Minsky Moments and Minsky's Proposals for Regulation of an Unstable Financial System

Jan Kregel

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The United States is currently faced with providing a regulatory response to what has been described by Alan Greenspan as by far the greatest financial crisis, globally, ever—including the 1930s Great Depression. Many analysts and forecasters identified the core of the crisis as the existence of Ponzi financial schemes supporting the increase in prices in housing markets and the associated increase in risky mortgage lending. As the crisis unfolded in 2007 the role of unregulated structured financing vehicles, called shadow banks, in providing the massive expansion of liquidity that funded the housing market became apparent. The ensuing collapse of liquidity and implosion of the financial system was baptized the "Minsky Moment." While Minsky spent much of his academic career warning of the inherent instability of financial markets, his analytical approach was based on the development of regulatory reforms that would be required to manage instability. It is thus paradoxical that his regulatory proposals have had so little impact in informing the debate on the necessary reform of the financial system. This short note is meant to highlight his basic framework and a number of basic, prescient proposals for reform of the financial system that are as relevant today as they were 50 years ago.[1]

Economic Theory That Precludes Crisis Cannot Be a Basis for Reform Proposals[2]

"The risk characteristics of banking and the tasks of bank regulators are different in a world in which instability is a present danger than in a world in which markets are stable. If bank regulators are to do a better job than in the past, it needs to be based upon an understanding of how our financial structure becomes susceptible to financial crisis." From the beginning of this work on financial crisis Minsky has argued that existing economic theory, which precludes the existence of financial crisis, cannot be used as a basis for financial regulation: "Standard economic theory leads to the proposition that markets are equilibrating. It is evident that disequilibrating forces exist in the essential financial practices of a capitalist economy. These disequilibrating forces center in the financial positions in capital assets and investment in progress. In time, financial practices lead to an environment in which financial crises can occur." Further, the fact that "financial instability has occurred with a wide range of institutional arrangements . . . lends preemptory credence to the hypothesis that financial instability is a

deep seated characteristic of a capitalist economy. Only a theory which explains financial instability can be valid for our economy and a guide to policy."

For Minsky, "the fundamental question in economic theory is whether the development of such crisis-prone situations reflects a fundamental characteristic of the economy we are dealing with, whether they are the result of correctable institutional flaws, or whether they are due to policy errors. A quite common interpretation, implicit in both the monetarist and the conventional Keynesian views, is that events like our current crisis are due to errors of economic policy management rather than inherent characteristics of the economy. A view that was quite common during the aftermath of the Great Depression was that financial crisis could be avoided if rather substantial reforms (100 percent money, for example) were made in the banking system." This appears to be the same approach that is currently being applied to reform of the U.S. financial system, which was disturbed by an unpredictable 100-year event.

In contrast, Minsky's view "is that while improvements in policy management and institutional reforms may alleviate and attenuate some of the forces that make for financial instability, the fundamental endogenous speculative elements in the demand for, and the financing of, positions in capital assets under capitalist financial arrangements make for the development, over time, of crisis-prone financial interrelations." Minsky's approach thus considers the persistence and ubiquity of financial instability as the result of an endogenous process that is a structural characteristic of financing the growth process in a capitalist economy.

In a Capitalist Economy Debts Are Used to Finance Control over Capital Assets

The basis for this characteristic feature is the observation that the role of the financial system is to provide the financing of the means of productive investment and the accumulation of capital in a private enterprise economic system. In such a system, ownership and control over capital is financed by incurring debt. "Borrowing and lending based upon margins of safety is the essential financial usage of our economy. At any moment, a maze of payment commitments exists due to outstanding financial contracts. These contracts are traded and new contracts are created. . . . The essential private financial contract arises when debt issued to finance a position in capital-assets, either a current or a long lived capital asset. These debts set up payment commitments. The behavior of the economy is affected by the relation between cash payment commitments on existing debts and anticipated receipts. The ability to meet commitments on financial contracts ultimately rests upon the profitability of enterprise: Prices must be such that almost always almost all financial contracts are validated."

This required detailed analysis of the assets and liabilities of the balance sheets of both financial institutions and the firms they finance, as well as an accurate tracking of the financial flow commitments attached to assets and liabilities. It is from the intertemporal mapping of these

interrelated commitments to pay and receive cash that Minsky's now-famous trilogy of financing structures—hedge, speculative, and Ponzi finance—emerged.

The Financing Profile of Financial Institutions

In Minsky's view, "the fundamental banking activity is accepting, that is, guaranteeing that some party is creditworthy. . . . A bank loan is equivalent to a bank buying a note that it has accepted." Banks can profit from providing this acceptance guarantee to their borrowers by ensuring that the rate they pay on their deposit liabilities is lower than the rate they charge to hold the liabilities of business firms. "Our complex financial structure consists of a variety of institutions that lever on owners' equity and normally make on the carry, that is, borrow at a lower rate than their assets can earn. In order to make on the carry, these liabilities have to be viewed as embodying more of Keynes's liquidity premium than their assets." Thus, for any financial institution the existence of this positive carry in the form of a positive net interest margin must be due to the ability to ensure a higher degree of liquidity for its liabilities than on the liabilities it accepts. Understanding the business of banking is understanding how financial institutions create and ensure the excess liquidity for their liabilities and how they provide liquidity to the liabilities of nonbanks by accepting them.

"Commercial banks and other financial institutions engage in speculative finance," since they make loan commitments by creating deposits: "Banking is not money lending; to lend, a money lender must have money. . . . When a banker vouches for creditworthiness or authorizes the drawing of checks, he need not have uncommitted funds on hand. He would be a poor banker if he had idle funds on hand for any substantial time. . . . Banks make financing commitments because they can operate in financial markets to acquire funds as needed; to so operate they hold assets that are negotiable in markets and have credit lines at other banks. The normal functioning of our enterprise system depends upon a large array of commitments to finance . . . that provide connections among financial institutions that allow these commitments to be undertaken in good faith and to be honored whenever the need arises."

The Lender of Last Resort and System Liquidity

Since a bank has a commitment to pay cash against its deposit liabilities it is always "short" cash. Since it cannot create cash, it will attempt to hedge this short position by possession of securities that are readily marketable at par or near par value for cash or are readily acceptable to creditors. In the absence of this possibility, the bank depends on the lender-of-last-resort function at the discount window of the Central Bank. Minsky encouraged the use of the discount window, and recommended that financial institutions always be "in the bank"—that is, borrowing from the window—because this provided direct information to the central bank about the assets the bank held as its cushion of safety.

Thus, in the current debate about whether the Federal Reserve should be involved in monitoring financial stability, this could be easily achieved by giving preference to discount window lending over open market operations.

But, Minsky noted that in the U.S. financial system only insured member banks have access to the discount window. When different types of financial institutions borrow and lend to each other, "financial layering" is created. Thus, the liquidity of any nonbank financial institution is ultimately determined by the liquidity of the liabilities of the bank from which it borrows. Minsky's point is that a consolidated balance sheet for the financial system as a whole—every liability in the nonbank financial system, as well as the short-term liabilities of the nonbank nonfinancial system—are all ultimately dependent on the liquidity of the deposit liabilities of the banks. This means that a failure to meet a payment commitment by any financial institution will have an impact on all the others in the system.

For Minsky, a condition of "financial distress" occurs when an individual financial institution "cannot meet its obligations on its balance sheet liabilities." This may evolve into a "financial crisis" when "a very significant subset of the economy is in financial distress" due to "'a slight disturbance' in money flows [that] creates such widespread financial distress that financial crisis is threatened" and the economy exhibits "financial instability."

At each stage in the evolution toward financial instability financial intermediaries become more reliant on other financial institutions such as banks to refinance their liabilities. As Minsky noted, "A key to the generation of financial crisis is whether the holders of marketable securities who have large scale debts outstanding can refinance or must liquidate their positions when they need cash" (1964, 266). "The worst thing that could happen to the solvency of any financial institution is a forced sale of its assets in order to acquire cash. Imagine what would happen to asset values, if there were a need to liquidate government bond positions by the government bond dealers or if the sales finance companies were suddenly to try to sell their portfolios of consumer installment paper on some market. In order to prevent this type of forced liquidation of assets, the financial intermediaries protect themselves by having alternative financing sources, i.e., by having 'de facto' lenders of last resort. These de facto lenders of last resort ultimately must have access to the Federal Reserve System in times of potential crisis."

Reappraisal of the Discount Mechanism of the Central Bank

Minsky observed that "the Federal Reserve System as it is organized and as it has functioned is a lender of last resort to the commercial banks." "If a commercial bank is forced to borrow at the Federal Reserve Bank's discount window because a consumer credit house unexpectedly draws upon its line of credit, we can expect that the credit will be granted." However, Minsky

noted that the Federal Reserve System has been "unwilling to regularize the access to the discount window of so important a money market intermediary as the government bond dealers. As a government bond dealer must have a guaranteed refinancing source in case they are unable to borrow enough from their normal sources to maintain their position, the Federal Reserve System has agreed to a subterfuge by which one of the New York City banks guarantees financing to the government bond dealers and this bank in turn has access to the discount window on an unrestricted basis." Thus, in effect "both the consumer credit houses and the government bond dealers do have direct access to the discount window of the Federal Reserve System."

However, in order to avoid a financial crisis, should commercial banks refuse indirect accommodation to money and capital market institutions "such access will have to become direct. There is no reason why approved government bond dealers and approved finance houses should not have access to the Federal Reserve System, now, when no crisis threatens. In addition to the Federal Reserve System, there are a number of other federal agencies that either insure the liabilities of financial intermediaries, guarantee the assets held by financial intermediaries, or act as a 'lender of last resort' to some class of financial intermediary. A number of these agencies center around the home mortgage market and the specialized home mortgage banks: the savings and loan associations. In order to make these guarantees, insurance schemes, and specialized lenders of last resort function in time of emergency, money has to be available when needed."

Thus, Minsky's basic recommendation in 1960, half a decade before the credit crunch that nearly bankrupted government bond dealers in the first financial crisis of the postwar period, and some 50 years before the current crisis, was to extend access to the Fed's discount window to primary securities dealers and important financial intermediaries.

Of course, this is precisely the problem faced by the Federal Reserve when shadow banks found it impossible to refinance their positions with insured banks and had to create a panoply of special discount lending facilities to provide lender-of-last-resort support to virtually every financial and nonfinancial institution facing a refinancing crisis. Had Minsky's 1960 recommendation been followed, this system would have already been in place on a permanent basis and would have prevented the uncertainty in the financial system around who would and who would not receive support. Thus, the Federal Reserve could provide a floor of financial stability by abolishing the various special facilities and simply declaring that the discount window would be available to all financial institutions.

Financial Information—Tracking Instability

The current crisis was as much a failure of management as a failure of regulators to identify and take action to prevent the massive liquidity famine that followed the bankruptcy of Lehman Brothers. It has now been reported that Federal Reserve officials were inadequate to the task of monitoring the positions of Citigroup, and the head of Lehman Brothers and the former chairman of the Federal Reserve Board have stated that they did not understand the risk inherent in the financing of positions. It is standard after every financial crisis for there to be calls for greater information concerning the position of financial institutions. A last will and testament providing position information has been proposed for the rapid dissolution of large failed institutions. Others have proposed a "network map" to provide information on every financial transaction in the system, similar to the reporting system on the New York Stock Exchange. Finally, there have been calls for incorporating minimum liquidity conditions in the proposed revision of the Basel capital regulations.

It is not clear how this information would help to identify financial instability or to forecast future crises. Nor is it clear how such liquidity ratios are to be produced. In contrast, as an extension of his proposal for the expansion of the discount mechanism, Minsky proposed a method of bank examination that recognizes the importance of the time distribution of cash flow commitments and the ability of institutions to liquidate their cushion of safety assets on a timely basis. Such a "cash flow–oriented" bank examination process is "designed to focus upon the actual (past) and potential (near-term future) position-making operations of a bank, so that the Federal Reserve authorities could be aware of actual or threatened financial fragility. The perspective [is] . . . of a dynamic, evolving set of financial institutions and relations. All too often, it seems as if the Federal Reserve authorities have been surprised by changes in financial practices."

This examination process "is based upon the view that liquidity is not an innate attribute of an asset, but rather that liquidity is a time-related characteristic of an ongoing, continuing economic institution imbedded in an evolving financial system. Whether a particular institution is, or is not, liquid over some time horizon depends not only upon its initial balance sheet but also upon what happens in its business operation and in the various financial markets in which the instruments it owns or 'sells' are traded. The liquidity of an institution cannot be measured by assigning invariant predetermined liquidity quotients to assets and similar liquidity requirement factors to liabilities: the liquidity quotients and requirements are system-determined variables. . . . Ultimately, the liquidity of an institution depends upon the way it would obtain cash if some need to do so should arise; thus any scenario of a unit's position-making activities depends in a critical way upon the expected developments in various financial markets."

Minsky also noted the importance that the procedure be applied to "all other financial institutions, and in particular those financial institutions that can be characterized as fringe banks—real estate investment trusts, finance companies, government bond dealers, commercial paper houses, etc.—actively engage in position making. Any overview of the banking system in the United States must consider the relations between the commercial banks narrowly defined and such fringe banks." For "fringe" we might read "shadow banks." Minsky pointed out that the "Federal Reserve needs to be concerned with those markets in which fringe banks finance their activities and the extent to which the commercial banks provide both the 'normal' finance and the "fall back" financing for fringe banking institutions."

"In light of developments over the past several years it seem that a cash flow–oriented bank examination of the type suggested should enable authorities to get a better handle on the operation of the giant multibillion dollar banks than is now available. It is now clear . . . that the giant banks are the effective lenders of last resort to both nonbank financial institutions and various short-term financial markets, in which both financial institutions and non-financial corporations raise funds." For Minsky, more "precise knowledge of the relations between the examined institutions and fringe banks . . . [would] enable the Federal Reserve to know better what [was] emerging in financial relations and to be prepared better for contingencies that might dominate as the determinants of its behavior if financial disruption [was] imminent.

Minsky recommended that the examination and information system should be constructed on the basis of the view that "the essential operation of a bank is position-making" and that it should provide information on the impact on secondary markets of financing those positions: a cash-flow examination procedure.

The Fed as Guarantor of Financial Stability and Regulator of the Economy through Monetary Policy

Much of the current reform discussion turns around the centrality of the Federal Reserve in the provision of financial stability. The main argument of the Federal Reserve is that if it were separated from the management of financial stability it would be deprived of the crucial information on the conditions of financial markets that is required to implement monetary policy. However, the proposals indicated above concerning the role of the discount window suggest that the Fed has not recognized the information that they require to ensure financial stability and that such information could be obtained within current legislation.

However, Minsky noted an even more important aspect of the discussion about where the responsibility for financial stability should lie. He suggested that there might be a conflict between the role of the central bank in providing financial stability through direct refinancing support to the financial system and "the current emphasis upon the central bank as a regulator

of the economy. Changes in discount rates, open market operations, and reserve requirements, as well as direct controls, are used by the Federal Reserve System to affect the volume and direction of lending. The reason given for such acts is that they will affect the level of activity in the economy." But, "in a world where a complex structure of financial institutions exists and where a large volume of short-term government securities are outstanding . . . the demand for financing makes the central banks a relatively ineffective regulator of the economy." This has been reinforced by the current trend to move financial assets off the books of regulated financial institutions.

Thus the use of "monetary policy to restrict aggregate demand in a period in which there is a secular buoyancy to the economy will lead to an economizing of cash balances. In place of increased activity being financed in part by increases in the quantity of money, increased activity will be financed almost entirely by substituting debt assets of private units for money in portfolios (or the monetary system may sell government debt to private units and acquire private debt). At every level in the economy such substitutions imply that each unit is less well able to withstand an interruption in its cash receipts; a given interruption of cash flows, say, on income account, will now lead to a larger amount of portfolio changes at all levels in the economy." In short, Fed policy to restrict expansion will encounter resistance in the form of financial innovation that will largely offset it and create a more unstable financial structure.

As an example, Minsky pointed out that the return on equity for a profit maximizing, innovate financial institution is determined by its return on assets and its leverage. "Given this profit equation, bank management endeavors to increase profits per dollar of assets and assets per dollar of equity. . . . To raise and sustain growth in share prices a high rate of growth of earnings per share is needed. . . . Earnings minus dividends per dollar of equity is the rate of growth of equity through retained earnings. If assets grow as fast as equity and if the profit rate of assets remains unchanged, then earnings, dividends, and the book value of equity will grow at the same rate." However, if management's growth targets are greater than the rate of expansion of the money supply desired by the monetary policy of the central bank, there arises a conflict between the profit and share price objectives of bankers (whose remuneration is linked to these variables) and the economic policy objectives of the central bank. Financial innovation is the response to this conflict, and it reduces the efficiency of monetary policy at the same time that it introduces unregulated techniques into the system that increase financial instability.

The conclusion is that "if the attempt is being made to restrain this growth in private demand by monetary policy, the possibility that a financial crisis takes place will increase." There is thus a distinct tradeoff between regulating the economy and stabilizing the economy. "Neither of the alternatives, tight money and a relatively lax fiscal policy or a relatively easy money situation combined with a tight fiscal policy, which can be used to restrain excess demand in an

inflationary situation due to private demand, is without side effects which adversely affect the stability of the financial system. As a result, the criterion, 'What are the effects of the alternative policies upon the stability of the economy?' does not result in a clear-cut choice between policies. The actual choice of policy must rest upon other secondary grounds."

Thus, Minsky concluded that "the Federal Reserve System should be reorganized to make clear its responsibility for the prevention of a liquidity crisis for the economy. Its domain of control should be extended to cover the entire financial system. Its primary responsibilities will be to assure monetary stability, to act as lender of last resort to the financial system, and to prevent fraud and misrepresentation. The Federal Reserve's directive to operate to achieve short-term stability of the economy should be replaced by a directive to keep stability in the financial markets and provide money for growth. The day-to-day open market operations in the money market should be replaced by easier and wider access to the discount window at posted rates to iron out temporary market difficulties. Open market operations should be undertaken in order to effect permanent increases in the money supply. Seasonal adjustments in the money supply should be the result of discount rather than open market operations.

"As long as the types of issues, the government emits can affect the operation of the economy, and as long as the Federal Reserve System engages in open market operations as a part of its control technique, it may be desirable to make the Federal Reserve System responsible for management of the government debt. This can be done by making the Federal Reserve System the owner of the entire outstanding government debt and having the Federal Reserve System issue its own debt in order to absorb 'reserves.' The Federal Reserve would be managing the debt and engaging in open market operations when it issued its own debt."

"To summarize, given the complex changing financial structure, the Federal Reserve System's role as a regulator of the economy should diminish while the Federal Reserve System's role as a lender of last resort to the financial system should increase."

Fed Lender-of-Last-Resort Intervention and Inflation Risk

For Minsky, lender-of-last-resort intervention to respond to a crisis is a two-edged sword because of its impact on the prices of financial assets and on goods prices. This is because "the fixing of the minimum price of some financial instrument or real asset is an essential lender of last resort action." In undertaking intervention, "claims on the Federal Reserve are always introduced into portfolios of banks, businesses, and households in exchange for some claim owned or created by a government, bank, business, or household unit. The terms on which the Federal Reserve is willing and able to make such exchanges set a floor on the price of the items the Federal Reserve might acquire. If there is a significant excess supply of some instrument in a market, be it a government bond, private commercial paper, bank loan, bank deposit, or capital

asset, the price of the instrument can fall markedly. In a world in which refinancing of positions is important, namely where there exists a significant volume of short-term debt, the ability of a borrower to meet financial commitments is thrown into question when the price of its instruments in the market falls markedly. If the Federal Reserve is willing and able to introduce claims on itself into the economy by purchasing such instruments and thus refinancing such borrowers, a limit, or floor price, to such instruments is set."

However, problems arise when these instruments are returned to the private sector since, they will require sufficient cash flows to validate these limit prices. As a result, Minsky noted, "Successful lender of last resort operations can result in subsequent inflation, possibly at an accelerating rate, because the debts that caused the trouble are now in another private portfolio, and if these private portfolios are to be made healthy, the underlying cash flows have to increase. And one way to increase these cash flows is to finance inflationary expansion. Inasmuch as the successful execution of the lender of last resort functions extends the domain of Federal Reserve guarantees to new markets and to new instruments, there is an inherent inflationary bias to these operations; by validating the past use of an instrument an implicit guarantee of its future value is extended. Unless the regulatory apparatus is extended to control, constrain, and perhaps even forbid the financing practices that caused the need for lender of last resort activity, the success enjoyed by these interventions in preventing a deep depression will be transitory; with a lag, another situation requiring intervention will occur."

Thus "lender of last resort powers provide the Federal Reserve with powerful medicine, but like most powerful medicines, they can have serious side effects. One is the lag inflationary impact of increases in liquidity due to lender of last resort operations. Every time the Federal Reserve and the institutions that act as specialized lenders of last resort extend their protection to a new set of institutions and a new set of instruments, the inflationary potential of the financial system is increased."

The response: "The need for lender of last resort intervention follows from an explosive growth of speculative finance and the way in which speculative finance leads to a crisis prone situation. To avoid this, institutional reforms that constrain corporate external finance and the capabilities of banks and other financial institutions to support explosive situations may be needed." Which is precisely the challenge of reregulation of the financial system that is currently being faced in the United States.

Is There an Inflation Risk from the Fed's Exit Strategy?

Although the Fed has acted to provide a floor to certain asset prices through its various special lending facilities and moved aggressively to substitute its own liabilities in the form of reserve deposits for impaired speculative assets, there are a number of factors that suggest that the

emergence from the crisis will not produce the inflationary tendency suggested by Minsky, but rather the opposite. The first factor is the distinction between the structured assets that held the mortgages and the collateral underlying them. Fed lender-of-last-resort intervention did not set a floor on house prices. Indeed, quantitative easing only sought to provide a subsidy to lending rates to allow households to refinance, but this was largely offset by the tightened lending standards of mortgage lenders. Thus, the decline in house prices has fed directly into the decline in household wealth and a reduction in discretionary spending as balance sheets are reconstituted.

Second, the kind of inflation that would be required to "validate" house prices would be increases in household incomes. But incomes were already falling before the crisis, and this trend has certainly not been reversed, but rather exacerbated by the rising levels of unemployment.

Third, a large part of the substitution of Fed liabilities for bank assets was in agency securities. This price support program has now been brought to conclusion, and, barring any substantial reform of the GSE's ability to absorb these assets, it is likely to remove the floor price and place downward market pressure on them. Finally, the source of many of the impaired assets in securitized lending has more or less ceased, without the need for official regulatory intervention.

The major concern would seem to be the presumed increased liquidity that is represented by the very large increase in unborrowed reserves in the banking system. But there is only one way these reserve funds can become a source of validation of the floor on asset values: if banks decide to lend to support the acquisition of impaired assets. But it is unclear how this would produce an increase in demand for final goods and services. Rather, this would require increased consumer lending, at precisely the time when households are retrenching to rebuild balance sheets and have very weak borrowing power.

Rather than incipient inflation, the biggest risk would seem to be the validation of certain financial practices that provided the foundation for the crisis. Thus, the need to extend the regulatory apparatus "to control, constrain, and perhaps even forbid the financing practices that caused the need for lender of last resort activity." This is the challenge that faces the U.S. financial system, not the risk of inflation resulting from the lender-of-last-resort activity or the support of household incomes through government stimulus.

Minsky's Alterntive Policy Assignment

If Minsky proposed that the central bank should focus on financial stability and limit its policy intervention to control the level of economic activity—and, in particular, the level of goods prices—who would be responsible for economic policy? The answer is to be found in his

assessment of the impact of consumption and investment on the level of activity and financial instability: “An inappropriate financing of investment and capital asset ownership are the major destabilizing influences in a capitalist economy. Thus the substitution of employment for investment as the proximate objective of economic policy is a precondition for financial reforms aimed at decreasing instability.”

“The emphasis on investment and ‘economic growth’ rather than on employment policy is a mistake. A full-employment economy is bound to expand, whereas an economy that aims at accelerating growth through devices to induce capital intensive private investment not only may not grow, but may be increasingly inequitable in its income distribution, inefficient in its choices of techniques, and unstable in its overall importance ”

For Minsky, support of employment could be best secured through a direct Government Employment Guarantee Program in which the government offered employment to all those willing and able to work at a wage near the prevailing minimum. The idea was to support the cash flows that validate assets through actual sales rather than through increasing borrowing or increasing prices. The Levy Institute has continued to pursue this particular line of research with a separate research unit. When faced with the current crisis, largely driven by consumption spending, Minsky would certainly have replied that if consumption had been financed by wages increasing in step with productivity rather than being transferred to the financial sector, much of the crisis would have been avoided. Consumer debt would have been lower, and if banks had transferred their higher earnings to their reserves rather than paying large bonuses, their capital structure would have been more solid. For Minsky, the impact of the financial instability of income distribution would have been a major factor.

Finally, Minsky was also a firm believer in [Abba] Lerner’s concept of functional finance. That is, that the government budget should have full employment rather than balance as its objective. The budget balance, surplus, or deficit becomes largely irrelevant once the impact of government spending on private sector budget balances and on its ability to meet its financial commitments is recognized. Thus, Minsky would have much preferred that the recent increase in budget expenditures would have been directed first to households facing reduced incomes and an impaired ability to meet their mortgage commitments, than directly to the banks to remove the impaired mortgages from their balance sheets. But this simple approach reflects his basic belief that both the government and the financial system exist to serve the private citizen rather than vice versa.

I hope we can take some of these prescient proposals seriously as we discuss ways to make the financial system once again the handmaiden of society.

Thank you.

[1] An Annex provides a summary of the major proposals for reform of the financial system.
[2] Quotations from Minsky's work come from the following publications:

Minsky, H. P. 1964. "Financial Crisis, Financial Systems, and the Performance of the Economy." In *Private Capital Markets: A Series of Research Studies Prepared for the Commission on Money and Credit*, 173–380. Englewood Cliffs, N.J.: Prentice-Hall.

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———. 1986. *Stabilizing an Unstable Economy*. New Haven, Conn.: Yale University Press.