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FINANCIAL INSTABILITY HYPOTHESIS
INTERPRETATION OF KEYNES *

by

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Once Keynes' rebuttal[1] to Professor Viner's[2] great review is taken seriously it is clear that the standard interpretation of Keynes, built upon the Hicks-Hansen[3,4] formulations, miss the point of *The General Theory*. In the light of Keynes' rebuttal *The General Theory* is designed to make serious fluctuations of output and employment in a capitalist economy, an anomaly from the perspective of standard theory, normal behavior within the new theory. In Keynes' words *The General Theory* is a "theory of why output and employment are so liable to fluctuations."[5]

The General Theory is mainly about investment within the context of capitalist financial usages. As Keynes insisted in his rebuttal to Viner, the main propositions of *The General Theory* center around the disequilibrating forces that operate in financial markets and affect the valuation of capital-assets. The essential proposition of *The General Theory* is that an economy with modern capitalist financial institutions is inherently unstable; is in Keynes' words "so given to fluctuations."

As pure theory, the argument of *The General Theory* is that we cannot explain the behavior of a capitalist economy by tacking money, financial institutions, and financial usages onto a model which is rooted in the bartering that takes place at a Village Fair: i.e. the neo-classical synthesis will not do. A Village Fair model can show that a decentralized market mechanism yields a coherent result once household budget constraints are given, but it cannot explain the periodic rupturing of coherence that occurs; a rupturing that originates in financial usages and spreads by way of investment.

Instead of a Village Fair perspective, Keynes in The General Theory adopts a City or Wall Street perspective. Thus The General Theory starts with a monetary economy in which money is a type of bond rather than a generalized ration point, as the quantity theory has it. Keynes clearly stated this money concept as early as a 1931 essay:

> There is a multitude of real assets in the world which constitutes our capital wealth - buildings, stocks of commodities, goods in the course of manufacture and of transport, and so forth. The nominal owners of these assets, however, have not infrequently borrowed money (J.M. Keynes' emphasis) in order to become possessed of them. To a corresponding extent the actual owners of wealth have claims, not on real assets, but on money. A considerable part of this 'financing' takes place through the banking system, which interposes its guarantee between its depositors who lend it money, and its borrowing customers to whom it loans money wherewith to finance the purchase of real assets. The interposition of this veil of money between the real asset and the wealth owner is a specially marked characteristic of the modern world.[6]

This conception of money, as a financing veil between the "real asset and the wealth owner", is markedly different from the conception in standard theory and is fundamental to understanding both Keynes and our economy. We live in a world "...in which changing views about the future are capable of influencing the quantity of employment."[7] The current variables that are most directly affected by changing views about the future are financial variables. In particular the market valuation of capital-assets, the pricing of financial assets, and behavior with respect to liability structures by both businessmen and their bankers are clearly affected by current views about the future.

Keynes' theory makes the cyclical behavior of a capitalist economy a normal rather than an anomalous characteristic. The special financial attributes of a capitalist economy lead to such behavior. To Keynes, dealing with a sohpisticated financial system, the financing veil encompasses many more financial instruments than any narrow or even extended money concept includes. In particular, Keynes' financing views mean "...that money enters into the economic scheme in an essential and peculiar manner...."[8] This is in marked contrast to the classical and todays standard economic theory, for, in both, money does not affect the essential behavior of the economy.

Although there are interesting problems in the history of ideas revolving around why those aspects of Keynes' General Theory that point to the business cycle perspective on our economy were "lost", I will turn my attention to the development of the financial instability hypothesis. It is my contention that by building upon The General Theory as a work which endeavors to explain "...the phenomena of the Trade Cycle"[9] theory that is better suited for our time and problems than both the monetarist and standard Keynesian versions of current theory emerges.

Neo-classical theory is suspect on two grounds. One is that it is incapable of assimilating money and capital-assets of the kind that we actually have.[10,11] The second is that it cannot explain the instability the economy hsa exhibited over the past decade. The vaunted empirical stability of the demand

for money, which is basic to the monetarist branch of neo-classical theory, was a transitory phenomena of the early post war years, when the financial system was unusually robust.

One fact about experience since World War II is that the first fifteen to twenty years after 1946 were characterized by the absence of any serious threat of a financial crisis, or a debt deflation process such as Irving Fisher[12] described, and that three threats of a financial crisis have occurred in the past decade. The first such threat, the credit crunch, occurred in 1966.[13] The second occurred in 1970; the immediate focus was the commercial paper market. The third occurred in 1974-75 and is still not fully resolved. This latest crisis involves a multitude of over extended financial positions, but can perhaps be identified as a crisis centering around the speculative activities of the giant banks. The first two threats were successfully aborted by the Federal Reserve, the third threat seems to be persisting, perhaps because it affects core elements of our financial structure and its very size.

This recent financial instability is a recurrance of phenomena that regularily characterized our economy before World War II; it is reasonable to view financial crises as systemic rather than accidental events. The period immediately after World War II, in which financial crises were absent, is the anamoly which can be explained away by the financial structure that resulted from a Great War following hard upon

a deep depression. Since the middle sixties the historic, crisis-prone behavior of an economy with capitalist financial institutions has reasserted itself. The past decade differs from experience before World War II in that embryonic financial crises have been aborted by a combination of support operations by the Federal Reserve and financial effects that flow from an immensely larger government sector. However, this success has had the side effect of an accelerating pace of inflation after each success in aborting a financial crisis.

Looking at the economy from Wall Street, we see a paper world - a world of inherited commitments to pay cash today and in the future. These cash flows are a legacy of past contracts in which money today was exchanged for money in the future.[14] In addition we see deals being made in which commitments to pay cash in the future are exchanged for cash today. The viability of this paper world rests upon the cash flows (or gross profits after out-of-pocket costs and taxes) that are generated by business organizations, households, and governmental bodies, such as states and municipalities.

We will focus on business debt, the debt that is essential to a capitalist economy. The validation of such debt requires that prices and outputs be such that businesses earn a large enough surplus over labor and material costs either to fulfill the gross payments required by debt or to induce refinancing, which will take place only if validating future gross profits are expected.

Roughly speaking gross profits in the production of consumer goods depend upon the expenditures on consumer goods by wage earners in consumption goods production and those who receive wage income from other than the production of consumer goods. If we make the simplifying assumption that wage income is received from the production of consumer and investment goods, and that only wage income is spent on consumption goods, and all of wage income is so spent, then the markup on labor costs in the production of consumer goods will be the wage bill in the production of investment goods.[15] This simple formulation can be expanded to allow for wage income from state employment, income received from transfer payments, and consumption spending out of profits. Total spending on consumer goods yields a realized markup on labor costs in the production of consumer goods. The markup on labor costs generates the gross profits from operations, and the cash available to meet debt commitments is these gross profits after taxes.

Gross profits after taxes are the funds available for the validation of the debts which were entered upon to finance control over capital-assets used in production. Furthermore the excess of gross profits after taxes over the debt payment commitments is the cash flow that accrues to equity share holders. Equity share prices are the result of capitalizing such residual cash flows. Equity share prices - which fluctuate in a world with Wall Street - are a determinant of the market valuation of capital-assets collected in firms. The market

value of capital-assets determines the demand price for investment goods, which together with supply and financing conditions determines investment.

Profit margins in the production of investment goods are not determined in such a direct manner as for consumption goods. However, as profit flows are always determined by the relative scarcity of specific capital-assets, we know that the relative scarcity of such capital-assets, and thus the difference between gross revenues and wage costs in the production of investment goods, is a function of the pace of investment. The funds that are available to meet commitments on debts of both consumer and investment goods producers are a function of investment, so that present acceptable liability structures reflect speculations on the course of future investment.

If our world includes government purchases of goods and services and transfer payments, then gross profits in the production of consumer and investment goods also depend upon the deficits that governments engender. Thus in our present world, a sharp shift to government deficit financing - as occurred in the four quarters 1974IV-1975III - will sustain demand and even increase profits. This big government reaction offsets a tendency for the debt sustaining capacity of the economy to diminish whenever accumulated household and business debt lead to financial market disturbances that induce a decline in consumer and business spending. The economy has behaved differently in the post-war period than in earlier epochs mainly because of the

increase in the relative size of the Federal Governments; not necessarily because of any greater skill of policy makers.

The behavior of our economy depends upon the pace of investment. In a capitalist economy the valuation that is placed upon capital-assets, which determines investment, and the ability to fulfill contractual commitments, which determines financing possibilities, depend critically upon the pace of investment. The ability to finance new investment depends upon expectations that future investment will be high enough so that future cash flows will be large enough to validate debts that are used to finance investment.

An economy with private debts is an economy which is vulnerable to changes in the pace of investment. The instability that such an economy exhibits follows from the subjective nature of expectations about the future of the economy and the subjective determination by bankers and their business clients of the appropriate liability structure for the financing of positions in particular types of capital assets. This is a world in which uncertainty, in the sense of Keynes, is a major determinant of the path of income and employment.

The natural starting place for analyzing the relation between debt and income is to take an economy with a cyclical past that is now doing well. The inherited debt reflects the history of the economy, which includes a period in the not too distant past in which the economy did not do well. Acceptable liability structures are based upon some margin of safety so

that expected cash flows, even in periods when the economy is not doing well, will cover contractual debt payments. As the economy does well for an extended period two things become evident: the existing debt burden is easily maintained and those units that depend more heavily upon debt prosper. As a result, over a period in which the economy does well, views about how well the economy will do become more optimistic. This transforms the economy into a boom economy. Stable growth is inconsistent with the manner in which effective investment is determined in an economy in which debt-financed ownership of capital-assets exists and in which the extent of such debt-financing is market determined. The fundamental instability of a capitalist economy is upward: the tendency to transform doing well into a speculative investment boom is the basic endogenous disequilibrating factor.

Innovations in financial practices are a feature of our economy, especially when things go well. New institutions, such as REIT's, and new instruments, such as negotiable C.D., are developed and old instruments, such as commercial paper, find new uses. But each new instrument and expanded use of old instruments increases the amount of financing that is available and which can be used for both investment and the taking of positions in inherited capital-assets. Increased availability of finance bids up the prices of capital-assets relative to the prices of current output and this leads to increases in investment. The quantity of relevant money, in an economy in which money conforms

to Keynes' definition, is endogenously determined. The money of standard theory - be it the reserve base, demand deposits and currency, or a concept that includes time and savings deposits - does not catch the monetary phenomena that are relevant to the behavior of our economy.

In our economy it is useful to distinguish between hedge and speculative finance. Hedge finance takes place when the cash flows from operations are expected to be large enough to meet the payment commitments on debts. Speculative finance takes place when the cash flows from operations are not expected to be large enough to meet payment commitments, even though the present value of expected cash receipts is greater than the present value of payment commitments. Speculating units expect to fulfill obligations by raising funds by new debts. A "bank" normally engages in speculative finance. The REIT's, airlines, and New York City engaged in speculative finance in 1970-73. Their difficulties in 1974-75 were due to a reversal in present values (the present value of debt commitments exceeds the present value of expected receipts) due to both increases in interest rates and a shortfall of realized over previously anticipated cash flows.

During a period of successful functioning of the economy both debts and speculative finance are validated. However, whereas units that are engaged in hedge finance depend only upon the normal functioning of factor and product markets, units which are engaged in speculative finance also depend upon the

normal functioning of financial markets. In particular they are vulnerable to higher interest rates. Whereas a money supply rule may be a valid guide to policy in a regime dominated by hedge finance, such a rule loses its validity as the proportion of speculative finance increases. The Federal Reserve must pay more attention to credit market conditions as the importance of speculative financing increases.

Two things enter into the dependence upon financial markets by units engaged in speculative finance. One is that they must meet the market as they refinance debt. A rise in interest rates can cause their cash payment commitments relative to cash receipts to rise. Furthermore the views as to acceptable liability structures are subjective, and any shortfall of cash receipts relative to cash payment commitments can lead to quick and wide revaluations of desired and acceptable indebtedness. Whereas experimentation with extending debt structures can go on for years and is a process of gradual testing of the limits of the market, the revaluation, when anything goes wrong, can be quite sudden and quick.

As debt structures are elaborated, the margins of safety between cash flows from operations and cash flows committed by debts decrease. Not only does the ratio of speculative finance increase, but simultaneously the ratio of 'cash kickers' in the form of money and default free, easily marketable assets in portfolios decreases.

In addition to hedge and speculative finance we can distinguish Ponzi finance - a situation in which cash payments commitments on debt are met by increasing the amount of debt outstanding. High and rising interest rates can force hedge financing units into speculative financing and speculative financing units into Ponzi financing. Ponzi financing units cannot carry on too long, and feedbacks from revealed financial weakness affects the willingness of bankers and businessmen to debt finance investment. Unless offset, the decline in investment leads to a decline in profits and in the ability to sustain debt. Quite suddenly a panic can develop as the pressure to achieve lower debt ratios increases.

A full fledged crisis can be aborted by the Federal Reserve intervening to assure the refinancing of debt. The decline in investment and consumer debt-financed spending that follows after an aborted crisis leads to a decline in income. In todays economy positive fiscal actions and the built-in stabilizers lead to massive government deficits as income falls. Such deficits sustain income, sustain or increase corporate profits, and feed secure and negotiable financial instruments into portfolios hungry for safety and liquidity.

The above sketch of financial instability fits what we know has happened recently.[16] In a world with the sharp turn abouts in income we have experienced over the past five quarters, the increases and decreases of interest rates, and the

epidemic of financial restructuring, bailouts, and outright bankruptcy there is no need to present detailed data to show that a theory which takes financial instability seriously is relevant for our economy.

Policy implications follow from the financial instability hypothesis. One is that fine-tuning, except as a transitory phenomena, is an impossibility within the existing financial framework. Another is that policies which work in one financial regime - such as the robust finance of 1946-65 - may not be effective in another regime, such as the fragile finance that has ruled in the past decade. A third is that in order to do better than hitherto we have to establish and enforce a financial society in which the tendency by business and bankers to speculate is more severely constrained.

FOOTNOTES & REFERENCES

Financial Instability Hypothesis
Interpretation of Keynes*

*An earlier version of this paper was presented before the 1975 ASSA Convention, Society of Government Economists, Dallas, Texas, December 29, 1975.

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