LONGER WAVES IN FINANCIAL RELATIONS: FINANCIAL FACTORS IN THE MORE SEVER

Depressions II

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The title and subject matter of this paper harks back to a paper I presented at the December 27-29, 1963 meetings of the American Economic Association. About the time I received the invitation to appear here I received a book of readings, edited by Massimo Di Matteo and Sandro Vercelli, which included a translation of my 1964 paper. I was very flattered especially, as they placed my piece in the section Classical Authors, along with articles by Kondratieff, Schumpeter, Kuznets and Sylos Labini.

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I. Introduction

Moses Abramowitz, testifying before the pathbreaking hearings chaired by Senator Paul Douglas on "Employment, Growth and Price Levels", said "It is not yet known whether they (the long swings) are the result of some stable mechanism inherent in the structure of the U.S. economy, or whether they are set in motion by the episodic occurrence of wars, financial panics or unsystematic disturbances".4

In reading these hearings for a review article,5 I took exception to Abramowitz's quite casual identification of financial panics as exogenous, episodic elements in the generation of the cycles of experience. In my 1963 presentation I argued that there is a mechanism in capitalist economies which has generated the longer swings in economic experience. This mechanism centers around the need for firms to finance investment spending and positions in capital assets externally and the cumulative changes in financial variables that result over the long swings of expansions and contractions.6

6. These financial movements are especially marked in expansions that take place just prior to the crisis and in the serious depression that follows a crisis whose repercussions are not contained.
The model which underlaid my 1963 paper is still attractive, even though it was based on the simple Hansen-Samuelson interaction between the accelerator and the consumption propensity. Let us suppose that the investment and consumption interactions combine to form a process which, if unconstrained, leads to an explosive, expansion or decline, of prices, output or employment. But in fact, the usual outcome is that an explosive increase or decrease does not happen. Containing factors enter which constrain what happens to what is economically possible or politically palatable.

As reasonable values of the parameters of the endogenous interactions lead to an explosive endogenous process, and as explosive expansions and contractions rarely occur then constraints, by devices such as the relative inelasticity of finance or an inelastic labor supply, need to be imposed and be effective in generating what actually happens. The relative inelasticity of finance can lead to a decrease in the rate of increase of investment and an

Abramowitz's long swings and the Friedman and Schwartz deep depression cycles coincide. In 1963 I noted that even in Friedman and Schwartz's view the evidence for a monetary involvement in the deep depression cycles is strong, and it was admittedly weak for the minor depressions that occurred between the deep depressions. Friedman and Schwartz make their case for a monetary explanation of mild depression cycles by arguing that "Is not a common explanation of both more appealing than separate explanations, especially when there is no well tested alternative explanation." M. Freedman and A. J. Schwartz, "Money and Business Cycles", Rev of Econ. and Stat. Sup. Feb 1963, p. 55.

increase in the carrying costs of both inherited short-term
debt and new long-term debt. An inelastic labor supply can
lead to wage increases which absorb an increased proportion
of gross revenues. These reactions constrict the cash flows
that are available to fulfill payment commitments on
inherited debts and may well trigger liquidity and solvency
crises.

In this way of looking at the economy the "parts" of
the economic process that are ignored as the "formal model"
is set up enter the argument by setting floors and ceilings,
which can thwart the full realization of an endogenously
determined explosive expansion or contraction. What happens
is constrained to be consistent with those economic
conditions that were set aside as the formal intertemporal
model was set up. 8

8. Hyman P Minsky, Monetary Systems and Accelerator Models
   American Economic Review, December 1957
   A Linear Model of Cyclical Growth Review

Note that the approach is essentially Marshallian.
Elements of economic reality are temporarily placed in a
"bag" of caeterus paribus when a formal model is set up and
the implications of the formal set up are derived. At that
point the question becomes how do the elements that were set
aside affect what happens. In the treatment of complex
dynamics the formal set up typically leads to time series of
endogenously determined variables that are "unacceptable"
for reasons either of logic or of the economic and social
conditions they imply. At that stage the question arises
about how the aspects of reality that were set aside as the
formal model was set up affect what is realized.

If the endogenous processes together with the
constraints imply that the economy enters upon a debt
deflation, then the question becomes how or what
institutions contain these deflations. In the United States
the Federal Reserve was put in place after the crisis of
1907 to deal with debt deflations that were triggered by a
liquidity crises in position making markets.
The mathematical interpretation of a model which combines processes which endogenously generate explosive expansions or contractions, and constraints, which are determined by policy and institutional elements that were left out of the formal model, is that when constraints or policy interventions become effective, the endogenous process is stopped and restarted with initial conditions which reflect the constraints and the interventions. The results of the interactions between endogenous processes, represented by a formal model, and constraints and interventions, that are due to institutional characteristics that had been placed in a Marshallian type bag of caeterus paribus when the formal model was set up, are contained cycles, if the constraints and interventions hold.\(^9\)

Questions as to what determines the "constraints" and "interventions" and what limits there are on the efficacy of the "constraints" and "interventions" are opened by this approach. Whereas the constraints and interventions are

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9. The gist of the above articles is the use of a piece wise linear model with floors and ceilings that embodied institutionally determined constraints which stopped the endogenous process and started it up again with new initial conditions. If the minor root of the endogenous process was greater than the expansion allowed by the upper constraint then the solution equation had a large positive coefficient for the minor root and a small negative coefficient for the minor and truly explosive root. In this way a one turning point process could be generated with the explosive behavior being in the opposite direction from the constraint; e.g. if the effective constraint was the ceiling the process would explode towards the floor and if the constraint was the floor the process would explode towards the ceiling. A cycle which bounced between the ceiling and the floor would result.
embodied in legislated institutions and usages which reflect the interpretation of what went wrong with the economy which ruled when the legislation was enacted, the interventions are by authorities who use the understanding, that rules at the date they intervene, of what needs to be constrained and of the efficacy of possible interventions. As many decades may pass between the creation of the institutions and the application of interventions, the "theory" that guides the intervenors is likely to be quite different than the "theory" that guided the institution builders. ¹⁰

The legislative actions in the middle of the 1930's that set up deposit insurance and reformed the Federal Reserve System reflected the theories and interests of a very able group of practical men, policy makers and economists of that time. The interventions in recent years, that were used to constrain what was viewed as the thrust of the economy towards incoherence, both financial and "real", reflected the economic theories and prejudices of those with administrative responsibilities in the late 1980's, early 90's. ¹¹

¹⁰. This is a \textit{variant of Keynes' rule on the relation between economic theory and economic policy. In my version the institutions embody the theory of the economists who had the ears of the policy makers in the past, when the institutions were created, and the interventions reflect the theory of the economists who have the ears of the policy makers in the present, when the interventions take place".}
¹¹. The recent legislation designed to prevent a repetition of the problems of bank insolvency represents the current dominant interpretation of the debacle of the late 1980's - early 1990's, which is a combination of rotten apples in the barrel and that deposit insurance was not correctly priced. This interpretation is at variance to the institutional
The hypothesis that guided my 1963 paper is that the more severe depressions of history occur after a period during which the economy performs rather well, with only minor cycles disturbing a generally expanding economy. However, as a run of such a generally expanding economy that is interrupted only by minor downturns is extended in time the liability structures of firms, households and financial institutions change so that payment commitments on liabilities increase relative to the cash flows derived from income, even as the ratio of assets whose market value is "certain" declines relative to the total market value of assets. In later writings I called this transformation the evolution of an initially robust financial structure into a fragile structure.\textsuperscript{12} I measured the fragility of the financial structure by the mix of different financing regimes (hedge, speculative and Ponzi) in the totality of finance.\textsuperscript{13}

In other words the way in which investment spending is financed in a prosperous capitalist economy leads to an

evolution - usage evolution interpretation of the debacle that follows from what is presented here.
12. Abba Lerner characterized this view as holding that "Stability is destabilizing."
13. In the 1964 paper I classified the payments being made as income, balance sheet and portfolio payments and the hypotheses was that the payments dictated by balance sheets, including those dictated by a rise in the extent of financial layering, increased over the run dominated by good times and minor cycles. A crisis developed when units were forced to try to meet balance sheet payment commitment by selling assets (portfolio payments) which led to a decline in asset values and a compromising of the margin of safety offered by a positive net worth.
accumulation of indebtedness relative to the cash flows that enable units to fulfill their payment commitments. As a result of such an evolution of the financial environment a shortfall of cash flows from the income stream, that in a low-indebted environment is readily contained, can, in a highly-indebted environment reach and break through the barriers so that a cumulative interactive debt deflation takes place.\textsuperscript{14, 15} That is, a over a number of small contained recessions a financial environment emerges in which a serious debt deflation is possible.

\textsuperscript{14.} The classic debt deflation reference is Irving Fisher "The Debt Deflation Theory of Great Depressions" Econometrica 1933. Irving Fisher starts his exposition of debt deflation from an unexplained initial condition of "over indebtedness". My work can be interpreted as trying to make that initial condition a result of the way financial markets operate.

\textsuperscript{15.} A symmetric argument holds for the emergence of runaway inflation.
II. The Testing of the Containing Mechanism.

In the conclusion to my 1964 piece I wrote:

"This paper contains no answer to the questions of whether or not a financial panic followed by a deep depression can now occur or whether a long-wave contraction can take place in the absence of a financial panic. The barriers to a financial panic erected in the aftermath of the great crash have not been tested..."; 16

We now have 30 years of experience since my paper was written. On the whole, experience validates the insights of that paper.

In model building, the development of computer-based experimental mathematics, which permits systems of equations which are multidimensional, non-linear and dynamic to be simulated to generate time series of the specified variables. Furthermore the implications for these time series of alternative specifications of the parameters of the model can be determined. These developments have freed economists from the need to force their theorizing into a straight jacket determined by mathematical tractability.

We now know that the time series generated by non-linear dynamic systems can be well behaved over a time span and then quite quickly migrate to regimes in which time series that are "unruly" are generated. These "unruly' time series need to be constrained if satisfactory time series are to be generated: apt interventions are needed for the economy to function well.

16. Op Cit pg 335
As a result of these developments in our capabilities to understand complex systems, the idea of dividing the discourse for the explanation of nonlinear economic dynamics into those elements which are included in the endogenous dynamic process and those institutional arrangements and government interventions which are outside the formal model, but which enforce limits upon the values that the endogenous process can generate, gains power. The intermittently effective institutional constraints as well as government interventions can be interpreted as setting new initial conditions for the endogenous dynamic process.\textsuperscript{17} The modern non-linear dynamic models can be interpreted as complex generalizations of the accelerator-multiplier based floor and ceiling models of more than 30 years ago.\textsuperscript{18}

In general the empirical assertions made in 1964, that over an extended period of good times the ratios of debt to equity of firms and of payment commitments of firms, households and financial intermediaries to the various supporting cash flows increases, have been validated by the experience since the 1960's.

The returns are mixed as to whether the in place institutional arrangements are sufficient to contain contemporary thrusts towards instability. A thorough debt

\textsuperscript{17} As the floors and ceilings are what constrains the economy to acceptable performance and as these are set by institutions which can be the result of legislation and are set in motion by administrators the argument is strongly anti laissez faire.

\textsuperscript{18} As cited in footnote 7.
deflation did not occur in 1988-1992 even though there were massive dislocations in financial institutions and markets. However the in place system of government deficits which sustained profit flows, central bank interventions, and deposit insurance had to be augmented by Treasury financing of deposit insurance. In particular when the safety net for financial institutions was put in place in the mid 1930's it was overlooked that the Federal Reserve had been largely on the sidelines when the 1933 bank holiday was resolved. The Reconstruction Finance Corporation was the main government player in the reopening of banks.

The crises in the 1930's and in the late 1980's - early 1990's were solvency crises, due to non performing assets. The Federal Reserve is not an institution that can take ownership positions in refinancing negative net worth institutions. As long as capitalism is financially unstable then either a government holding company or intermittent ad hoc financing by the Treasury and The Congress of negative net worth institutions will need to be a part of the structure of capitalist economies.

Thirty years of experience since the 1930's gives us much more information to use in assessing whether or not a financial panic and a deep depression can now occur. The barriers to debt deflation which were erected in the aftermath of the great contraction of the early 1930's have

19. Walker Todd has instructed us all on the barriers to the Federal Reserve being the main actor in resolving a solvency crises.
been tested in a number of well-defined episodes, beginning with the Penn Central commercial paper crisis of 1968, and continuing through the recent breakdown of the Savings and Loan "industry", the collapse of commercial property values, and the impact on banks of the aftermath of the leveraged buy out mania.

Four elements make up the mechanism which contained the thrusts to a debt deflation, since the possibility of such a thrust became a present danger in the late 1960's, These are:

1. Government deficits, which sustain aggregate cash flows, in particular gross profits,

2. Special government sponsored deposit and other "insurance" funds, which assure that there is no (or a minimal) pass-through of financial institution losses on assets to depositors,

3. The Treasury, which refinance insolvent deposit insurance institutions and

4. The Central Bank, which expedites an increase in liquidity after the crisis is contained, so that financing terms improve.

I will take these up in turn.
III. The Elements of the Containing Mechanisms

(1). The flow of gross profits is determined by the size and the structure of demands. In particular the Levy-Kalecki way of looking at the national accounts and the generation of the various cash flows available to validate debts is especially relevant in a world where over indebtedness is at least a potential problem. The simplified form of the Levy - Kalecki way of looking at the propelling factors of a capitalist economy leads to the equation:

\[ \text{Gross capital income} = \text{Financed gross investment}. \]

In this form gross investment calls the tune for gross capital incomes (profits) and through the complex of multipliers for all of income and employment. The bare bones Profits equals Investment relation needs to be adjusted to allow for government deficit spending, the balance of international trade and payments, for saving by

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Economists are familiar with the relations between profits and investment through the work of Kalecki, although it also underlay Schumpeter's views in his *Theory of Economic Development*. However evidence indicates that Jerome Levy, who was an autodidact as far as economics was concerned, had the essentials of the profits-centered accounting system well before Kalecki's work in the 1930's.
wage earners and for consumption spending by those who receive profits as income.\(^{21}\)

One conclusion drawn from the extended Levy-Kalecki equation is that a government deficit, that is used to finance government purchases of goods or services or to finance the purchase of goods and services by retiree's and other recipients of transfer payments, is the equivalent of private investment in generating profits. Thus with the increase of the size of government relative to the size of the economy, the likelihood of a collapse in profits, such as happened in the 1929-1933 period in the United States, decreases almost to the vanishing point.\(^{22}\)

A main reason why the collapse of investment spending on construction in the early 1990's did not lead to an equivalent collapse in profit flows in the United States is that the profit sustaining government deficit increased in this period. This is so, even as the measured government deficit in this period exaggerates the government's impact on profit flows. The government refinancing of the saving and loan associations and banks, when the deposit insurance funds proved inadequate for the task, did not finance either

\(^{21}\) Consumption out of profit income is particularly important in modern capitalist economies where pensioners receive property income which together with social pensions finance consumption.

\(^{22}\) The essential point is that if gross investment is 16% of gross domestic produce then a serious fall in gross investment cannot be offset by a deficit based upon a Federal Government that is 3% of gross domestic product but it can be offset by a deficit based upon a Federal Government that is some 20% of gross domestic product.
employment or transfer payments and thus did not become part of the mechanism by which profits are forced upon an economy. However, by preventing a pass-through of the losses on asset to the holders of deposits, this government spending prevented a collapse of spending by households, whose deposits would have been put on hold. Such a decline of spending on consumption would have led to a collapse of profits beyond that due to the decrease in investment.

(2). Deposit insurance was really tested for the first time in the late 1980's and early 90's, as an unprecedented number of savings and loans as well as commercial banks were adversely affected by an epidemic of "non-performing" assets, even as the government deficits of these years prevented a collapse of gross business profits. The shortcomings of deposit insurance were revealed in the 1980's and 1990's when insurance replaced the capital that was lost as a result of the combination of the hits to the net worth of institutions during the Volcker era of interest rate inversions followed by an epidemic of non-performing assets.23

The housing and home finance arrangements introduced in the aftermath of the great collapse of 1929-33 rested upon

23. The Volcker era stripped net worth from S & L's and savings institutions even as their assets kept on performing. The diminished net worth of S & L's meant that the supervision and regulation designed to protect the insurance funds should have become more stringent. Instead in the Reagan/Bush years that followed Volcker's regime, supervision and regulation were relaxed.
an implicit contract among the Federal Reserve, the deposit insurance organizations for savings banks and savings and loan associations, the United States government, and financial institutions such as savings banks and savings and loan associations. This implicit contract was that the Federal Reserve and the Treasury would assure that the interest rates at which the thrifts financed their positions were consistent with the interest rates on their stock of mortgage assets.\textsuperscript{24} They implied that the use of interest rates as a weapon to constrain aggregate demand or inflationary pressures was to be limited by the condition that the net worth of the thrifts was not to be compromised. In the interest rate experiment of the early 1980’s the Federal Reserve broke this implicit contract. The losses, whether running or through marking mortgages to market, were such that the net worth of many thrifts became less than zero even though there was no crisis due to non-performing assets.

Negative net worth institutions with small or zero market value were neither refinanced, so that they had a positive net worth, nor liquidated: they were kept open by the strength of the insurance guarantee and were given the

\textsuperscript{24} This implicit contract became of increasing importance as the term at initiation of the fully amortized constant payment mortgage increased even as the down payment at initiation decreased. That is the vulnerability of the savings and loan associations, savings banks and insurance companies to interest rate increases increased even as interest rate increases became ever more important in the effort to constrain inflation.
opportunity to grow out of their negative net worth by being allowed to add to their portfolios assets with presumably positive returns over and above their now much higher funding costs which they had been prohibited from owning. An implicit equity base, which enabled these institutions to fund their entry into new lines of business, was provided by the continued guarantee of liabilities by the deposit insurance fund. A game was set up in which the often new managers of the bodies of money at the S & L's would gain if the new assets proved profitable and the insurance funds would lose if they turned out to be unprofitable. The game as played by the government and the thrifts in the 1980's was heads I the government lose, tails you the thrifts win.  

Deposit insurance did prevent a pass-through of the loss on asset values to depositors, but the actual execution of the guaranty embodied in the insurance leaves much to be desired. Deposit insurance, when it is activated for a failed institution, replenishes a failed institutions net worth, which enables deposits to be paid off. In exchange the deposit insurance authority is left holding the assets, performing and non-performing, of the failed institution. Typically deposit liabilities, performing assets and the deposit insurance monies are transferred to a continuing institution, while the non-performing assets become the property of the deposit insurance organization for

25. Another way of putting it is that in the 1980's no one was looking after the interests of the deposit insurance funds, the Treasury or the tax payers.
liquidation. In place of a work out of the non-performing assets, which is what a continuing bank would do, the government organization attempts to liquidate these assets at whatever can be fetched in the market.

(3). The Treasury bears the costs of the shortfall of the segregated funds of the formal deposit insurance organization to the deposit liabilities that will be validated. The deposit insurance exercise can be interpreted as a refinancing-plus-liquidation operation in which title to non-performing assets is left with some government organization. The use of a government holding company is an alternative to the deposit insurance path for the handling of negative net worth financial institutions.

During the Great Depression the Reconstruction Finance Corporation of the United States was a Government holding company which was used to inject equity into otherwise bankrupt companies and for the financing of industrial initiatives. The RFC served not only as a government holding company but also as a government owned and financed investment bank.26

26. The Italian IRRI was a similar organization to the RFC, however the assets of the IRRI were not privatized either over the years between the Great Depression and World War II or after the war. IRRI played a significant role in the growth of the Italian economy during the epoch after World War II.

In 1992-93 large scale corruption in Italian government became public and some of this corruption centered around the operations of IRRI and organizations that were spun-off from IRRI. It is necessary to separate the corruption of the 1980's and 1990's from the earlier success of the
The difference between the government holding company and the deposit insurance approach is that in the former the negative net worth organization receives an infusion of equity and often a new management and continues as an institution whereas in the latter the organization is either liquidated or folded into a continuing institution with the help of government monies. In the case of a government holding company the instructions to the new management by the new owner of the organization, the government holding company, is to work out the non-performing assets and return to profitability. In the United States, after the 1933 bank holiday a return to profitability led to the privatization of many institutions as now profitable institutions, using either retained earnings or funds obtained from the capital market, bought back the bonds, preferred stock and ordinary shares that the government holding company acquired in the refinancing operation. In the American experience holding company ownership was transitory.\textsuperscript{27} A thick set of capital market institutions which makes privatization a feasible option once there is a return to profitability is required for the holding company approach to the containing of a solvency crisis viable.

(4). The Federal Reserve was not the key player in the Government holding company in the development of modern Italy.

27. In the Continental Illinois Bank and Chrysler Corporation refinancing of failed institution a similar return to profitability and privatization took place.
resolution of either the 1933 bank holiday or the 1980's and 90's net worth crisis of banks and other financial institutions. The key player in the 1930's case was the RFC and the key player in the 1980's and 90's was the Treasury and The Congress.

Both the recent crisis and that of 1933 centered around the insolvency of institutions that arose from the non-performance of assets in portfolios. The Federal Reserve, as set up, is capable of resolving illiquidity problems, it is not able to provide equity funds to negative net worth institutions.

Treating insolvency as if it were a matter of illiquidity in cases where insolvency is important only makes the insolvency of the institution worse, as the Federal Reserve provides liquidity by stripping the failed bank of performing assets. An institution with only non-performing assets is left in the wake of the Federal Reserve supplying liquidity through discounting.

However not all financial crises are solvency crises. The crisis in the commercial paper market after the Penn-Central fiasco of the mid 1960's was a liquidity crisis, as solvent firms were unable to roll over their outstanding commercial paper as market participants became suspicious of their protection in the market. The Federal Reserve was able to contain this crisis by providing reserve funds to the banks so that bank financing was able to replace market financing for the solvent firms. Similarly the credit
crunch of the 1960's was resolved when the Federal Reserve announced that the discount window was available for banks which were squeezed. In a world of performing assets the Federal Reserve can resolve transitory liquidity-based crises.

The Federal Reserve has a positive role to play in the resolution of a systemic solvency crisis. This role is to provide liquidity to financial markets so that short-term interest rates fall. Such a fall in short-term rates will lower the carrying costs for both real and financial assets and thus tend to raise their prices. In a relatively short time after the full development of a crisis is contained, the market value of long-term assets, which command some expected cash flow, even though these expected cash flows were not able to fulfill the cash payments which their prior financing required, will rise from their crisis level.

A generalized fall in interest rates eases the transition from a stagnation, that follows a debt deflation, to an expanding economy. The Federal Reserve, together with the Government deficit that sustains profits, can limit the time spent in a stagnation that follows a contained debt deflation.

The Federal Reserve cannot contain the gyrations of a capitalist economy so that unacceptable performance is avoided. An emphasis upon rising interest rates to contain modest inflation may well lead to a solvency crisis which
creates a situation the Federal Reserve is not able to handle. If the Federal Reserve focuses upon how its actions can abet the capital development of the economy it will come to realize that its proper role is to maintain stable financing conditions, not necessarily stable prices. Operating upon financing terms and asset values so that the solvency of financial institutions is seriously impaired does not abet the capital development of an economy.
IV. Conclusion.

The vision of my 1964 article to which today's paper refers has stood up well. The capitalist economy is an intensely financial system - money and finance are not neutral. Furthermore, the mechanism I emphasized appears to be confirmed: Over a run of times without a financial panic and a deep depression, the financial structure changes so that financial layering increases and the proportion of what I called speculative and Ponzi financial postures increase. The above can be called the first postulate of the Financial Instability hypothesis. The second postulate is: The increase in layering and the shift in the structure of payment commitments progressively increases the vulnerability of the financial system to a debt deflation process which can usher in a deep depression business cycle.

Thus the financial panics and deep depressions of history can be characterized as normal functioning results for a capitalist economy. However, as the institutional structure of a capitalist economy changes, because of both legislation and endogenous reactions of economic units, the economy never replicates the past. The forces making for financial panics and deep depression cycles can be contained, or transformed, so that the path through time of the economy exhibits some business cycle phases in truncated or vestigial forms.
Because the losses on assets of financial institutions did not pass through to households as a wholesale default on their deposit assets, a cumulative decline of the economy did not occur in recent years. The structure put in place in the 1930's, supplemented with Treasury funds and within the modern "profit" generating environment that includes a large increase in the relative size of government, held.

As a result, the economy seems to have gone from the threshold of a debt deflation to a stagnant state. During the stagnant state the portfolios of business, households and financial institutions are so to say "cleaned up": financial structures become more robust. As the memory of the "crisis" fades, risk aversion dissipates and financing terms ease. As a modest economic expansion replaces stagnation, financial institutions and balance sheets in general become more robust. Continued success sets the groundwork for failure. Financial robustness that is deemed excessive leads to the development of new instruments. Once again belief in the power of creative finance emerges. Even as optimism reigns, financial robustness is eroded: The domain of financial fragility increases.

The world is becoming universally capitalist. Because of today's communication, record keeping and computation capabilities, global financial integration is likely to characterize the next era of expansive capitalism. The problem of finance that will emerge is whether the financial and fiscal control and support institutions of national
governments can contain the consequences of global financial fragility and contain an international debt deflation.

Once again the past is not a good guide to the future.