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The Capital Development of the Economy and the Structure of Financial Institutions

Hyman P. Minsky Ph.D.

THE CAPITAL DEVELOPMENT OF THE ECONOMY

AND

THE STRUCTURE OF FINANCIAL INSTITUTIONS

Hyman P. Minsky

Distinguished Scholar
The Jerome Levy Economics Institute
Bard College
Annandale on Hudson, NY 12504

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Introduction

The announced subject of this session, Financial Fragility and the U. S. Economy, could lead us to too narrow a focus. Financial fragility now poses a clear and present danger to the continued prosperity of well nigh all financially sophisticated capitalist economies. In many economies financial fragility can now induce attempts, simultaneous or sequential, by banks and other financing institutions to "make position by selling out position". A collapse of asset values, which forces the price of capital assets below the cost of production of investment output, could occur in many countries. This would assure that a deep an long world wide depression will take place.

Whether or not such a debt depression takes place depends on whether lender of last resort interventions, which abort the need to make position by selling out position are effective and whether aggregate profits are sustained in the face of a credit crunch, which can follow even successful lender of last resort interventions.[1]

1. The behavior of the export powerhouses of the 1980's, Germany and Japan, is not conducive to a belief that international cooperation to contain depressions will be forthcoming. Germany is so fixed on containing inflation that it raises interest rates even as its main trading partners need to engage in expansionary monetary and fiscal policy to contain recessions. Japan seems unable to move to a high consumption economy that is consistent with its manufacturing productivity. Both Germany and Japan can be characterized as "beggering their neighbors", i.e.

A capitalist economy is characterized by a financial structure which leads to the prior commitment of cash flows received, by households, businesses, governments, banks and non-bank financial institutions, to validate their liabilities. These cash flows are received either from the distribution of the value of output among the participants in producing and financing output or from the fulfillment of financial contracts. Liability structures, which link yesterdays and tomorrows to today, introduce a degree of intertemporal complexity into the economic process beyond that due to the different expected lives of capital assets, the gestation period for investment output and the time it takes to transform a labor force. Such complexity renders suspect the basic neoclassical presupposition that the behavior of the capitalist economy can be understood by assuming that the economy is a system that seeks and sustains equilibrium. Once the equilibrium assumption is abandoned all economic theory can tell us is 1 economies need to reconcile a variety of dynamic processes, 2 the reconciliation process is a multidimensional, intertemporal and non-linear system and 3 from time to time such processes generate time series that are not nice. These not nice time series can be characterized as incoherent, chaotic or ones that exhibit hysteresis.

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sustaining their domestic prosperity even as their policies diminish the prosperity of their trading partners.

In economic terms not nice time series result from situations when the reactions of impacted units to conditions such as excess supply, excess demand, and the shortfalls of cash receipts relative to payment commitments on liabilities leads to the excesses or the shortfalls becoming worse not better.

Cash Flows and Liability Structures: Fragility Defined

Long ago I defined three types of relations between a unit's cash receipts and the cash payments mandated by the liability structure. For reasons that are now buried in ancient particular bits of analysis, I labeled the financial posture of a unit as being either hedge, speculative or "Ponzi"[2]. A hedge posture implies that the prospective cash flows are sufficient to fulfill contractual payment commitments on liabilities and a speculative posture means that the unit's cash flows are sufficient to pay the interest but insufficient to pay the principle amounts that fall due. A unit with a Ponzi financial structure has insufficient cash flows from operations or contracts it owns to meet its interest payment commitment. The options for such a unit are either to increase its indebtedness or default.

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2. H.P. Minsky "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, Prentiss Hall, Englewood Cliffs New Jersey, 1964 Pp. 173-380.

Note that payments due on liabilities are either fixed by contract or contingent. Cash payments on equity liabilities are contingent upon earnings and the declaration of dividends. Only if dividends are declared do equity instruments lead to cash outflows. If equity looms large in a unit's liability structure the presumption is that the unit is a hedge financing unit.

We can postulate a spectrum of liability structures that ranges from robustness to fragility. The overall robustness or fragility of an economy's financial structure is determined by the mix of hedge, speculative and Ponzi financing units. A liability structure in which units mainly engage in equity financing will lie towards the robust end of the spectrum. A liability structure in which units are heavily in debt so that speculative and even Ponzi finance are common will be towards the fragility end of spectrum.[3]

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3. Mauro Galligati and Dominico Delli Gatti have shown that a well nigh standard IS-LM model can be interpreted as leading to a stable equilibrium if the financial structure is robust and to an unstable equilibrium if the financial structure is fragile. Within the process framework this means that with a robust financial structure the processes set in motion by some excess or deficiencies tend to decrease the excesses or deficiencies whereas in a fragile structure processes driven by the same maximization behavior by units tend to increase the excesses or deficiencies. See Delli Gatti and Galligati, Financial Instability, Income Distribution and the Stock Market, Journal of Post Keynesian Economics, 1990, and Delli Gatti, Galligati, and Gardini, Real Accumulation and Financial Instability, Studi Economici, 1990

The financial instability hypothesis, or the financial instability interpretation of Keynes, holds that over a run of good times the financial structure evolves from being robust to being fragile. This hypothesis rests upon the profitability of debt financing, given the term and risk class structures of interest rates in a robust financial structure and the way asset values can collapse whenever speculative and Ponzi financing units are forced to "make position by selling out positions".[4]

Note that Ponzi financing decreases equity for debt increases without any increase in assets. It therefor has a limit for any private unit. It ends when equity goes to zero.[5] For a national state habitual recourse to Ponzi finance may well put the economy on the "Road to Argentina".[6]

The Financial Instability Hypothesis

A main theorem of the financial instability hypothesis is that the internal dynamics of capitalist economies leads, over a period dominated by the successful operation of a

4. Hyman P. Minsky John Maynard Keynes, Columbia University Press, New York, New York, 1976
5. This is true unless the debtor is somehow able to cook the books. The events of the 1980's make it clear that there is an enormous willingness to suspend disbelief in financial markets.
6. H.P. Minsky "The Financial Instability Hypothesis: A Clarification" p.166 in The Risk Of Economic Crisis" Martin Feldstein ed. University of Chicago Press, 1991 for a reference to the United States as a potential Argentina.

capitalist economy, to the emergence of financial structures which are conducive to debt deflations, the collapse of asset values and deep depressions. The financial instability hypothesis models the economy as having two price levels which are determined in quite different ways. One is the price level of capital assets, the second is the price level of current output. The price level of capital assets is the present value of expected "profits"[7]: profits are determined by investment (the structure of demands). This approach makes the mechanisms of the debt-deflation theory of great depressions precise. As Abba Lerner put it many years ago the financial instability interpretation of Keynes holds that over the time frame in which we live out our lives "Stability is Destabilizing".[8]

The financial instability hypothesis has stood up well over the past 30 years. The integration of the explanation of financial market, investment behavior and the aggregate performance of the economy was an essential part of post Keynesian doctrine long before the present difficulties in finance and the economy arose.

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7. Profits are defined as gross capital income. The distribution of profits among rent, interest, payments to "managers", profit taxes, retained earnings and distributed dividends reflects liability structures and the business and government "cultures". H.P. Minsky Stabilizing an Unstable Economy, Yale University Press, New Haven, 1986, Chapter 7.

8. Alan Sinai has noted that economists have in general neglected the way real and financial facets are integrated. He seems unaware the extent to which finance is integrated into the explanation of the progress of the economy through time in the post - Keynesian view of things. See Alan Sinai, Financial and Real Business Cycles, Presidential Address, Eastern Economic Association, March 16, 1991.

Perspectives on Economic Theory: The Smithian Legacy

Now that I have paid homage to the title of the sessions I can turn to the subject announced in the title of my presentation. As a first step I want to introduce the theoretical perspective that guides what follows. Today's mainstream economic theory starts from the famous passage by Adam Smith:

> "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 labors to render the annual revenue of 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 so many other cases, led as if by an invisible hand to promote an end which was no part of his intention.
>
> Adam Smith
> The Wealth of Nations

The invisible hand proposition is the rock upon which neo-classical economics rests. To modern economists the Smith passage becomes the fundamental theorem of General Equilibrium theory - the Arrow-Debreau proposition that a competitive equilibrium exists and it is a Pareto optimum. It is now generally accepted that the Arrow Debreau theorem provides little insight into the economies in which we live out our lives because the equilibrium whose existence is demonstrated is not unique and is not globally stable. Mathematical general equilibrium theory cannot be the foundation of a meaningful economics.[9]

Furthermore perfect foresight needs to be assumed for the proofs of the fundamental theorem of general equilibrium theory to hold. The various attempts to derive a macroeconomics which yield underemployment equilibrium or policy effectiveness by assuming some form of asymmetric information negates the perfect foresight assumption of general equilibrium theory. Therefor the asymmetric information approach to constructing a meaningful macroeconomics is logically flawed. It is not permissible to first assume perfect foresight so that economic processes would tend to generate an equilibrium and introduce imperfections of foresight in the form of asymmetric information.

In addition unless our theory proves the existence of a unique equilibrium we cannot legitimately do comparative statics exercises. All that economic analysis is restricted to modelling dynamic processes and determining the characteristics of the path that will emerge. The logical foundations of the Smithian invisible hands approach have evaporated.

Paul Davidson's Money and the Real World, Revised ed. Macmillan, London and New York 1978.

9. The Invisible Hand: Economic Equilibrium in the History of Science. Bruna Ingrau and Giorgio Israel, MIT Press, Cambridge Massachusetts and London, England, 1990

The above has a "big" policy implication. The validity of laissez-faire as a guide to policy rests upon the validity of the proposition that "The invisible hand, operating through markets, leads the economy to an equilibrium which in some sense is a best that can be achieved. With this proposition not valid the logical foundations for laissez-faire disappears.[10]

Perspectives on Economic Theory: The Keynes Legacy

The alternative to the invisible hand - comparative static approach to economics was set out by Keynes. Keynes wrote

> "If I may be allowed to appropriate 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, 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 do no harm as bubbles on a sea of enterprise. But the position is serious when enterprise becomes the bubble on a whirlpool of speculation. When the capital development of a country becomes the by-product of the activities of a casino, the job is likely to be ill done."
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> John Maynard Keynes
> The General Theory of Employment
> Interest and Money

10. The various policy ineffectiveness propositions rest upon the invisible hand leading the economy to an equilibrium that is determined by preferences, technology and maximization under conditions of perfect foresight.

In this passage Keynes shifts the argument from the Smithian emphasis upon the allocation of resources to the capital development of the economy, the creation of resources.[11] The creation of resources is a process in time. It involves what Keynes called enterprise: the forecasting of the prospective yield of assets over their whole life. Keynes's dichotomy between enterprise and speculation draws attention to the financial structure as an essential element in the capital development process. In a successful capitalist economy the financial structure abets enterprise. When finance fosters speculation the performance of a capitalist economy falters.

Keynesian economic theory tells us that capitalist accumulation, which involves financial and output markets, is a process which ties the past, present and future together. It also allows us to identify variables that affect the processes. These processes are not constrained by the inherent nature of capitalist economies to lead to satisfactory system behavior: there is no guarantee that the processes will interact to lead to some nice coherent expansion (growth) of the economy. In particular we know that the dynamics are best characterized by time dependent, nonlinear, and multidimensional relations. This implies

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11. The emphasis upon the capital development of the economy as the prime problem that economic theory need address might best be called Schumpeterian. See J. Schumpeter The Theory of Economic Development, Harvard University Press, Cambridge mass, 1934. This is a translation of a 1906 German text.

that hysteresis, chaos or incoherence will characterize the time series that are generated, not always but from time to time.

If an economy is given to intermittent endogenously determined incoherence then devices (regulations and interventions) that contain the incoherence or impose coherence can improve performance. Central banks are just such devices; big government whose deficits sustain aggregate profits in times of recession are another such device.

The economic incoherence containing mechanisms may be considered to be analogous to electronic circuits that prevent perverse feed backs: by halting endogenous processes they impose new initial conditions within which the structure will generate an alternative, presumably more satisfactory, future. Appropriate systems of intervention are necessary if economies with the properties that result from the complexity due to capitalist finance are to behave in a reasonably coherent manner. Apt intervention and interventions which thwart the thrust to incoherence is the appropriate policy slogan, not laissez faire.[12]

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12. P Ferri and H P Minsky, Market Processes and Thwarting Systems, Working Paper # 64, The Jerome Levy Economics Institute.
    P Ferri and H P. Minsky, Journal of Post-Keynesian Economics 1984.

Insights on the Bailout of Savings and Loans and Banks

From the perspective of an economic theory that views the economy as a set of interacting processes it is an error to call government support of the deposit insurance system a bailout. The need for the government to intervene to refinance savings and loan associations and commercial banks should be viewed as a normal and therefor expected result of the characteristics of the economy which make intermittent bouts of chaos, incoherence or hysteresis occur and where the consequences of allowing free reign to such "states of nature" are deemed unacceptable.

The specific aim of the government refinancing of banks and thrifts is to prevent a broad set of institutions to need to make position by selling out position. If such selling of assets becomes necessary then, over a wide spectrum of assets, the second hand price will be incompatible with the production of new assets. A collapse of investment activity is one way in which an initially unsatisfactory situation becomes a disaster. The so called bailout is in truth a downpayment on containing a serious depression.

Unfortunately the technique that is in place for refinancing banks and other institutions is inept. The government agency that refinances banks and S&L's, The Resolution Trust Corporation, takes assets from the deposit insurance funds and tries to turn these assets into cash. A public holding company approach, The Reconstruction Finance Corporation of the depression era is an example, to the refinancing of banks etc would be much better. Such an approach would treat the now failing banks as institutions which would continue to operate after an infusion of equity (The RFC becomes the banks owner) and the replacing of management. The RFC approach leads to many non-performing assets being treated as work outs rather than as requiring foreclosures and liquidations. Continuing the "failed" banks as refinanced independent institutions, though government owned, is more conducive to economic recovery than the present treatment, in which organizations are.destroyed and the non-performing assets of failed institutions act to depress asset prices.

A List of Topics

The United States, and the rest of the capitalist world, should be engaged in a serious discussion about the effect that the financial structure of an economy has upon the performance of the economy. Only some one whose vision is obstructed by the blinders of neo classical theory would deny the following propositions:

1. A capitalist, or if you wish a market, economy is a financial system.[13]

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13. The western neo classical economists who have traveled to the east to extoll the virtues of the market economy have done a great disservice to these economies, and to their

2. The neoclassical way of doing economics, which rests upon splitting the financial system off from what is called the real economy, throws no appreciable light on the effect that a financial system has upon the functioning of the economy: the only relevant neoclassical position is that the financial structure makes no difference.

3. The financial structure is significantly more fragile now, in early 1992, than it was earlier in the post world war II epoch.

4. This fragility makes it more likely now than hitherto in the post World War II period that the "next" phase of our economy will be a high level stagnation, although a deep depression followed by a low level stagnation cannot be ruled out.

5. A main characteristic of a capitalist economy that is stagnant and or immersed in a deep depression is that the "capital development of the economy" is not going forward.

The following may not be accepted by all who are free of the neoclassical blinders.

6. The tragedy of a prolonged stagnation and a deep depression can be avoided by an apt reform of the financial structure and by the apt use of the government's fiscal powers.

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prospects for a sensible resolution of the problems by not emphasizing that their basic problem is the creation of a financial structure and that many command economy facets have to be sustained until a financial structure is in place.

Comments on the Topics

I will now comment on the implications of the above list for the desired structure of financial institutions.

1. A capitalist, or if you wish a market, economy is a financial system.

In a capitalist economy there are two sets of markets and two sets of prices. One set of markets and prices is for current output and the labor that is used to produce current output. The other set of markets and prices is for capital assets, either individually, as organized into production units called plants, or as economic units called firms and for financial instruments.

The markets for current output and for labor are the stuff of ordinary price theory. The result is the production and purchase of goods and services for either consumption or investment. Prices of current outputs enable producers to recapture their out of pocket costs. They also carry the gross profits that firms earn. Thus the price system of current output results in incomes to businesses, households and governments (through taxation).

These incomes may enable these units to validate their financial liabilities, including the liabilities held by financial intermediaries. The receipts by financial intermediaries are a source of the funds that financial institutions make available to finance investment, consumption and government spending. The proper performance of a capitalist economy requires that there be a well functioning financial structure whose main orientation is the financing of capital asset creation. As became evident in the United States in the 1980's, unconstrained profit seeking financial institutions are lief to use their resources to finance speculation. Such asset based financing can promise larger returns in the short run than cash flows from financing enterprise can warrant.

2. The neoclassical way of doing economics, which rests upon splitting the financial system off from what is called the real economy, throws no appreciable light on the effect that a financial system has upon the functioning of the economy: the neoclassical position is that the financial structure makes no difference.

This proposition is virtually self evident. The heart of the neoclassical system is that relative prices and outputs are determined by preferences over real goods and services, the technology and maximization behavior. The perfect foresight assumption of neo-classical theory means that investment is just an allocation over time, where time adds no special difficulty. (One implication of the neo-classical theory is that for any capital asset at every moment of time the depreciated value of the original cost equals the present value of future profits.)

Inasmuch as all relevant variables are determined by "real relations" nothing of significance is affected by the financial structure. This means that the neo-classical theory cannot act as a guide to the apt structure of financial institutions. In particular as neo-classical economic theory divorces the financial structure from investment. It has no room for speculation as plays on the difference between the market evaluation of the uncertain expected profits and the cost of producing capital assets. It does not allow for market power to determine the value of firms. Given these attributes the neo classical theory cannot be a guide to the appropriate structure of banking and financial institutions: A neo classical theorists should stand mute when policy matters the deal with finance are on the "table".

The earlier citation from Keynes, which specified that the objective of economic policy is to assure that the capital development of the economy is not "ill done", pointed out that the "organization of investment markets" determines whether speculation or enterprise is dominant in an economy.

In Keynes theory it is important that financial markets be structured so that the financing of enterprise dominates. Expectations of longer term cash flows and not expectations of short term asset price movements must become the dominant determinant of the availability of financing. As banking regulations are moving towards using capital absorption ratios for assets, the capital absorption ratios of cash flow based assets should be significantly lower than that of collateral based assets. A further way to force financing to be based upon anticipated cash flows is to facilitate the growth of organizations that specialize in intermediate and long term financing of particular types of productive assets: i.e. By compartmentalizing the financial structure.

3. The financial structure is significantly more fragile now, in early 1992, than it was earlier in the post world war II epoch.

The leveraged buy out movement of the 1980's led to the growth in highly leverages firms. The growth in the money market mutuals in the 1980's led to a large demand for short term marketable corporate liabilities. The combined effect of these two developments was the growth in speculative financing. Leveraged buy outs often included "payment in kind" bonds, i.e. the capitalization of interest (Ponzi finance). Much of the debt of the poorer countries of the world have had periods in which the interest due was not paid but was capitalized into the principle due. These well known facts, as well as the more detailed examination of the data, lead to the conclusion that the system is more fragile now than in the past.[14]

4. This fragility makes it more likely than hitherto that the "next" phase of our economy will be a high level stagnation: even a deep depression followed by a low level stagnation cannot be ruled out.

Financial fragility, or overindebtedness, tends to constrain investment by business and debt financed consumption by households. The United States economy is burdened by a deadweight government debt[15] accumulated as a result of the dreadful abuse of the government budget during the 1980's, an abuse which is continuing today. These conditions mean that a recovery from the current recession will not be accompanied by buoyant private demand.

A deliberate move of the government towards a significantly larger deficit at the current level of income and structure of spending and taxes is not available. The peculiar position that neo classical theory fosters, that tax reductions are fully equivalent to resource creating government spending, remains a major view guiding fiscal policy and is an obstacle to apt policy. Thus the best that can be expected is a continuation of the current miasma: a sluggish stagnant performance.

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14. Martin Wolfson, Financial Crises M E Sharpe & Co, 1986.
15. Deadweight government debt is debt that is not the result of government resource creating activity.

The alternative to continued sluggishness is a deep depression. A deep depression requires the breakdown of the financial system. The acceptance by the Congress and the Administration of the need finance the ability of banks to pay off depositors at par means that a debt deflation is not likely in the foreseeable future.[16] Thus the prospect is that the economy will stagnate at the current relatively high level, with some further deterioration quite likely but with little or no likelihood that a massive decline such as occurred in the early 1930's will occur in the near future. If a depression is allowed to occur then a low level stagnation is apt to follow

In a capitalist economy capital assets exist which are expected to yield services to production for some time in the future. The market value of such capital assets can raised if Federal Reserve moves lower long term interest rates. However unless business profit flows are sustained mere monetary policy is ineffective. The likelihood for a further decline in expected nominal value of profit flows cannot be ruled out given the extent of excess capacity: this is particularly true of commercial real estate.

5. A main characteristic of a capitalist economy that is stagnant and or immersed in a deep depression is that the "capital development of the economy" is not going forward.

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16 The governments of major capitalist countries protect deposit liabilities of banks even in the absence of formal deposit insurance.

There are two ways in which the capital development of an economy can be "ill done". One is that the investments being financed are inept and the second is that investment is insufficient to maintain a close approximation to full employment. In the past decade the United State's financial structure first was very good at financing inept investments. It is now doing a fine job of financing insufficient investment to create a progressive full employment economy.

The vast overhang of office and other commercial construction and the declining competitiveness of United States managed manufacturing, which are legacies of the 1980's, are evidence that something was basically wrong with the financial structure as a selector of what is financed. The United States's financial structure is a mixture of institutions that originate financing and market based institutions that hold paper which they "buy" from markets. The securitization of standard mortgages was a technique by which Savings and Loans and Mortgage companies originated mortgages which were then packaged as securities for the portfolios of holders such as pension funds, life insurance companies, mutual trusts and various international holders. Because of the way the mortgages were packaged it was possible to sell off a package of mortgages at a premium so that the originator and the investment banking firms walked away from the deal with a net income and no recourse from the holders. The instrument originators and the security underwriters did not hazard any of their wealth on the longer term viability of the underlying projects. Obviously in such packaged financing the selection and supervisory functions of lenders and underwriters are not as well done as they might be when the fortunes of the originators are at hazard over the longer term. All that was required for the originators to earn their stipend was skill avoiding obvious fraud and in structuring the package.

An easier filter for financing ruled after securitization was developed than before. Furthermore more money was chasing financing deals than hitherto. As the thrifts were released from financing single family homes, their funds became available for financing new activities: land development, construction financing and commercial mortgages. This funds availability was combined with a pricing structure by which developers made money from construction quite independently of the success of their projects. The combination of perverse incentives guaranteed that both over and wrong type of building would take place.

If financing is to select viable projects the use of other peoples money has to be restricted to vehicles which have been proven in the market or to deals in which the unit that selects and structures the deal also finances the deal. To be brief the crisis of the 90's is making us overlook that the projects financed in the 80's set up the current crisis. Deregulation in the 1980's was one source of the current difficulties, for the managers of the deposit insurance funds were not willing or able to contain the exposure of the funds by constraining the deals that could be financed with insured deposits.[17]

Another thing that went wrong is that the new players in town, the various pension funds, were often patsy's for those who approached them with deals.[18]

If the capital development is to be done better in the future than the excesses of the 1980 indicate they were done in the past, then constraints upon what pension funds can do may well be needed. Mutual funds have to be more closely constrained by tight definitions of their allowable portfolios.

The other way in which the capital development of the economy may be ill done is if investment is insufficient to maintain a close approximation to full employment. The financial structure that Keynes advocated is still relevant: the socialization of investment as a supplement to private investment. This socialization of investment should take a multitude of forms: the current concern about the inadequacy of infrastructure development may lead to extending financing mechanisms, such as the dedicated taxes for highway and airport construction, to other areas. Other

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17. Martin Mayer, The Greatest-Ever Bank Robbery, Scribners & Co, New York, 1990
18. Sarah Bartlett, The Money Machine, Warner Books, New York, 1991.

devices, including capital budgeting, development banks and the flexible use of government holding companies, are feasible. A greater reliance on government operated fee for service infrastructures may also be desirable. We might well turn to conscious cross subsidization on the European model, such as having gasolene taxes provide funds for public transportation and commuter railways.

The administration's proposals for financial system reform, which came to virtually naught in the recent Congress, were deficient in that they did not address the problem of how poorly the capital development of the economy was done in the 1980's. The administration took a rather simple minded approach to the issues. They somehow believed that universal rather than compartmentalized banking and finance was the way to foster stability in finance.

In a recent paper prepared for a conference at the Jerome Levy Institute Jan Kregel pointed out that German financial structure is much more complicated than the common Unites States image of a four bank universal bank financial structure would indicate: there are a large number of specialized financial institutions.[19]

In creating a financial structure that aids and abets the capital development of an economy specialized financial

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19. Jan Kregel, Markets and Institutions in the Financing of Business: Germany, Japan and the USA. Prepared for a Jerome Levy Economics Institute Conferencew: Restructuring the Financial System for Economic Growth, November 21-3, 1991. Annandale on Hudson, New York, NY

institutions, each of which has a well defined primary domain, are necessary. One model of a compartmentalized financial structure was the United States in the aftermath of the great depression. In the light of that structure which led to one of the great periods of American Economic development serious consideration should be given to creating a modern compartmentalized financial structure for the United States.[20]

Community banks are at the heart of a financial structure that will be biased towards resource creation. These banks would offer both insured and non-insured checkable deposits. The insured checkable deposit should be mainly offset by home mortgages. The standard home mortgage for the portfolio of the community banks should be something like a 20% down payment mortgage of which 50% is at a fixed rate and 50% at a variable rate. The term to maturity of the mortgages can be quite long. Aside from home mortgages, the offset to insured deposits should be restricted to government debt and Federal Reserve deposits. The mortgage portfolio may be no more than 80% of the checkable insured deposits, cash 4% and mainly government debt 16%. The equity absorption of these accounts should be about 4%. The mortgages in the portfolio should be originated by the

20. If we consider an economy without a government debt and require a "safe" checking and deposit system then limiting banks to specified earning assets and forbidding banks to engage in activities that may compromise their ability to redeem deposits is a logical way to go. The root of Glass Steagal may well lie in the desire to create narrow banks in the absence of a government debt.

community bank and they should be from some defined geographical area surrounding the bank's home office.

In addition community banks should offer interest bearing non insured checkable accounts which reflect positions in a portfolio of short term assets which are protected by some 8% of cash and 8% of bank equity: these short term assets would be well structured loans to local businesses, high grade commercial paper and government debts up to some intermediate term.

All checkable accounts should be fee for service accounts: the fees for the use of the checking service should be such that the function of providing checks should be a profit center. Debit cards, as a payment system that is viable because of the vender's discount, should be encouraged.

6. The tragedy of a prolonged stagnation and a deep depression can be avoided by an apt reform of the financial structure and by the apt use of the government's fiscal powers.

The above may not be accepted by all who are free of the neoclassical blinders. One reason for this may well be that the power of United States policy to control the United States economy has been much attenuated by the changes of the 1980"s. In particular the cumulative effects of the growth of the dead weight debt, the well nigh destruction of the revenue system over the 1980's and the loss of the dominant international asset position have combined to diminish the fiscal autonomy of the United States.

The principles of the reform of the financial system that are needed were set out earlier. But reform of the financial system is not enough. Fiscal reform must accompany financial reform: the reform needs to be on both the revenue and the spending side. On the revenue side an "in principle" balanced budget must be achieved. This means that a tax system needs to be in place which will not only pay for current operations but will also pay interest on the public debt: "Ponzi" financing by the government needs to come to a halt. Even though the government, unlike private institutions may not exhaust its balance sheet equity, Ponzi financing by government means that an inflation tax will in time contain the real size of the government debt. The threat of an inflation tax means that private long term debt financing needs to be at rates that compensate for the expected erosion of the purchasing power of the principle due in the future. This inflation premium in interest rates is in fact an amortization of the principle.

Given that government spending on the order of magnitude of 20/25 % of gross national product is desirable on stabilization grounds, the balanced budget rule requires that the revenue system wield some 20 to 25 % of GNP when GNP is at the targeted rate. This means that the government revenue system will need to depend on more than income taxes: various forms of fee for services and direct taxes need to be in the revenue mix.

The spending side requires a large overhaul. The Keynes phrase "the socialization of investment" means that the government spending program needs to finance a significant part of the resource creation of the economy. Some of the resource creation financed in all or part by government funds may end up as privately managed, profit earning capital assets. The subsidies in the form of land grants for which financed railroad building comes to mind. Federal mortgage insurance "socialized" part of the risk of financing single family housing.

In particular in principle income from work, where if necessary the work is provided by government, should replace much of today's transfer payment schemes. I see no way to create a society in which the socially divisive transfer payment systems are within bounds that are broadly acceptable without a revival in one form or another of the depression era work schemes: the WPA, NYA and CCC of the 1930's need to be in the arsenal of social and economic policy.

Such a package of reforms, where the government debt, though growing, is always in principle, ie when the economy is at a close approximation to full employment, being validated by revenues will not return the economy to full employment overnight. It will mean that the accumulation of government debt in private portfolios will be an accumulation of default free and readily transferable assets. On reason why the massive deficits of the Reagan years did not lead to a buoyant expansion was that the revenue system had been compromised. This meant that the increases in the government debt was not a one for one increase in liquidity. A fiscal system based upon an in principle balanced budget is a way of assuring that a period of government deficit financing is followed by a period in which buoyant private demand does the job.

Conclusion

There is a sharp difference in the view of the economy that follows from the Smithian and the Keynesian perspective. In particular the Smithian perspective leads to the conclusion that the financial structure is irrelevant whereas the Keynesian perspective leads to the conclusion that effective financing is necessary for the capital development of the economy and that there is a need to constrain any tendency of what Keynes called speculation to dominate. The Smithian perspective as it developed imported the notion of equilibrium from the physical sciences. Neo-classical theory rests upon the assumption that the economy has an equilibrium and that this equilibrium has desirable properties.

The historical Keynes molded his argument in terms of equilibrium but the essential elements of Keynesian theory, the financial theory of investment and the investment theory of business cycles, is best treated as an analysis of the outcomes of processes that operate in time. Process analysis, where one day leads into another, allows for the path of the economy through time to be incoherent - run away inflations and debt deflation depressions are possible resolutions of the interactions among the processes of the economy.

These two perspectives lead to diametrically opposite approaches to both an understanding of economies and to policy. The Smithian perspective leads to the conclusion that laissez faire is the appropriate philosophy of policy. A consistent application of the Keynes perspective leads to the conclusion that apt policy, i.e. policy guided by an understanding of how an economy can shoot off into thoroughly unsatisfactory states, is necessary for economies to behave in a satisfactory manner. Given the way the economy is behaving now it seems as if what I call the Keynes perspective is the better guide for economic policy.