterprise. As the organization of investment markets improves, the risk of the predominance of speculation does, however, increase. ... Speculators may do no harm as bubbles on a steady stream of enterprise. But the position is serious when enterprise becomes a bubble on a whirlpool of speculation. When the capital development of a country becomes a by-product of the activities of a casino, the job is likely to be ill-done."\(^4\)

When designing and advocating policies economists and practical men alike have to choose between the Smithian theory that markets always lead to the promotion of the public welfare, and the Keynesian theory that market

---


4. Keynes, op cit p. 158-9 italics re casino added
processes may lead to the capital development of the economy being ill-done, i.e. to other than the promotion of the public welfare. If the theory that takes the invisible hand conjecture as a guide to the way the economy works is valid, then intervention or regulation can only do mischief. If the theory that takes the capital development of the country may be ill done as a guide to the way the economy works is valid, then regulation and intervention can be beneficial. Furthermore, if the consequences of doing the capital development poorly are serious, then it is politically necessary to create and apply appropriate regulations and interventions.

The Smithian view leads to the proposition that financial crises and deep depressions arise from one of the following: non-essential institutional flaws which prevent the market from working its wonders, the system of intervention contains openings which allow some dirty rotten scoundrels to operate or external shocks dislodge the economy. Thus the current crisis is reduced to the problem of the exploitation of deposit insurance by managements and to the restrictions, both geographic and with respect to lines of business, imposed on banks.

The Keynesian view leads to the proposition that the natural laws of development of capitalist economies leads to

5. Henry Simons, Rules versus Authorities in Monetary Policy. JPE, 1935?
the emergence of conditions conducive to financial instability. Law and policy makers need to be aware of institutional evolution and to develop instruments to contain the potential for both inflationary surges and deflationary disruptions. Potential instability is a basic system characteristic, and as instability may well lead to serious disruptions of investment and profit flows, instruments to support profit flows and asset prices need to be developed.

In the Keynesian view the crisis of the Savings and Loans and the banking system is the result of a tendency, over protracted periods of good times, for sectoral indebtedness to outrun the ability of sectoral cash flows to validate the contracts. The current problem is not how to bail out the deposit institutions but how to sustain asset values and profit flows so that investment does not collapse and usher in a deep and long depression. One aspect of such a program is to prevent the dumping of assets by the failing institutions, for such a dumping, by lowering asset values, will play havoc with new investment. Thus the funds that Congress makes available for paying off deposits in institutions with negative net worth are not only validating deposits but are also preventing the need for institutions to attempt to make position by selling out position, which would be disastrous to asset values.
The sophisticated Keynesian view accepts that while there is a need to intervene to keep a market economy performing in a satisfactory manner or to prevent disasters, actual systems of intervention, especially when they are not enlightened by a theory which helps us understand why there is a positive value to intervention, can do substantial harm. Furthermore the Keynesian view recognizes that agents learn and adapt, so that a system of intervention that was apt under one set of circumstances can become inept as the economy evolves.

Theoretical economists and practical persons pay lip service to the invisible hand proposition but, in the modern world, where Central banks are taken for granted, when push comes to shove intervention takes place. Actual behavior is guided by an often implicit theory in which "Markets can do poorly" is a proposition. One long standing proposition is that markets manage money poorly: the monetarist rule that the Central Bank should see to it that the quantity of money grows at an appropriate constant rate is a reflection of this view. The Smithian view leads to the view that the savings and loan debacle and the forthcoming bank crisis are results of a break down of regulation, including the regulations that guide the behavior of the learned professions of law and accounting.\(^6\)

---

\(^6\) Martin Mayer "The World's Greatest Bank Robbery"
rather than as a consequence of the dynamics of successful capitalism.

The dominant strain in economic theory since the early 1950's - the mathematical general equilibrium theory associated with Arrow and Debreu - is used to support the invisible hand conjecture of Smith as a guide to policy. This is so even though sophisticated contemporary economic thinking recognizes that the proofs in modern general equilibrium theory which validate Smith's conjecture are rather like a lawyer's brief: they conform to the dictum that "These are the conclusions from which I draw my premises". Even so all that has been proven, and the proofs are under tight conditions, is that a general equilibrium that conforms to the Smith rule exists: the uniqueness and stability of equilibrium are not proven.7

Beyond this it is acknowledged that this theory does not allow any room for money.8

Keynes "...capital development of a country ... is likely to be ill-done." proposition implies that markets can get the investment decisions wrong as measured by both the

amount, too little or too much, or by the distribution among types of investments. As Keynes remarked

"The measure of success attained by Wall Street, regarded as an institution of which the proper social purpose is to direct new investment into the most profitable channels in terms of future yield, cannot be regarded as one of the outstanding triumphs of laissez faire capitalism ..." 9

Keynes pointed out that the prices of the existing stock of assets, both real and financial, as well as the cash payment constraints imposed by the liability structure of the holders of capital assets, may lead to an inappropriate amount or type of investment. If speculation leads to an excessively high investment ratio and debt financing of investment and positions in assets, then excessive demand and inflation are likely to occur: if the results are liability structures that cannot be serviced by cash flows then the price level of assets is likely to collapse. A sharp break in the price level of assets and the institutional failures that follow will lead to a fall in the aggregate volume of investment. Speculation, the activities identified with Wall Street, make business cycles, including the occasional deep depression cycles, rather than equilibrium seeking and sustaining behavior the normal result of economic processes. 10

9. Keynes op. cit pp159

In the Keynes view the monetary mechanism is tied to credit and therefore to the financing of activity. The interaction between the financial system and what, for want of a better term, we can call the production system is introduced at the beginning of the argument, when the financing of enterprises and investment programs are "on the table". This is in sharp contrast to the Smithian theory where some asymmetry in the perceptions of some assumed exogenous change in the monetary system is introduced in order to transform an equilibrium seeking system into a cycle generating system. 11 The centrality of money, credit and the pricing of capital assets in the Keynes theory is what differentiates the Keynesian from the Smithian theory.

History shows that every deep and long depression in the United States has been associated with a financial crisis, although in recent history we have had financial crises that have not led to a deep and long depression. 12 The potential loss to society from a financial crisis will be great if it leads into a deep and long depression. If all that followed from a financial crisis is some redistribution of the wealth or a shift of production from


investment to consumption goods within a full employment economy, then some concerns about equity and the impact upon the losers in this process may arise. But such concerns would not lead to the same willingness to intervene and take possible efficiency losses as that which follows once policy is motivated by the possibility that the history, in which serious depressions are associated with financial crises, is a good guide to the consequences of a financial crises in our time. Intervention is ordained if it is believed that a free market resolution of a financial crisis requires doing time in a deep depression.

III. SYSTEMIC CONDITIONS

A capitalist economy can be described by a set of interrelated balance sheets and income statements. The liabilities of the balance sheet are commitments to make payments either on demand, when a contingency occurs or at specified dates. Assets on a balance sheet are either financial or real and they yield receipts either as the contract is fulfilled, as some underlying productive process generates incomes, or as they are sold or pledged. This balance sheet - income statement way of looking at an economy results in a need to focus on how the prices on the balance sheet and the cash flows that are generated and committed, all measured in a common denominator the money of the economy, are determined. Capital assets generate cash
as compensation for their participation in the production process, financial assets generate cash as the maker is able to fulfill commitments. In addition capital assets, as well as financial assets, can yield cash by being sold or pledged. For pledging or selling to be an option either a broker or a dealer market in assets needs to exist.13

A fundamental property of all capitalist economies is the existence of a system of borrowing and lending based upon various margins of safety. The excess of anticipated cash flows from asset ownership or participation in income production over the cash flows committed by the liability structure is one class of margins of safety. The excess of the market or the pledge value of assets over the value of liabilities which can require the payment of some principle amount is another class of margins of safety.

A debt instrument or a lease provides for payments to be made on account of both interest and principle. An equity liability has only a contingent commitment to make payments, dividends need to be paid only if earned and declared, and there is no contractual need to repay principle. For any given cash flow, from operations or from the fulfillment of owned contracts, the greater the share of equity financing in a balance sheet the greater the margin

of safety that protects the owners of the non-equity liabilities.

In addition to the basic household and firm structure of the economy, there are a variety of firms that both own and issue financial assets. For such financial intermediaries the cash flow to is the result of the fulfillment of terms on contracts, the "placing" of new liabilities, or the sale or pledging of assets. These organizations have a variety of liabilities, each type having its distinctive expected cash flow out. Among these financial organizations are those which have assets that are longer in duration than their liabilities: these organizations always need to refinance their positions. Such organizations depend upon the normal functioning of various markets, including dependable fall-back markets in case the usual refinancing channels break down or become "too" expensive. The Central bank is the ultimate fall-back refinancing market.

The normal operation of the economy results in the assets owned or operated by a firm yielding a cash flow to the firm. If for some reason an organization needs more cash than the normal cash flow generated by its assets would permit, then it needs to be able to force a cash flow in its favor either by borrowing or by selling assets. But the ability of an organization to force a cash flow in its favor by borrowing or selling assets requires that there be a
market in which lending or buying of such assets takes place.

The ability of financial organizations to meet their commitments to make payments often requires the ability to refinance or to sell out positions. But the terms for refinancing or selling out positions may be such that the transaction doesn't yield enough to fulfill payment commitments. This would occur if there are many units in a situation where refinancing or selling out is necessary: the refinancing organization may have a limited capacity to absorb assets. As a result the market price of the assets can become too low to yield enough funds to meet payment commitments. Central Bank interventions protect at least some set of financial institutions from this contingency.

In prior work I have distinguished between hedge, speculative and Ponzi financial postures. Hedge financing has the normal cash flow large enough to meet both principle and interest that are due on debts, speculative financing has the income of the debtor large enough to meet the interest but not the principle payments and Ponzi finance takes place when not enough is earned to meet the interest due on debts. Speculative finance involves rolling over debts and Ponzi finance involves the capitalization of interest.\textsuperscript{14}

\textsuperscript{14} H.P. Minsky, "Finance and Profits, the Changing Nature of Business Cycles", \textit{The Business Cycle and Public Policy, 1929-1980}, Joint Economic Committee, Congress of the United
A fundamental conjecture of a model of the economy that supports the Keynes view is that when hedge financing is the dominant posture the interest rate structure offers inducements to increase indebtedness and increase the proportion of short term financing that requires the rolling over of outstanding debts. Once there is a large volume of short term debts outstanding, which finance longer term positions, and institutions exist where such short term debts are regularly rolled over, then a rise in interest rates, a shortfall of earnings or an optimism about future cash flows can lead to the emergence of Ponzi financing relations. It should also be pointed out that there is a respectable type of Ponzi financing, for the normal financing of long gestation investment projects, even where hedge financing dominates, involves the folding of interest on early on costs into the indebtedness on the project.

In all except the financing of long gestation investment projects Ponzi financing involves the erosion of the margins of safety. The payment commitments on debts are increasing as interest is capitalized, even as the ability to acquire profits is not enhanced by investment. Ponzi finance, when it is not construction financing, implies a decrease in equity, for debts increase without any increase in assets.

As a result of the erosion of equity and the decrease in the ratio of cash flow in to payment commitments, Ponzi finance also leads to a deterioration in a unit’s credit rating so that a unit’s interest rates rise relative to the rates available to the best credits. As a result payment commitments on debt rise faster than debts. The internal relations in a Ponzi situation tend to make the conditions that led to Ponzi financing in the first place worse, not better.  

There therefor are systemic conditions that need to be satisfied for a financial crisis to occur: the financial structure needs to be heavily indebted, involving a large element of either Ponzi finance or speculative finance which can become Ponzi. We can characterize a financial structure which is predominantly hedge financing as robust and a financial structure that is heavily speculative and Ponzi as fragile. The fundamental assertion of the financial instability hypothesis is that the financial structure evolves from being robust to being fragile over a period in which the economy does well.

15. Some leveraged buy outs include Payment in Kind provisions for some of the indebtedness. Payment in kind financing is Ponzi financing.

16. In a number of papers Mauro Galligatti and Dominico Dela Gatti have shown that once the IS-LM structure is recast in terms of the price of assets and the profit cash flow. configurations in which the economy is stable and others in which the system is unstable can be identified. Further, under reasonable assumptions, the system migrates from financial relations which imply system stability to others which imply system instability. See
The systemic element underlying financial crises is the evolution of the financial structure from being robust to being fragile, from being mainly characterized by hedge finance to having the weight of speculative and Ponzi finance increase. This structural change occurs because the market sets the prices of capital assets in the context of a specific institutional structure and a set of judgements as to the likelihood of alternative contingent environments. Successful operation of the economy, defined as an interval in which no serious financial crisis and no serious depression occur, is taken to imply that the current institutional structure is less crisis and depression prone than the structure of earlier times. The view develops that those environments that are conducive to crises and debt deflations are not likely to emerge.

The way markets price capital and financial assets often reflects an heroic assumption that the unknowable can be known: that propositions about fundamentally uncertain situations can be derived by assuming that what happens can be viewed as if it is a sample from a well defined probability distribution. Strategies for controlling assets often treat uncertain situations as if they were amenable to probability analysis. But once the randomness associated with uncertainty becomes manifest, the values sustained by this financing strategy become inappropriate. The necessity to adjust portfolios in a world which does not conform to expectations is likely to lead to the collapse of asset
values.

IV. IDIOSYNCRATIC ELEMENTS IN THE CURRENT SITUATION.

The extent to which indebtedness can rise before a crisis occurs has changed through time. The fragility of the system is not solely determined by the payment commitments on debts relative to cash receipts. Each period of increased indebtedness has unique elements. The transformation of a downturn from a recession cycle to a depression cycle depends upon the details of the institutional structure and the pattern and efficacy of interventions.

Innovation, the key to capitalist development is not just a technique and product phenomena: Financial institutions and usages are also subject to innovation. New financial institutions and practices are introduced and have an impact upon the asset and liability structures. They also have an impact upon the overall stability of the economy. Each period of rapid financial change and of financial fragility has unique and often interesting characteristics.17

It is tempting to allow the colorful personalities who crop up in financial affairs to dominate the story of the evolution of the financial system and emergence of financial

17. Joseph Schumpeter.
stress and crises. One would need more courage than I possess to try to do for our present situation what J.K. Galbraith did for the 1920’s and 30’s in his classic The Great Crash. Today’s financial journalists are doing a good job introducing us to today’s cast of characters, many of whom seem fit to be added to the rogue’s gallery of finance as their illustrious predecessors in our colorful financial history.

I want to go beyond the heroic and pitiful individuals who form part the fabric of the current crisis in detailing special features of the current crisis. I want to emphasize several historical and institutional features that form the fabric of the current crisis and which will have to be taken into account if the response to the current crisis is to be anything but superficial. The idiosyncratic elements in today’s situation include the legacy of policy interventions and therefore refers to the question of what theory guides action and the consequences if the guiding theory misspecifies the underlying reality.

I want to take up three special characteristics of the present situation that make it different from earlier post war episodes of financial tautness. These three are the crisis in the structure of banking, the legacy of the depression of the 1980’s and the emergence of money manager

18. J.K. Galbraith,

19. Martin Mayer,
capitalism

IV A The crisis in the structure of banking and finance

At least in part the situation in banking and finance in 1991 is a delayed response to the experiment in practical monetarism that took place in 1979-1982.

Monetarist theory holds that inflation is always the result of too much money chasing too few goods, or some equally simplistic idea. Monetarism instructs us that to control inflation the growth of the money supply, which is defined as currency plus deposits subject to check ($M_1$) or as currency plus total quickly available bank deposits ($M_2$), needs to be controlled. This is achieved by setting the growth rate of bank reserves, what the monetarists call HPM, at a rate corresponding to the target rate of growth of the economy. Monetarism instructs the Federal Reserve to give up any pretense of controlling the interest rate: whatever the market sets is to be accepted.

The effect of monetarism was to constrain the supply of credit through normal banking channels, which increased the cost of credit to borrowers and increased the price that purveyors of alternative sources of credit could charge for financing. Profit opportunities in supplying credit through non bank institutions and through markets improved.\textsuperscript{20} This

\textsuperscript{20} H.P. Minsky Central Banking and Money Market Changes, QJE 1957 (Reprinted in \textit{Can It Happen Again})
led to the development of new instruments by banks and other financial institutions, as well as new market based financing techniques.

Banks which have complex portfolios and savings and loan associations with focused portfolios are both in the business of lending for a longer term than the term of their liabilities. Both have to meet the market in financing their position. The cost of their liabilities will rise relative to the income their assets earn. Given the highly leveraged position of banks a small loss on total assets will lead to a large loss of equity. The implication of a protracted period of high interest rates is that banks will reach for yield, will accept greater risks, in an effort to improve earnings.

When the market situation implies that banks will reach for yield alert regulators will tighten their supervision. Bank examination and deposit insurance had been easy functions during the first fifty or so years after the institutionalization of deposit insurance during the Great Depression: in fact they were largely redundant. One consequence of the interest rate pattern of the period of practical monetarism was to strip the deposit insurance funds of the protection they had from the positive cash flows and the positive net worth of the insured institutions. The situation called for tighter regulation,
however the Reagan administration was committed to looser regulation and the regulatory bodies followed the elections.

The growth of the alternatives to bank financing did not occur because of purely market forces. The money supply control path to the constraining of inflation implied that the competitive position of banks in financing markets was weakened. The growth of alternatives to banks was an outgrowth of the constraint upon banks. One standard critique of regulation is that the regulator soon becomes an advocate for the regulated. In the case of Central banking and banks the opposite happened in the monetarist period as the attempt to control inflation by controlling bank liabilities provided room for the growth and prosperity of non-bank institutions.

IVB. The Reagan depression of the 1980's and its legacy.

In mid year 1982 two financial shocks occurred well nigh simultaneously: the collapse of the Mexican Peso and the crash of the Penn Square bank in Oklahoma City. The Mexican collapse was not just a collapse of the peso, it also was a wholesale collapse of banks, many of whom financed some of their position internationally. The collapse was the result of private indebtedness of enterprises in the booming north of Mexico and some portfolio diversification by Mexicans who took advantage of the support to the peso that came from oil revenues.
International pressure and domestic political considerations forced the Mexican government to nationalize the debts of the banks: de facto deposit insurance occurred.

The Penn Square Bank crisis centered around the origination of loans by one bank and the taking into position of these loans by other banks: a financial usage that is necessary if a system of decentralized local and quasi independent banks is to be the dominant financial structure. The Penn Square’s placements in a wide variety of banks that wanted a piece of the action in exploring for oil and gas collapsed in mid 1982, and helped bring down a wide variety of banks over the next several years, including Continental Bank in Chicago.

The Federal Reserve’s response to the twin collapses was to abandon practical monetarism. Meanwhile the Reagan administration had entered upon the great experiment of lowering taxes, not as a response to the recession but as a means of disciplining spending, and raising defense spending: this radical expansionary fiscal posture was adopted just as the economy received a sharp downside thrust from the collapsing banks and the Latin America financial crisis.

The fiscal posture offset the recessionary thrust from the financial collapse by making profits available to business: certainly the military build up made profits available to the specialized firms that were in a position
to take advantage of the defense spending. However a burst of imports of a vast array of consumer products saw a huge international deficit emerge in the 1980’s. This trade deficit meant that in the 1980’s profits induced by the fiscal deficit in the United States were earned in those countries that had a surplus in their trade account with the United States. In the competition among firms for profits the American firms lost to Japanese and other firms in the 1980’s.

As a result of the siphoning off of profits induced by deficit spending to other economies, the massive deficits of the 1980’s did not lead to a commensurate rise in domestic profits and improvement in domestic balance sheets. It therefore did not trigger a sufficient rise in domestic investment and domestic profits so that income rose by enough to reduce or eliminate the deficit. The ailing prosperity of the 1980’s rested upon a fiscal deficit, the economy was never strong enough to generate high income and employment levels without substantial deficits.

In prior post war recessions the fall in private investment was first offset by increasing government deficits, which enable businesses and households to fulfill their financial commitments and clean up their balance sheets. After a short interval of dependence of profits on

21. This view of profits reflects what I now call the KLM or Dutch airline theory of profits. See Mical Kalicki, Sjay and David Levy, and Hyman p. Minsky.
government deficits, investment and employment in the private economy increased, which tended to eliminate the deficit.

In the Reagan era, and to date in the Bush Presidency, the buoyancy of the American Economy has not been sufficient to reduce the need for deficits. In the era where government spending is in excess of 25% of total spending it may well be impossible to have a depression of the length and depth of the 1929-33 experience because profits cannot fall as far now as in the past. It may be necessary to consider an economic performance which is dependent upon government for the maintenance of profit flows a "depression" even though the employment and profit numbers do not indicate a depression is happening.

The Reagan era saw a vast increase in the outstanding government debt as well as a fundamental shift in the international indebtedness position of the United States. As a result the United States enters the 1990's with it's fiscal independence greatly reduced. Action to contain potential financial crises and the deficits that are needed to sustain United States profit flows may not be effective unless the trading partners adjust their international posture.

IVC The emergence of money manager capitalism
Over the post war period of successful capitalism in the United States the ownership of property has been more widely distributed than henceforth, but this ownership has take the form of positions in various mutual funds and beneficial interest in pension funds. These funds need to be managed. The mangers of these funds presumably operate in the interest of the owners or the beneficial interests, but they also have interests of their own.

These pension and mutual funds have monies for placement on a regular basis. The soon outgrew the orthodox high quality stocks and bond portfolio. They became a market for specialized instruments such as securitized mortgages and credit card receivables.

They also play a key role in the emergence of leveraged buy outs and the phenomena known as junk bonds. A little known aspect of the leveraged buy out game is the leveraged buy out funds that each of the main players in the game controls. The source of the money in these pools available for the equity position in the buy out is largely though not completely the various managed money pools.

V. Policy proposals

In recent years we have seen that ideas, forcefully put forward as propositions derived from economic analysis, have affected economic policy even though, within economics, the
ideas had a limited sectarian following and their scientific standing was questionable. Monetarism is one such doctrine, supply side economics is another. Within the monetarist framework the implicit proposition in my title, that financial crises may well be systemic in that they are outcomes of the normal functioning of market economies, is a non-starter. Within monetarism, and the even broader neo classical economics, financial crises, almost by definition, must be the result of shocks imposed upon the economy by some system that is in an essential sense outside of the economy.

The main thrust in the recommendations to address the emerging crisis in the banking system, as well as the programs to address the Savings and Loan debacle, reflect the view that the problems are due to specific institutional weaknesses in the banking system rather than a fundamental flaw in market economies which make the transition from a system with robust finance to one with fragile finance an expected result of profit seeking activity.

Within the framework of the Keynesian view that market process need not lead to the capital development being well done, the main policy objective is to put a financial structure in place which is conducive to doing the capital development well.
A quick and dirty list of some policies that may well be needed if the response to the present crisis is to be anything but superficial follows.

1. Development of protection for early outstanding bonds when a major refinancing takes place. The junk bond phenomena in part was a transfer of value from existing debts to the new debts or the initial equity owners. The development of a right to put bonds whenever a serious change in the financial structure of the debtor takes place in a refinancing. The ctrine of conveyance has to made to conform to current practices.

2. Need to question the pension fund system. Should policy induce a shift to defined contribution schemes? Should pensions be attenuated by having an open ended IRA's (No limit to contributions, withdrawals without penalty but all withdrawals taxed, interest and dividend accruals not taxed except as they are spent.) Opening up the IRA's may well require a thorough overhaul of the income tax. Perhaps the income tax should be transformed into a spending tax.

3. The government is no different than any other organization in that it needs revenues to validate its debts. This means that the government should have a normal conditions balanced budget, allowing for deficits in recessions and depressions and major wars. inasmuch as a government that spends some 16 to 20 % of GNP is more conducive to the normal functioning of a market economy than
a government that spends 3 to 9% of GNP, the tax system must be such that it yields 16 to 20% of GNP when a close approximation to full employment is achieved.

4. Furthermore the government budget should be designed to be an automatic macroeconomic anti inflationary force. Indexing as a mechanical device in social security and government pensions should be abolished, so that inflation leads to a substantial budget surplus.

5. Government spending should increasingly be directed towards the creation of resources and the creation of opportunities that enterprise can exploit. The main role of government spending is macroeconomic, to promote conditions that sustain profit flows. The microeconomic impact of government spending should aim to create conditions conducive to resource creation and to enterprise.
<table>
<thead>
<tr>
<th>No.</th>
<th>Title</th>
<th>Author(s)</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Macroeconomic Profitability: Theory and Evidence</td>
<td>THOMAS R. MICHL</td>
<td>November 1987</td>
</tr>
<tr>
<td>2</td>
<td>The Firm and Its Profits</td>
<td>NINA SHAPIRO</td>
<td>March 1988</td>
</tr>
<tr>
<td>4</td>
<td>Housing Quality Differentials in Urban Areas</td>
<td>DIMITRIOS A. GIANNIAS</td>
<td>July 1988</td>
</tr>
<tr>
<td>5</td>
<td>The Finance Constraint Theory of Money: A Progress Report</td>
<td>MEIR KOHN</td>
<td>August 1988</td>
</tr>
<tr>
<td>6</td>
<td>A Structural Approach to Hedonic Equilibrium Models</td>
<td>DIMITRIOS A. GIANNIAS</td>
<td>August 1988</td>
</tr>
<tr>
<td>7</td>
<td>Why is the Rate of Profit Still Falling?</td>
<td>THOMAS R. MICHL</td>
<td>September 1988</td>
</tr>
<tr>
<td>8</td>
<td>The Effects of Alternative Sharing Arrangements on Employment</td>
<td>JEFFREY PLISKIN AND DEREK C. JONES</td>
<td>September 1988</td>
</tr>
<tr>
<td>9</td>
<td>Consumer Benefit from Air Quality Improvements</td>
<td>DIMITRIOS A. GIANNIAS</td>
<td>October 1988</td>
</tr>
<tr>
<td>10</td>
<td>Long-Term Trends in Profitability: The Recovery of World War II</td>
<td>GERARD DUMENIL, MARK GLICK AND DOMINQUE LEVY</td>
<td>October 1988</td>
</tr>
<tr>
<td>11</td>
<td>Ranking Urban Areas: A Hedonic Equilibrium Approach to Quality of Life</td>
<td>DIMITRIOS A. GIANNIAS</td>
<td>October 1988</td>
</tr>
<tr>
<td>12</td>
<td>The Real Wage and the Marginal Product of Labor</td>
<td>TRACY MOTT</td>
<td>November 1988</td>
</tr>
<tr>
<td>14</td>
<td>Classical and Neoclassical Elements in Industrial Organization</td>
<td>MARK GLICK AND EDUARDO M. OCHOA</td>
<td>December 1988</td>
</tr>
<tr>
<td>16</td>
<td>Unionization and Labour Regimes: A Comparison Between Canada and the U.S. Since 1945</td>
<td>DAVID KETTLER, JAMES STRUTHERS AND CHRISTOPHER HUXLEY</td>
<td>January 1989</td>
</tr>
<tr>
<td>17</td>
<td>Social Progress after the Age of Progressivism: The End of Trade Unionism in the West</td>
<td>DAVID KETTLER AND VOLKER MEJA</td>
<td>February 1989</td>
</tr>
<tr>
<td>18</td>
<td>Profitability and the Time-Varying Liquidity Premium in the Term Structure of Interest Rates</td>
<td>TRACY MOTT AND DAVID ZEN</td>
<td>March 1989</td>
</tr>
<tr>
<td>19</td>
<td>A Dynamic Approach to the Theory of Effective Demand</td>
<td>ANWAR SHAIKH</td>
<td>March 1989</td>
</tr>
<tr>
<td>20</td>
<td>Profits, Cycles and Chaos</td>
<td>MARC JARSULIC</td>
<td>April 1989</td>
</tr>
<tr>
<td>21</td>
<td>The Structure of Class Conflict in a Kaleckian-Keynesian Model</td>
<td>TRACY MOTT</td>
<td>April 1989</td>
</tr>
<tr>
<td>No.</td>
<td>Title</td>
<td>Author(s)</td>
<td>Date</td>
</tr>
<tr>
<td>------</td>
<td>----------------------------------------------------------------------</td>
<td>-----------------------------------------------</td>
<td>---------</td>
</tr>
<tr>
<td>22</td>
<td>Debt and Macro Stability...MARC JARSULIC</td>
<td></td>
<td>May 1989</td>
</tr>
<tr>
<td>23</td>
<td>Viability and Equilibrium: ISLM Revisited...JEAN CARTELLER</td>
<td></td>
<td>May 1989</td>
</tr>
<tr>
<td>24</td>
<td>Financial Instability: A Recession Simulation on the U.S. Corporate Structure...</td>
<td>DORENE ISENBERG</td>
<td>June 1989</td>
</tr>
<tr>
<td>25</td>
<td>Kaleckianism Vs. &quot;New&quot; Keynesianism...TRACY MOTT</td>
<td></td>
<td>June 1989</td>
</tr>
<tr>
<td>26</td>
<td>Marx's Value, Exchange and Surplus Value Theory: A Suggested Interpretation...</td>
<td>JEAN CARTELLER</td>
<td>June 1989</td>
</tr>
<tr>
<td>27</td>
<td>Money and Equilibrium: Two Alternative Modes of Coordination of Economic Activities...</td>
<td>JEAN CARTELLER</td>
<td>June 1989</td>
</tr>
<tr>
<td>28</td>
<td>The Covariance Transformation and the Instrumental Variables Estimator of the Fixed Effects Model...</td>
<td>JEFFREY PLISKIN</td>
<td>July 1989</td>
</tr>
<tr>
<td>29</td>
<td>Unionization and the Incidence of Performance-Based Compensation in Canada...</td>
<td>DEREK C. JONES AND JEFFREY PLISKIN</td>
<td>August 1989</td>
</tr>
<tr>
<td>30</td>
<td>Growth Cycles in a Discrete, Nonlinear Model...MARC JARSULIC</td>
<td></td>
<td>August 1989</td>
</tr>
<tr>
<td>31</td>
<td>The Changing Role of Debt in Bankruptcy...DORENE ISENBERG</td>
<td></td>
<td>September 1989</td>
</tr>
<tr>
<td>32</td>
<td>The Effects of Mergers on Prices, Costs, and Capacity Utilization in the U.S. Air Transportation Industry, 1970-84...</td>
<td>FRANK R. LICHTENBERG AND MOSHE KIM</td>
<td>November 1989</td>
</tr>
<tr>
<td>33</td>
<td>What Remains of the Growth Controversy??...NANCY J. WULWICK</td>
<td></td>
<td>December 1989</td>
</tr>
<tr>
<td>34</td>
<td>The Determinants of U.S. Foreign Production: Unions, Monopoly Power, and Comparative Advantage...</td>
<td>THOMAS KARIER</td>
<td>January 1990</td>
</tr>
<tr>
<td>35</td>
<td>Industrial De-Diversification and Its Consequences for Productivity...</td>
<td>FRANK R. LICHTENBERG</td>
<td>January 1990</td>
</tr>
<tr>
<td>36</td>
<td>The Microeconomics of Monopoly Power...THOMAS KARIER</td>
<td></td>
<td>April 1990</td>
</tr>
<tr>
<td>37</td>
<td>What Happened to the Corporate Profit Tax??...THOMAS KARIER</td>
<td></td>
<td>May 1990</td>
</tr>
<tr>
<td>38</td>
<td>The Mathematics of Economic Growth...NANCY J. WULWICK</td>
<td></td>
<td>July 1990</td>
</tr>
<tr>
<td>39</td>
<td>Poverty and Household Composition...JOAN R. RODGERS</td>
<td></td>
<td>November 1990</td>
</tr>
<tr>
<td>40</td>
<td>A Kernel Regression of Phillips' Data...NANCY J. WULWICK and Y.P. MACK</td>
<td></td>
<td>November 1990</td>
</tr>
<tr>
<td>41</td>
<td>Generalized Entropy Measures of Long-Run Inequality and Stability Among Male Headed Households...</td>
<td>SOURUSHE ZANDVAKILI</td>
<td>December 1990</td>
</tr>
<tr>
<td>42</td>
<td>Poverty and Choice of Marital Status: A Self-Selection Model...JOAN R. RODGERS</td>
<td></td>
<td>December 1990</td>
</tr>
<tr>
<td>No.</td>
<td>Title</td>
<td>Author(s)</td>
<td>Date</td>
</tr>
<tr>
<td>------</td>
<td>----------------------------------------------------------------------</td>
<td>-----------------------------------------------</td>
<td>------------</td>
</tr>
<tr>
<td>43</td>
<td>International Comparison of Household Inequalities: Based on Micro Data with Decompositions</td>
<td>SOURUSHE ZANDVAKILI</td>
<td>December 1990</td>
</tr>
<tr>
<td>44</td>
<td>Accounting for the Decline in Private Sector Unionization: Representation Elections, Structural Change and Restructuring</td>
<td>THOMAS KARIER</td>
<td>February 1991</td>
</tr>
<tr>
<td>45</td>
<td>Female-Headed Families: Why Are They So Poor?</td>
<td>JOAN R. RODGERS</td>
<td>March 1991</td>
</tr>
<tr>
<td>46</td>
<td>Redistribution Through Taxation: An International Comparison</td>
<td>SOURUSHE ZANDVAKILI</td>
<td>April 1991</td>
</tr>
<tr>
<td>47</td>
<td>Financial Disturbances and Depressions: The View from Economic History</td>
<td>RICHARD SYLLA</td>
<td>April 1991</td>
</tr>
<tr>
<td>49</td>
<td>The Role of Banks Where Service Replication Has Eroded Institutional Franchises</td>
<td>RICHARD ASPINWALL</td>
<td>April 1991</td>
</tr>
<tr>
<td>50</td>
<td>How Useful Are Comparisons of Present Debt Problems With the 1930s?</td>
<td>ALBERT GAILORD HART</td>
<td>April 1991</td>
</tr>
<tr>
<td>51</td>
<td>Financial Crises: Systemic or Idiosyncratic</td>
<td>NYMAN P. MINSKY</td>
<td>April 1991</td>
</tr>
</tbody>
</table>