RECONSTITUTING THE FINANCIAL STRUCTURE:
THE UNITED STATES

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I. Introduction

My project at the Jerome Levy Economics Institute has the working title "Reconstituting the United States' Financial Structure". The relation of my interests at the Institute and the topic of this Conference is self evident: both are concerned with defining the good financial society and devising the institutional framework which can achieve this state.

As is well known legislation to reform the financial structure is now on the policy agenda in the United States. The collapse of the Regime in the Soviet Union means that a financial structure has to be created for 1/6th of the earth's surface virtually "de novo", without the liberty to calmly consider alternatives which the economies with in place capitalist institutions have. The same problem of choosing, or falling into, a financial structure is present in all of the countries which had a Soviet type system imposed upon them as a result of the outcome of World War II. The factors which place financial reform on the policy agenda of the United States are present to a greater or lesser extent in all of the capitalist countries.

We are meeting at a time when the world's financial structure is entering upon an era of rapid, if not revolutionary change.
My procedure in this paper is to deal with the topic "Reconstituting the Financial Structure" in four parts. The first is quite concrete. It uses the Administration report "Modernizing The Financial System, Recommendations for Safer, More Competitive Banks" as the basis for critiquing the current level of discourse in the United States. In the second part I point out significant aspects of the financial structure which are largely ignored in the Administration document, aspects that need to be taken into account in any reform program. In the third part I introduce some aspects of economic theory that affect what one takes to be the role of the financial system in a capitalist economy and therefore one's views as to what needs to be done to achieve a well functioning financial structure. In the fourth part I argue that it is impossible to separate the financial from the fiscal, for it is the fiscal posture of the several states that determines the mix of instruments available in the financial system and the market valuation of the various instruments.

I do not in this paper set out my version of the institutional structure for a good financial society for the rapidly approaching 21st century.

II. The Treasury Document
The administration (Treasury Department) document "Modernizing The Financial System, Recommendations for Safer, More Competitive Banks" is a starting point for the analysis of the policy issues that are on the official agenda of reforms. From the title of the report the aim of reform is to modernize the financial system, although the report centers around banks, virtually ignores important emerging features of the financial system, and is vague on the functions the financial system performs in capitalist economies.

My aim is to raise the question of whether reform packages being discussed in this Treasury document and in other policy forums, such as The United States Congress and this Conference, are deep enough. By raising the question of whether what is now on the agenda is sufficiently deep, I am implicitly suggesting that what is now on the agenda may be superficial. The object therefor of this paper, as well as of my other ongoing work, is to broaden the agenda: to bring about an awareness that more is at stake in reforming the financial institutions than is evident at first glance. My view is that what is truly at issue in the various crises in finance that have surfaced around the world is how effectively the capital development of the global economy will be carried out in the years to come. My perspective is that financial crises and deep depressions are closely related and if finance misfunctions then situations
analogous to those that made socialism attractive in the past will become the order of the day.

There is an American folk saying "If it ain't broke, don't fix it". In the United States the deposit insurance institutions are broke and clearly require fixing. The collapse of a multitude of savings and loan Institutions (usually called the thrifts) depleted the fund of the Federal Savings and Loan Insurance Corporation so that it could not fulfill its obligation to sustain the value of the deposits. Last year and again this year the Congress, which controls the purse strings, has put up money to make good on prior explicit pledges, dating from the 1930's and periodically reenforced by Congressional declarations, that the deposit insurance funds, and therefore the par value of Savings and Loan deposits, are backed by the full faith and credit of the United States.

Losses and therefore bankruptcies by commercial banks, first in Texas and the Southwest and now in New England, New York and the South, which are insured by a separate, and presumably stronger, deposit insurance fund (The Federal Deposit Insurance Corporation) than that which insured the savings and loans, are threatening to exhaust their insurance fund. Although a good number of smaller banks have failed, the crisis of the commercial bank insurance fund is largely due to the "too big to fail" doctrine, whose contemporary form was established in the 1984 collapse of
the Continental Illinois Bank of Chicago, but which in truth has always been implicit in central banking doctrine.

The dismal history of the Federal Savings and Loan Insurance Corporation, which was forced to cope with the insolvent and illiquid thrifts without having sufficient funds available so that it could such institutions, seize their assets and pay off their depositors, makes the refinancing of the commercial bank insurance fund by the Congress before it runs out of funds a policy imperative.1

It therefor is agreed that something, i.e. deposit insurance, in the existing institutional structure is broke and requires fixing. As a minimum the deposit insurance mechanism requires legislative adjustment and refinancing.

Because refinancing the funds is what clearly needs to be done and as Congress needs to use Treasury tax revenue or debt for the refinancing, the issue of reform of the banking system and deposit insurance is being phrased in terms of creating a structure of deposit insurance that will decrease the potential liability of the Treasury. This may well be making a peripheral issue, the cost to the Treasury of a mass of failures of financial institutions, the main objective of reform rather than the creation of a financial

1. Martin Mayer, The Greatest Bank Robbery Ever is a journalists account of the problems that the unfunded FSLIC faced
and economic structure in which the capital development of the economy is done well.2

A deeper question is whether the deposit insurance schemes are all that is not functioning well and if so what can be done about these not well functioning parts of the financial structure. As the Treasury document goes beyond merely refinancing deposit insurance, it implicitly reflects a view that the financial system is not supporting all that it might in the American economy. But the Treasury document does not support this implicit view with any strong foundation of what the financial system may do to support the proper functioning of the economy.

American administrations are not given to modesty. When confronted with the imperative to refinance the deposit insurance funds the Administration, in the Department of the Treasury, prepared a report Modernizing the Financial System: Recommendations for Safer, More Competitive Banks3 which it labeled as proposing the greatest reform of the financial system since the New Deal days of the 1930's: The package is to bring the financial system into the 21st century. It is my contention that there is less to this reform program than meets the eye.

2. The phrase capital development of the economy echoes Keynes.
The Treasury proposal has 5 main thrusts:
1. Refinance the funds that are running out of money by a combination of
   A. Treasury money
   B. Borrowing by the funds to finance their inventory of assets acquired as the insurance guarantee is fulfilled.

and simultaneously restructure the deposit insurance organizations

2. Change the balance of power between the Treasury, the Deposit Insurance Funds and the Federal Reserve:
   A. Increase the power of the Treasury
   B. Increase the power of the Deposit Insurance Funds
   C. Decrease the power of the Federal Reserve.

3. Allow nationwide branch banking

4. Weaken the Glass Steagall act

5. Allow corporations to own banks.

The first point, refinance the deposit insurance function and changing the structure of deposit insurance institutions, addresses what is clearly broke, the inability of the insurance funds to meet the commitment to validate deposits. Allowing the deposit insurance funds to issue debt to partially finance the inventory of assets they acquire in the course of validating deposits in failed banks is a gimmick, designed to contain the size of the reported government deficit in near term. Such off-book financing by
agencies does not show up in the government budget and therefor does not show up in the reported government deficit. Economically this is a rather meaningless step, which aims to deflect some political embarrassment by hiding the cost of the misfinancing by the savings and loan Associations and the commercial banks in the 1980's.

The second item suggests that the power and political independence of the Federal Reserve be diminished by diminishing the Federal Reserves' supervisory power and eliminating its examination function. Furthermore the report proposes that the Secretary of the Treasury and the Comptroller of the Currency be made members of the Board of Governors. These suggestions make the Treasury report seem like a power grab by the Treasury.

The position of the Federal Reserve System in the United States' constitutional system has always been precarious and its structure has always been mistrusted. This is because of the large power it possesses and its mixture of privateagements and capital with public power.

The Federal Reserve's powers to examine are inherent in its ability to lend to banks through the discount window. The Federal Reserve was set up in an age when government debt was scarce. As a lender to banks, either as the normal provider of the reserve base to commercial banks (The normal operation prior to the great depression) or as the potential
lender of last resort, central banks have a right to knowledge about the balance sheet, income and competence of their clients, banks and bank managements. This is no more than any bank believes it has a right to know about its clients.

By removing the Federal Reserve from the examination and supervisory function the Treasury report would weaken the Federal Reserve's ability to perform its monetary policy function. This is so because monetary policy operations are constrained by the Federal Reserve's views of the effect such operations would have upon bank activities and market stability. Furthermore in a world where financial innovation is not rare, a Central bank needs to have business, supervisory and examination relations with banks and markets if it is to be knowledgeable about what is happening. Without such knowledge it cannot judge the likely effects of its actions.

This Treasury attack on the Federal Reserve's powers is coming at a time when a populist attack on the status of the Presidents of the Federal Reserve Banks is taking place. The Federal Reserve system consists of twelve regional banks, these banks are organized as if they were private banks. Their Presidents, who are not subject to Senatorial conformation and who are paid as if they were private bankers, sit and vote on the Open Market Committee, which sets monetary policy. The argument being advanced is that
either the bank Presidents should be removed from the Open Market Committee or they be should subject to Senate approval.

In recent years the time a governor spends on the Board has decreased: appointees have gone on to greener pastures after a few short years on the Board. Many of the bank presidents have spent their entire career in the Federal Reserve System. There is more institutional memory and less commitment to the Administration of the day among the Bank Presidents than among the Board members. In the present day environment an attack on the bank presidents is an attack on the independence of the Federal Reserve.

Numbers 3,4, and 5 may well be wrong headed. The suggestion that the state laws limiting banking be weakened if not overridden by allowing nation wide banking can be characterized as fixing something which is not broke. Banks now can solicit loans and deposits throughout the United States and the world if they wish: they even can open "loan development offices throughout the country. The great issuers of credit cards, be it a non-bank like American Express or a bank like Citybank, do so nationally. The only thing that is still limited by State laws is the ability to open deposit taking offices wherever one wishes. It is generally agreed that such "locations", much prized in the past, are of decreasing importance today.
The move to nationwide branch banking ignores the strengths of the decentralized United States banking system and may well allow the weakest part of the system, the giant banks, to expand, not because they are efficient but because they can use the clout of their large asset base and cash flows to make life uncomfortable for local banks: predatory pricing and corners cannot be ruled out in the American context.

In the United States banks in the 1 to 5 billion dollar class have consistently been more profitable than bigger banks. They are also more relation oriented than the big banks. The arithmetic of banking indicates that these smaller but not tiny banks may be development oriented in a way that is difficult for the giant banks. A 1 billion dollar bank may well have 80 million dollars in capital. It therefore would have an 8 to 12 million dollar maximum line of credit: for a 3 billion dollar bank the line of credit limits would be 24 to 36 millions. In the United States context this means the normal client for such banks is a community or smaller business: such banks are small business development corporations.

The Treasury report stands mute on the conditions of entry into banking. When giant banks merger and absorb smaller banks experience shows that new banks appear. Elements in the business community in the area where banks disappear in mergers feel that their needs are not so well
met by the larger succeeding bank. They often proceed to form new banks. If there are minimal legal or administrative barriers to entry, we can expect the profitability of banks which branch nationally to be eroded by the entry of new banks.

The 4th in my list of what the Treasury proposes, eliminate or greatly weaken Glass-Steagall, is a proposal to fix something that is not really broken. In the aftermath of the great depression it was revealed that commercial banks misused the powers they had to underwrite and distribute securities. As a result the reform legislation of the 1930's provided that deposit issuing and underwriting and distributing of securities be carried out by different institutions. Over the past 55 years separate institutions for financing activity through deposit banking and the issuing of securities developed.

The division of labor between commercial banks and investment banks in supplying securities for the public is changing as the public's holdings of financial instruments has moved from the direct ownership of securities to the intermediated ownership of securities by way of mutual and pension funds. The success of an underwriting depends more upon whether the funds will buy into an issue than whether a cadre of investment house sales people can place an issue with ultimate investors. Large and intermediate issues are
served well by the present structure, small and regional issues may not be.

Therefore it may be desirable to relax, even as we do not eliminate, the constraints of Glass-Steagall by allowing bank holding companies, with less than say three billions of banking footings, to engage in underwriting even as the constraints are kept in place for larger banks. As it stands banks are permitted to offer retail customer oriented brokerage services in their lobby: Glass Steagall is already "passe" in the secondary market.

The last item in my list of Treasury proposals would allow ordinary corporations to own organizations chartered as banks. The argument advanced is that this will bring much needed capital into banking. Given the enormous amount of equity that would be required to make a giant bank whole, given their wealth of non-performing assets, means that a normally profitable corporation would not be wise to invest in banking unless there was some reason not clearly related to the profit potential in banking for doing so: i.e. the non bank corporation would use its bank association to gain access to funds that it would not be able to acquire in the market.

The proposal that corporations be allowed to own banks also reflects the fact that ordinary corporations do own finance affiliates which effectively compete with banks. These finance affiliates originally were organized to
facilitate the operations of their industrial parent, and they still finance both floor plans, final purchases and suppliers of their parent's products. These finance companies acquire funds by their own equity, by issuing bonds and by selling commercial paper: they exploit the vast volume of institutional funds that have emerged. As finance companies have proved to be very successful in raising funds they have expanded their portfolios beyond the financing of activities related to their parent's business.

E. Gerald Corrigan, President of the Federal Reserve Bank of New York, has been outspoken in opposing the opening of the ownership of banks to industrial companies. He divides the "world" into three spheres: industry and commerce, non-bank finance and banking. He would allow banks and non-banks to be part of the same organization, and he would allow ordinary businesses to be in the same corporate enterprise as finance companies. He is not enthusiastic about allowing banks and ordinary businesses to be in the same corporate enterprise, but is willing to tolerate such an alliance if the combined enterprise did not incorporate non-bank financial organizations.

He is adamant in rejecting allowing all three types of enterprise under one "umbrella". The grounds Corrigan gives are mainly that the bank liabilities being underwritten by government may be used to carry debts of the business "owner" which do not meet bank standards, especially as a
crisis develops. Corrigan is mainly concerned with the perversion of a particular bank by an owning corporation.

There is a deeper issue involved in the last three items of my list of Treasury proposals that the Treasury does not face. The Treasury proposals would shift the weight of the United State's financial structure from being market based to being institution based.

During the 1980's Japan and Germany surged ahead with export led growth based upon high technology and high quality outputs. The financial structure of both Germany and Japan is weighted towards the institution based end of the financial structure spectrum. They both have large combinations of financial firms and ordinary corporations that are linked by cross ownership patterns or by some form of universal bank. Such patterns, or universal banks in general, grow and develop where capital markets are weak. The countries that are emerging from Soviet style socialism will have to use some combination of universal banks and public holding companies as they transit towards capitalism: they do not have the private wealth holdings that are needed for a capital market financial system.

The United States and Britain have not done well in the 1980's. Their financial structure is characterized by commercial (limited domain) banks and strong capital markets. It is a gross over simplification to argue that the success of Germany and Japan and the retrograde behavior
of the United States and Great Britain are due to the institution dominance in the former and the market orientation in the latter.

The universal bank pattern is inconsistent with the huge growth in both pension funds and mutual funds (unit trusts) in the United States. These organizations, which now are of major importance in the United States' financial structure, are fundamentally inconsistent with the universal bank model, excepting that the universal banks can capture these funds. If this occurs the question of the fiduciary integrity of the funds surfaces. It is necessary to think seriously about the implications of the modern fund dominated financial structure in drawing up a program for reform of the financial structure.

The Treasury's proposal may be a loser even before it reaches the starting gate: as Congress moves in its normal deliberate pace to take up the reform of the financial system the deposit insurance funds and the Resolution Trust, which acquires and holds the assets rejected by the successor organizations in arranged mergers or in the process of paying off depositors, are running out of money. The Congress may have to pass a quick fix funding of these organizations before it reaches any agreement on how to alter the structure of financial institutions. Once the funding is taken care of, if only for a year, the need to fix that which it is agreed is broke will be accomplished
for this session. Congress will go on to other business and reform will be off the immediate agenda.

This need to move quickly on refinancing deposit insurance even as no consensus has been reached on the Administration proposal means that we in the United States can consider the deeper issues involved in financial reform in relative leisure before moving the legislation forward.

Apparently in the two months I have been away from the States there has been some movement in the Treasury reform that accept the Treasury reform that accepts the Treasury reform that accept the Treasury reform. The position as the view has emerged that the position the commercial bank crisis has been contained. Refinancing is required that the markets will not be an invasion, as they were in '74.
III. Market determined changes in the financial structure of the United States

Any reconstitution of the United States' financial structure will need to come to grips with some fundamental, largely market determined, changes that have occurred in financial institutions and usages as well as in the economy's financial structure. In particular the pattern of intermediation has undergone accelerated change in the past decade, the payment mechanism is undergoing rapid evolution and the role of the dollar in the international financial economy has been attenuated. For reform to be successful it will need to take these changes into account.

The changes I will emphasize have been the result of largely market driven evolutionary changes in institutions and relations among units. The political cry of deregulation, so prominent in the 1980's, has had little to do with the main changes that any reconstitution of the financial structure will have to deal with. One result of the changes is that the role of organizations chartered as banks in providing financial services in the United States has been much reduced.

A capitalist economy is a financial structure. It can be conceptualized as a set of intertwined balance sheets and income statement. Balance sheet liabilities are commitments
to make payments: they are prior commitments of either a unit's "share" of gross national income, of a unit's receipts from the financial assets it owns or of a unit's ability to raise cash in financial markets. In this structure of payment commitments it is evident that the validation of financial instruments ultimately rests on incomes received from the production process. National income and its distribution is the "rock" upon which the capitalist financial structure rests.

In the modern economy balance sheets are layered, for there are financial institutions which have financial liabilities that have the liabilities of financial institution as their assets. The normal functioning of such a structure of payment commitments requires a close articulation between receipts and payments and, as the layering and interconnections among institutions becomes increasingly complex, the required articulation becomes ever closer. Money market institutions make it possible for financial institutions to generate a cash flow in its favor by either borrowing or selling assets. Broad deep and resilient financial markets are necessary for the normal functioning of capitalist financial markets.

Keynes once described a capitalist economy as characterized by borrowing and lending based upon margins of safety. As the articulation between money receipts and money payments becomes closer because of the growth of
financial liabilities and the increasing complexity of the financial system, the margins of safety decrease. Therefore the more complex the financial structure of an economy the greater the need for assurance that the cash flows from income receipts and from liability validation will be sustained. This assurance that cash flows will be sustaining is provided by the combination of a fiscally prudent big government, which by its deficits can sustain profits, wages and government tax receipts, and central bank lender of last resort operations, which in the modern world not only support liquidity but also the equity base of institutions whose failure, it is felt, may trigger systemic instability.¹

On the one hand there are the proximate owners of the economy's capital assets, the corporations, and on the other there are the ultimate owners of these capital assets, the households. The proximate and the ultimate owners of wealth are linked by the financial structure. Each financial item in a balance sheet formalizes a stream of payment

¹ Walker Todd takes the strong view that it is illegitimate for the Federal Reserve to provide funds for otherwise insolvent banks, which is what the Federal Reserve has done in both the Continental Illinois bank and the Bank of New England episodes. Walker Todd would prefer the "honest solution" of an Reconstruction Finance Corporation to the back door solution of the Federal Reserve financing. So would I, but the Federal Reserve does not have the luxury of doing nothing because the preferred solution is not available. The problem that Walker Todd is concerned with is a reflection of the need to deal with the inherently unstable capitalist economy when the institutions and the economic theory both are based upon the unwarranted assumption that a capitalist economy is stable.
commitments from a payor to a payee: these payment commitments, which are denominated in some "money", can be dated, demand or contingent.

These commitments arose in a prior exchange of the "money", or its equivalent, for the commitment to pay money in the future. The financial structure of a capitalist economy arises as a result of exchanges of "money" now for "money" in the future. Much of economic activity is undertaken to acquire the money called for in the future part of the initial transaction.

The financial linkages connecting the capital assets of the economy and the wealth of households have undergone marked changes over the history of capitalism.

In a primitive capitalist economy households directly own the rather meager stock of capital assets. To a large extent finance was separated from production in early capitalism. Financial institutions were mainly involved in commerce. Initially bankers were mainly specialists in making payments at a distance. Their function in the financing of commerce grew out of the payments process. This earliest stage of capitalism, which may well be called commercial capitalism, was perhaps the dominant financial form until about a century ago.

In the United States the development of canals, railways and utilities, as well as the major manufactures of
the nineteenth century, involved the importation of capital goods and the external finance of the projects. In this development great financial houses, that specialized in the export of debts to Europe and which became agents of their European creditors, became core players in the development of the economy. Great agglomerations of industry and finance developed, each dominated by one financial house or another. The economy's industrial structure in this time was characterized by these financial groupings. The Morgan, Kuhn-Loeb, Rockefeller etc groups of banks, other financial institutions and industries were the subject of analysis and argument. These great combinations were at least as dominant in the American Economy of the late nineteenth early twentieth century as any of the present financial industrial groups in Germany or Japan. This stage may well be called finance capitalism.

The dominance of finance capitalism was broken by the great depression and the reform of capitalism that followed. Financial reforms of the 1930's in the United states, which were designed to break the concentration of power and to prevent another great depression, weakened the hold of these groups. The great era, during the depression and the war, of constructive government deficits meant that major industrial organizations became well nigh free of debt. Banks, other financial institutions and households became holders of government debts. With recovery the wartime household savings led to a large number of small holdings of government bonds.
stocks. This meant that management of many of the great firms was virtually free of stockholder control. This era can be characterized as managerial capitalism.

In terms of the breadth of ownership of wealth the United States may be called a people's capitalism. However over the post war era, aside from the ownership of houses, this people's capitalism has increasingly become a capitalism of owners of interests in funds. Households own interests in funds, be they pension funds, mutual funds or annuity liabilities of insurance companies. These funds make up a great body of managed money. The managers of this money have a great impact upon what is financed and the way it is financed. This stage of capitalism which is currently in the ascendancy can be called money manager capitalism.

These mutual fund and pension funds are often huge. The great Teachers Insurance and Annuity Fund with its associated College Equity Retirement Fund manages over 135 billions of dollars. The main states such as California now have 60 or so billions in retirement funds. These retirement funds are often strange and quite unnatural beasts such as funded defined benefit pension plans. This new world of funds has given rise to a new layer of financial intermediation.

The initial belief was that pension funds would be ultra conservative in their investments, mainly seeking out government and top rated private bonds. So they typically
were until the inflation of the 70's and 80's. In this period they became seekers after short term total returns (income plus net asset value change).

These funds, and their advisors, succeeded in redefining the responsibilities of a fiduciary. Instead of investing only in investment grade securities, which was the prior norm for fiduciaries, it became accepted, as the 1970's and 80's wore on, that a pension fund or insurance company management satisfied its fiduciary responsibility if the expected return and risk from the portfolio was deemed prudent.

Modern "finance theory" rationalized the entry of pension and other funds into the purchase of less than investment grade securities, for it held that a portfolio of well diversified non-investment grade instruments could do better than a portfolio of investment grade instruments if it were appropriately diversified. Much of what has taken place in the financial markets of the United States (and perhaps the world) in the past decades can be explained by the omnivorous demand of these funds for assets, their impetuous pursuit of short term performance and the ingenuity of market operators in developing instruments for such managed portfolios.

Rather than the financial conservatism that pension funds, mutual funds and insurance companies were supposed to bring, money manager capitalism has ushered in a new era of...
pervasive casino capitalism. A large percentage of the equity money in the 1980's spate of leveraged buy outs came from pension funds. Without the monies from State pension funds, both as suppliers of the equity base for leveraged buy outs and as the takers of the high yield bonds (junk bonds), it is doubtful if the leveraged buy-out movement could have reached the levels it did.

Systemic over indebtedness may well be a legacy of the emergence of Pension Funds in the United States. Over indebtedness was the initial condition hypothesized by Fisher for the debt deflation process that in his view led into the great depression of the 1930's.

It is important to note that the emergence of money manager capitalism in the past two decades, with its concomitant decrease in the power of banks and other financial institution, has little to do with the movement to deregulate banks and other financial institutions. During the Volcker led war against inflation the Federal Reserve failed in its duty to protect the equity base of banks and the thrifts by permitting an interest rate pattern to emerge which destroyed asset values and had a negative impact upon these institutions cash flows. This set in motion a process that led to the exploitation of the zero equity - insured deposit combination by the ostensible owners of the institutions who had nothing to lose by "going for broke" in
their asset structure. Once the equity base was destroyed, slack supervision, which did not protect the deposit insurance funds from undue exposure, enabled banks and savings and loan associations to enter into the financing of leveraged buy outs, either as investors in junk bonds or as the providers of bridge financing.

Electronic funds transfers and especially credit cards may well be breaking the hold of commercial banks on the payment mechanism. The main economic innovation of the credit card is the vender's discount. The discovery and exploitation of the fact that merchants who did not have the scale to set up their own charge system would willingly accept a discount from face value of a transaction for the guarantee and convenience to customers that a credit card offered is the key to the success of the credit card. This vender's discount, together with the economies of the electronic based processing systems that have emerged, have created a profit yielding payments mechanism.

The check system never was a free standing profit center for banks. The checking system required a subsidy from profitable customer relation banking to cover its costs. The traditional analysis suggests that the check system cost a bank some 3.5% to 4.0% of the deposits subject to check. It was profitable to offer this loss leader when relationship banking was the norm. It cannot be expected to
be viable in deal making banking when businesses expect to be fully invested at all times.

The check system depends upon income from assets and other fees to pay at least part of the costs. The emergence of money market funds meant that each bank believed it needed to meet the market to retain deposits. Banks cannot compete with money market funds unless they first transform the check system into an independent profit center. This will only take place when banks succeed in substituting debit cards for checks, keep a venders discount on debit card payments and fully price checks so that they become a profit center.

The emergence of the credit card as a full alternative to the check payments system is mainly a result of the technical changes in the ability to compute and handle masses of data. Deregulation had little if anything to do with the changes that make the electronic vehicle the payment system of the future.

A third major change in the financial-economic structure over the 1980's has been the change in the financial position of the United States from being the worlds major creditor country to becoming the major debtor. This means that at some point of time in the near future the ability of the United States to fund further government and international payment deficits will need to be earned in the market. A crisis in which the United States will be forced
to face up to its changed position is likely unless fiscal wisdom prevails.

Other details of the financial system have also changed, but the emergence of new layers of financial intermediation main players, the developments in the payments mechanism and the change in the international clout of the United States are three which require attention.
IV. Aspects of Economic Theory

Peter Albin's phrasing of the legacy of the rational expectations "revolution" is: "The agents in the model have a model of the model and this model is an input to their behavior." In an era where some aspects of the financial structure are clearly "broke", legislation to change and adapt financial institutions and usages is on the policy "agenda". The agents in the policy model include people in the administration, the Congress and their respective staffs. The model of the model that these policy agents believe to be valid, either with full knowledge or intuitively, is a determining factor in the reforms they favor.

The model of the model is of course a theory. To many there is but one economic theory. This theory has its roots in what is -perhaps the most famous passage in all of economics. This passage, by Adam Smith reads:

"As every individual, therefore endeavors as much as he can both to employ his capital in the support of domestic industry, as so to direct that industry that its produce may be of the greatest value; every individual necessarily labours to render the annual revenue 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 is intending only his own gain, and he is in this, as in many other cases, led as if by an invisible hand to promote an end which was no part of his intention." 1

1. Adam Smith The Wealth of Nations
The history of modern economics is largely the history of the endeavor to demonstrate the truth of this Smithian proposition. The work of mathematical economists some 40 years ago produced an acceptable proof, albeit under restrictions designed to make the problem mathematically tractable, of the modern phrasing of the Smithian proposition: "A competitive equilibrium is a Pareto optimum".

The importance of the proposition that "Markets work to promote the public interest." as a guide to public policy has been increasing in the years since the mathematical economists demonstrated the validity, within their narrow and precisely stated premises, of this Smithian proposition. The rational expectations "revolution" in macro-economics and the thrust towards deregulation, which encompasses deregulating banking and finance, owe their validity to the Smithian proposition. This is true even though the "proof" that the outcome markets generate is in the public interest depends in critical way upon abstracting from both money and capital assets as attributes of the economy. Furthermore while the mathematical economists have demonstrated the existence of such a Smithian equilibrium, they have also shown that under quite general conditions this equilibrium is not unique and it is not stable. Without uniqueness and stability the arguments for policy measures that depend upon comparative static analysis are not valid.

2. Ingrau and Israel
The less abstract Smithian argument is that markets are mechanisms that seek and sustain an equilibrium and the result of this process is "In the public interest." This view is clearly a matter of faith rather than of demonstration. Nevertheless there is a free market thrust to policy which is evident in many policy proposals.

But what if the Smithian proposition is not true? What if unconstrained markets, in an economy with money and capital assets, intermittently lead to unacceptable results such as wild inflations, serious depressions, chronic mass unemployment and pervasive crushing poverty in the midst of potential plenty? What if unconstrained market economies cannot sustain a close approximation to full employment for an extended period? What if the situation that ruled in the United States and the other capitalist economies between 1929 and 1933 is a normal functioning result of market processes? If all, or even some, of the above are true then the question arises whether a system of constraints and interventions may be able to improve the outcomes.

Keynes after appropriating "...the term speculation for the activity of forecasting the psychology of the market, and the term enterprise for the activity of forecasting the prospective yield of assets over their whole life..." goes on to note:

"...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 a bubble 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."³

Keynes stakes out the case for intervention by putting financial markets at the center of the economic stage. His conception or vision quite clearly was of a modern (vintage 1930’s) capitalist economy. The organization of investment markets has quite evidently improved in the decades since Keynes wrote: the ability to compute, keep track and communicate is now greater by many orders of magnitude than when he wrote.

The "capital development of a country can be ill-done" in two ways. One is the neoclassical way: the wrong capital assets can be financed. In the United States this is evident in the overbuilding of commercial real estate and various types of housing developments. In the late 1980's financial markets and the organization of the construction industry gave agents in these markets signals to finance and to build in spite of increases in vacancy rates.

The second we can call the Keynesian or aggregate demand in which the capital development can be ill-done. Market signals can lead to the level of investment being too great to maintain price stability or too small to maintain adequate aggregate demand or to generate sufficient profits to sustain the liability structure. In an era where financial markets are dominated by speculation, liability

structures and therefore commitments to make payments may well be built up which cannot be validated by the cash flows generated by investment activity.

In a free market financial structure overcommitted debtors will be forced to attempt to meet their payment commitments by the selling out of their positions in some set of assets. This can force the price of these assets down so far that the equity of the overcommitted financial firms vanishes. This process on a mark to market basis may well lead to compromising the net worth of a large number of basically prudent financial organizations. It is a function of Central banks is to contain and control the impact of overextended financial firms on the mark to market valuation of "innocent bystanders".

An essential Keynesian proposition is that under circumstances which arise from time to time if each individual in financial, asset evaluation and investment markets acts in a Smithian way, seeking only one's own good as determined by the individuals understanding of market processes, the end that is promoted is not "the public interest". Just as Smith asserted the invisible hand leads every individual to promote an end which was no part of his intention. But the end that is promoted may well be the chaos of the winter of 1933 or a collapse of asset values rather than some situation which cannot readily be improved.

The round of financial market, product market and labor market reactions sketched by Irving Fisher in his various
statements of the debt deflation theory of great depressions are Smithian, the end result is a disaster.

From the Smithian point of view the endogenous generation of debt deflations is a non-starter. Inasmuch as debt deflations and threats of debt deflations (often called systemic instability in today's discourse) do occur, the Smithian program needs to impute these events to deviations, however minute, from free markets. Thus deregulation is a preferred policy option.

From the Keynesian point of view the susceptibility of the financial and economic interactions to a debt deflation reflects a transformation of financial structures from being robust to being fragile as a normal reaction of agents in the economy to the successful operation of the economy. A period of success leads to conditions conducive to failure. This process and its effects can be contained by apt interventions, and apt interventions are possible if policy makers as legislators and administrators understand the flaws in market mechanisms that lead to the undesired results. In particular interventions to prevent or contain the need for units to make positions by selling out positions and devises that sustain aggregate cash flows are needed for capitalist economies to function well.

There therefore are two diametrically opposite views of how the economy functions and therefore of the principles that should guide reform of the financial structure in the light of the broken deposit insurance organizations. In the
presentation of policy proposals the model of the model that underlies the proposal is often obscure. Analysis and debate is needed to make the model clear: in policy making as in financial markets transparency is a good.
V. Validating Financial Instruments

The value of all real capital assets as well as financial instruments rests upon expectations that cash will be forthcoming either because income is imputed to the asset in the process of production and trade or because the financial contract is fulfilled. But fulfilling financial contracts, even by borrowing, just pushes the expectations back one step: lenders expect cash in the future. All financial instruments rest upon income produced and its distribution. Ultimately household debts rest upon wage income, business debts upon gross profits and government debts upon tax revenues.

For each unit the relation between cash flows from either income or the fulfillment of contracts falls into one of three categories: hedge, speculative and Ponzi. A hedge unit receives sufficient cash from income or from the assets it owns to meet all its contractual payment commitments on its liabilities, whether the payments are on income account or a contractual repayment of principle. A speculative financial unit can meet all or more than all of the contractual payments due on account of interest, but it needs to roll over part or all of the principle. A Ponzi financing unit does not receive sufficient cash to meet its interest payments, it has to capitalize interest due.

If we think of a private economic unit which is engaged in Ponzi finance debts are increased even as there is no
increase in the value of assets: the book keeping steps are to add to debts outstanding and to subtract from the equity account. Quite clearly Ponzi finance decreases the margin of safety in the market value of assets minus liabilities that the borrower offers the owners of its debts. This will tend to lower the "credit rating" of the borrower, increasing the interest rate it needs to pay to attract lenders. For an firm or a household there is a limit to how far Ponzi finance can be carried, for as the process continues the equity account will go negative, at which time only a fool would lend.

What applies to a household and firm also applies to government: government liabilities are valuable only as the government can meet its payment commitments. If the tax revenues cannot cover interest after all other current payments are made then the government will be a Ponzi finance unit. It will pay its interest on its debts by increasing its debts. There is no government net worth account to debit as it increases its debt to pay interest on outstanding debt, but the increase in the debt means that it will need to increase its tax take by even more if it is to meet its obligations. The alternative is to use the central bank to monetize government debt, which leads to first inflation and then accelerating inflation.

Note that as the government engages in Ponzi finance the quality of the government debt decreases, which means that the market interest rates on government debts increase.
Inasmuch as the government debt is still default free in nominal terms, the interest rate on all debts, even of private units that cover their interest and principle payments from income, rise. Government Ponzi finance leads to constraining financing terms for private units. Thus a key element in financial reform is the establishment of a fiscal regime in which government debt is validated by government tax receipts.

For the United States the proposition that government debts need to be validated by taxes is a new thing because the post war international financial structure gave the United States unprecedented international fiscal autonomy. However such fiscal autonomy has been dissipated by the regime of domestic and international deficits. Any reform of the United States' financial structure will require a reconstruction of the revenue system so that the era of Ponzi financing by government comes to an end.

VI. Conclusion.

Underlying and program of reform lies a model of the model. Unfortunately as the need to reform the financial system is evident, the underlying model maintained by much of the administration, central bankers and even the Congress seems to be Smithian. One bit of evidence which indicates the Smithian bias in the policy establishment is that the discourse is often framed in terms of achieving a financial
structure that minimizes the potential "Cost to the tax payer" of sustaining the payments mechanism, rather than in terms of achieving a financial structure that will facilitate doing the capital development well so that the United States can achieve and sustain a close approximation to an full employment economy that is also internationally competitive.