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Hyman P. Minsky Ph.D.

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SALIENT ATTRIBUTES OF POST-KEYNESIAN ECONOMICS

Hyman P. Minsky
The Jerome Levy Economics Institute
Bard College
Annandale-on-Hudson NY 12504

note!

1. the non-neutrality of money also implies the non-neutrality of money wages and of monopoly positions that are capitalized into asset prices.

A. The following analysis registers my final escape from the confusions of the Quantity Theory, which once entangled me.

B. I regard the price level as a whole as being determined in precisely the same way as individual prices; that is to say under the influence of supply and demand. Technical conditions, the level of wages, the extent of unused capacity of plant and labour, and the state of markets and competition determine the supply conditions of individual products and of products as a whole. The decisions of entrepreneurs, which provide the incomes of individual producers and the decisions of those individuals as to the disposition of their incomes determine the demand conditions. And prices - both individual prices and the price-level - emerge as the resultant of these two factors.

C. Money and the quantity of money are not direct influences at this stage of the proceedings. They have done their work at an earlier stage of the analysis.

D. The quantity of money determines the supply of liquid resources, and hence the rate of interest. and in conjunction with other factors (particularly that of confidence) the inducement to invest, which in turn fixes the equilibrium level of incomes, output and employment and (at each stage in conjunction with other factors) the price level as a whole through the influences of supply and demand so established.

John M. Keynes. Introduction to
the French edition. (1)
Collected Works Vol ~~13~~ pp. ~~xxxx~~ .x xxv.
vii

?

intervention can be constructive

11. Requirements for a serious depression
12. Post war stabilization policy.

I. Introduction

A commonplace of the current discourse, whether the forum be the press or learned Journals, is an assertion that Keynesian Economics is dead. Like peace the economics of Keynes has never really had a chance. Post-Keynesian economics, while not wedded to taking every scrap of Keynes' General Theory and after writings as gospel, is a tendency in economics that aims to give

Keynes a chance: *The basic premise of Post-Keynesian Economists is to seriously take Keynes' strategy - that he was engaged in a project to revolutionize "economic theory" - as the unifying discipline - it is*
 Perhaps the ~~sole~~ ^{One} unifying element in the economics of the

economists to whom the label Post Keynesian is attached is that the equilibrium interpretations of Keynes that followed the lead of JR Hicks' Mr. Keynes and the Classics missed the point of the General Theory. The programs of research, interpretation and abilization policy.

- (1) I have taken the liberty of breaking what Keynes wrote in one paragraph into four passages.
- 2. See Klammer's for the disdain that most
of the mainstream economist hold the Post Keynesian thrust: in particular I relish the comments of Robert Solow. Post Keynesian analysts has done better at analysing and explaining the progress

implementation that followed this ² lead ¹ to interpreting the

message of the General Theory were misdirected. These ~~se~~ research

inspired by Hicks and Modigliani
programs led to

1. the neo-classical synthesis, which in attempting to integrate the economics of the General Theory with equilibrium economic theory ended up subordinating it to the barter oriented general equilibrium theory, and

2. the ad hoc econometric forecasting models, which ignored the innate interdependence of the monetary - financial dimensions and the investment - consumption - production - employment aspects of a capitalist economy.

3

ining the progress of the advanced capitalist economies over the 1980's and 90's than the representative orthodox economist.

2. The introduction of a simplistic supply and demand for labor as determining an equilibrium employment and real wage which dominate the aggregate demand determining relations in setting the equilibrium of the economy is the key step in forcing the Keynes structure into an equilibrium framework. The result has been the research program which requires the macroeconomic the research program which requires the macroeconomic relations to conform to what are taken to be microeconomic conditions.

3 These forecasting models were initially derived from the tools of macroeconomic planning during World War 2. During the war economy and the early post war period the close interrelations between investment and the banking and financial structures were attenuated. It is not at all surprising that models which ignored finance were adequate for forecasting purposes in the first decades after world war 2 and of decreasing

*Just as
he now
for
capitalist
economy.*

The Post Keynesians take the commandment for economic theory, "Thou shalt not dichotomize ~~what is commonly called~~ the real from the monetary and financial in explaining the behavior of a capitalist economy," as the main message of the General Theory: this message was lost in the development of mainstream macroeconomics. A major proposition of the post-Keynesian view is that the General Theory pointed towards a rejection of the notion of equilibrium as a state towards which the economy gravitates and from which, once achieved, it will deviate only as a result of exogenous shocks. Keynes did write in terms of short period equilibria, but Keynes used the term equilibrium in the peculiar Marshallian sense in which an equilibrium is a set of values that are implicit in a concatenation of conditions that may be assumed to be unchanging for the purposes of an argument, but which, in fact, do change, in a not necessarily deterministic

4. That is at several points in his argument Keynes assumed that there was an equilibrium implicit in a set of initial conditions and adjustment processes, but the very changes that the search process for this equilibrium brings about will change both the initial conditions and the search process. Therefore, at best,

manner, as a result of the processes which start from a momentary set of values.

As a result Post-Keynesians view the economy as a set of interdependent processes whose behavior generates the economy's path through real calendar time. The interacting endogenous processes often produce outcomes of apparent coherence but for time to time the result tends to become incoherent.

What has passed as Keynesian economics is a variant of equilibrium analysis in which the equilibrium need not be at full employment and economic policy could be effective in altering the level of employment. Neither underemployment equilibrium nor policy effectiveness is sufficient to make an argument Post-Keynesian. The salient attributes that make an argument Post-Keynesian is that financial institutions and the organizational

the implicit equilibrium is a changing even as adjustments are made on the basis of existing disequilibria. There is no need for convergence in such a process to a unique equilibrium. . cite JR Hicks and Oscar Lange. Keynes was not without responsibility for the integration of his theory into the "equilibrium" structure of neo-classical theory. He speaks of the equilibrium of the orthodox theory as one of a multitude of

characteristics of product and labor markets are integrated in the determination of the path of the economy through time.

A passage from Keynes' introduction to the French edition of the General Theory is the "Motto" or taking off point for this exposition of Post Keynesian Theory because of three statements Keynes makes: The statements are:

1. ~~the emphasis upon~~ escaping "from the confusions of the Quantity Theory",

2. ~~the proposition that~~ "money and the quantity of money are not direct influences" upon the level of output prices which are determined "under the influence of supply and demand" and

3. the assertion that money and the quantity of money "have done their work at an earlier stage (prior to the determination of the prices of outputs) of the analysis". $\pi \downarrow$ This earlier stage is the

analysis of those markets in which the prices of capital assets, the liability structures used in financing positions in capital

one of a multitude of possible equilibria and, he accepted, however mistakenly the JR Hicks interpretation of his theory. ion of his theory.

assets and the pace in the aggregate of investment activity is determined.

The problem that Keynes set for himself, to "escape from the confusions of the Quantity Theory," remains a valid problem for economists. Whether the problem being faced is the reform of capitalism, in the light of a deterioration in performance, or the creation of capitalism, in the aftermath of the breakdown of command socialism, almost always the advice offered by an economist of the economic advising establishment reflects "the confusions of the Quantity Theory". ~~But~~ ^{the} essential attribute of the quantity theory of money is the neutrality of money. The incongruity of offering advice on the construction of a financial system on the basis of an economic theory which can find no place for money is disregarded by the advice givers and the advice receivers. Without understanding how capitalist economies integrate the so called financial and real aspects of the economy and the consequences of alternative institutional arrangements it

. This statement may well have been Keynes' last comment upon

becomes a matter of chance whether policies will contain the endogenous tendencies for market economies to fly off into incoherent ^e behavior or channel the dynamic forces of capitalism to assure that creative ends are attained.

2. Neutrality

The essential aspect of the Quantity Theory of money is not that the price level is determined by the quantity of money, but rather that money is neutral. ⁵ In the various resurrections of the Quantity Theory transitory non neutrality of money is achieved by introducing dumb workers and smart bosses (Friedman)

upon the substance of the General Theory.

. There has been a large literature on the micro-foundations of macroeconomics

⁵ The exchange between W. W. Leontief and J. M. Keynes in the Quarterly Journal of Economics in 1937 is worth recalling. Leontief pointed out (quite incorrectly I believe) that Keynes assumed that the economy was neutral {Leontief used the term homogeneous of degree zero} with respect to changes in money wages. Keynes' reply was that the orthodox theory blandly assumed that the economy was homogeneous of degree zero with f degree zero with respect to the quantity of money and that this is an heroic assumption. eventually get the exact citation.

. Such transitory non-neutrality can lead to deviations from an assumed equilibrium. Ever since Frisch and economists have been aware that a moving average of random deviations will

Slutsky

and confused bosses who cannot differentiate between relative and absolute price movements (Lucas). But such non neutrality is transitory and

"Any economic model is going to have at its center a collection of hypothetical consumers whose decisions, together with the technology and market structure, determine the operating characteristics of the system and whose welfare is the explicit subject of normative analysis." ↵

This doctrine of consumer sovereignty is an asserted attribute of economies. The Post-Keynesian framework of analysis recognizes that the investment decisions in a modern capitalist economy are removed by quite a few levels of market participants

from the hypothetical consumer. ^{To a Post-Keynesian} ~~Perhaps~~ the parenthetical bow to ^{to check on} market structure, ^{to check} ~~in the~~ Lucas ^{is a naturally} ~~assertion~~ _(s), is of comprable or

will exhibit cyclical properties. Much of the real business cycle theories literature is a case of old wine in new bottles. ↵ R. Lucas Models of Business Cycles, Yrjo Jahnsson Lectures, Basil Blackwell 1987 p. 20) The authoritarian tone of Lucas' assertion is worth noting: "Any economic model is going ..." implies that anyone who rejects the simplistic view of households and production used in neo-classical theory and insists upon an institutional context or who doesn't go along with the idea of consumer sovereignty, (that an economic model must explain how consumers are sovereign is not creating an economic model. Because of the ideological content of economics there is a strong pressure for theoretical conformity and wide support for an

greater significance in determining system behavior through time than the consumers to whom Lucas assigns ~~such power~~ ^{central significance}.

In ~~this view~~ the view stated by Lucas the objective of economic behavior is to maximize the present value of expected consumption sequences: this is not in any sense a result proven within the theory. Consumer sovereignty is a postulate, not a theorem, of neo classical economics.

The "escape from the confusions of the quantity theory" requires the development of an economic theory in which the non neutrality of money is an essential theorem: i.e. non neutrality is derived from the structure. Frank Hahn has often stated that the Arrow Debreau model, which he considers the best available re for theoretical conformity and wide support for an enforcer of orthodoxy.

In a similar vein ^{Frank Hahn} ~~Milton Friedman~~ asserted . "The most serious challenge that the existence of money poses for the economic theorist is this: the best developed model of the economy cannot find room for it. The best developed model is, of course, the Arrow-Debreau version of a Walrasian general equilibrium. " F.H. Hahn "Money and Inflation", MIT Press, Cambridge Mass. 1983. To this economist Hahn's acknowledgement implies that a search must start for an alternative to the Arrow-Debreau / Walrasian theory. Hahn backs off from that implication of his remark by noting "A first, and to a fastidious theorist difficult, task is to find an alternative construction without thereby sacrificing the clarity and logical coherence that are such outstanding features of Arrow-Debreau." But the history of science indicates that a "new theory" will never satisfy Hahn's

starting place for serious economic analysis, has no place for
(u)
money. This follows from the axiom of the reals, that ultimately
agents care only about the real variables, Lucas' flows of
consumption through time, and the mechanisms of the economy
transfer this concern into the behavior of the economy.

Within any model based upon the Lucas or Hahn specification
of what it is that economics studies, money can only affect
behavior as it affects the formation of expectations. However as
invariant preferences and production technologies determine the
stream of output and its distribution - in neoclassical theory
distribution is but another facet of pricing - the impact of
monetary changes is at most transitory. This is so because if

fastidious theorist: an initial sacrifice of clarity and logical
coherence is a necessary step in scientific progress. Science
progresses by first recognizing that there are "too many"
observations that are anomalies with respect to the normal
science and the construction of a rough and ready model which
covers the anomalies even as there are holes in the logic and
ambiguity in the concepts. It takes the work that follows the
breakthrough to cover the holes and remove the ambiguity. This
implies that for a discipline to be a science the discipline as a
whole needs to stand ready to discard well worked out theories
and to start anew on the task of clarification and precision when
a theory which covers the holes appears in a rough and ready
form.

Incidentally when one cannot find any room for money one cannot

units really know the structure of the economy and know what was happening to money and why, they will adjust their behavior so that the impact of a monetary change is nil. In this view fiscal policy, in the sense of government deficits or surpluses, can affect the economy only as it changes the quantity of money in a manner that could not be anticipated: the view is that all demand management policies operate by surprises that impact upon agents as unanticipated changes in the money supply.

However such surprises have only transitory impacts upon real economic behavior; their only lasting effect is upon the price level. The surprise has an initial effect by affecting relative prices. As the reactions to the surprise works their way through the economy relative prices and outputs return to their natural levels as determined by productivity and preferences. In this way the quantity theory of money is validated.

3. New Keynesian

Within the Lucas specification, the money neutrality result can be overridden by making expectations something other than the outcome of a learning process in which agents find out how they fit into the preference system - production function structure which determines the equilibrium of the economy. This has spawned a new Keynesianism which makes much of the structure of information and the possession of private (asymmetric) information which leads to the system deviating from the result mandated by preferences and technology. Policy is conditionally effective if it affects the deviation or reinforces the market imperfections. Non-neutrality is achieved not as a fundamental property of the system but as result of special assumptions; ie imperfections.

The result of this Neo keynesian methodology is the game "My Rabbi is holier than yours", i.e. my special assumption on

expectation formation or market imperfections is better than yours.

⁴ The Rationality of Agents.

The units in Post Keynesian analysis are broken down into following classes household, businesses, "bankers" and governments. Each agent in these classes of units ~~is a~~ seeks his own good as modified by the ethics of the culture and each organization, household, business, bank or government, has a problem of coordinating the self seeking of ~~its~~ ^{the agents it employs} units into an effective team ^{where} behavior ~~that~~ promotes the achievement of the unit's objectives, ^{as set in the capitalist economy - in an autocratic fashion.} Maintaining moral is a problem of any organization that depends upon team behavior:

but the "world" is not.

The agents are rational, ^{between PK + the institutional} The Post Keynesian position on rationality is "How does a rational animal behave in a world that is not fully understood and whose laws of change are but dimly perceived." The question at issue ^{is not} ~~is~~ rationality, it is the ~~not~~

imperfection of foresight. The post Keynesians sticking point is on the neoclassical assumption of perfect foresight, and ~~As we~~ ^{of the neoclassical literature} "a consistent equilibrium is a point that all understand the basic, arrow debreau proofs, depend upon the ^{rather than perfect foresight.} assumption of perfect foresight. Post Keynesians, ~~going along~~

~~The post Keynesian~~ with Keynes, ~~accept that a rational~~ rational animal recognizes that he ^{she} may be wrong. This implies that ~~unlike neoclassical~~ ^{a post Keynesian rational agent} theorists he is willing to admit that ^{she} he was wrong and to admit that he ^{she} does not understand the rules that guide the behavior of the world. ~~Such a rational agent~~ allows ^{will} events to change

^{of such an agent does not lead to a VK.} behavior: preference systems that affect choices that involve

risk change as events unfold. Such a rational animal would

^{learn the lesson of a bank under} participate in ^{the} leveraged buy outs ^{during} of the 1980's and turn ^{his} credit standards ^{down} around and impose ^a credit crunch in the 1990's. ^{is} evidence

in what follows that the self knowledge of volatility will be particularly evident in portfolio policies and in the relative prices of different financial instruments as well as the price level of capital assets relative to

IV. The Economics of Capitalism

^{the price level of} ^{of current output} *

* It was obvious to all who observed the U.S. economy between 1929 and 1933 that the C/P fell by some 30%. even as the Dow Jones fell by 85%.

It is obvious that more structure than is embodied in the pure Arrow Debreau model is needed if the consumption stream only postulate of Lucas and the axiom of reals of Hahn are to be abandoned and if money is to be non-neutral for causes more fundamental than the asymmetry of information. Chapter 1 of The General Theory reads:

I have called this book the General Theory of Employment, Interest and Money, placing the emphasis upon the prefix general. The object of such a title is to contrast the character of my arguments and conclusions with those of the classical theory of the subject, upon which I was brought up and which dominates the economic thought, both practical and theoretical, of the governing and academic classes of this generation, as it has for a hundred years past. I shall argue that the postulates of the classical theory are applicable to a special case only and not to the general case, the situation which it assumes being a limiting point of the possible positions of equilibrium. Moreover, the characteristics of the special case assumed by the classical theory happen not to be those of the economic society in which we actually live, with the result that its teaching is misleading and disastrous if we attempt to apply it to the facts of experience."
(G. T. p3)

The attributes of the "economic society in which we actually live" include bankers and clients of bankers and firms (corporations) that are the proximate owners of the capital assets of the economy. Households, as the ultimate owners of wealth, own not titles to capital assets but financial instruments which are liabilities of firms, banks, and other financial institutions. That is the economic society is capitalist.

Keynesian economics is not "General", it is the economics of a modern capitalist economy. The General Theory is virtually "Schumpeterian" in the praises it bestows upon entrepreneurship. As a result Post Keynesian economics is one variety of analytical institutionalism. The behavior of the economy is affected by institutional changes, that are themselves the result of self seeking activities and adjustments to past behavior. There is a

nd any room for money on cannot find any room for finance and therefor one cannot explain the capitalist investment process.

nothing works forever aspect to the attitude towards policy that flows from the keynesian view.

Bankers and clients of bankers live in an $M > C > M'$ world: a project is financed, M is exchanged for promises to pay M' in the future, this M is spent on C , capital assets and produced investments, and the operations of capital assets in the economy yields M' . If all goes as envisaged when the initial contracts are written, M' is greater than M . Anticipated cash (money) flows are what sets the process off: the anticipated M' has to be sufficiently greater than M to overcome the doubts of the entrepreneur and the banker. The structure of the model for such an economy must include bankers and units that finance activity by using advances from bankers at the beginning, not as an afterthought. Thus the structure of the model has to include consuming units which own wealth, investing units which owe funds to financing units and banks and banking units which finance investment and provide instruments to households. Each agent in

these classes of agents is a "self interest" operator, who transacts in pursuit of personal gain. Bankers are self interest operators and the structure of banking in an economy evolves in response to perceived possibilities of personal gain.

Monetary variables are in general liabilities of bankers. Non-neutrality of money requires that the monetary variables enter in an essentially different way in different parts of the system. Keynes' solution to this problem was to separate aggregate demand into investment and consumption demand and allow for two sets of prices, the prices of current output, including investment output (the CPI), and the prices of capital and financial assets (the Dow Jones). The proximate determinants of these two sets of prices are quite different.

Manufacturers and commercial firms recover their costs by way of the prices of current outputs. In addition these prices carry profits in the form of realized mark ups on costs. It is these mark ups which enable units to meet their obligations to

the owners of their liabilities. these current prices are those of investment and consumption utputs.

The prices of capital assets are the present value of expected future profits capitalized at a rate which allows for the problems that are forseen in acheiving these profits. The current market value of equity shares plus the current market vakue of outstanding long and short term debts minus the market value of the financial instruments owned by a firm are the current market value of a firm's capital assets as they are imbedded in the firm's market position.

V. The Formation of the Price Level of current output

Let us return to the passage I used from Keynes' introduction to the French edition as the Logo for this chapter. To Keynes the price level is determined under the influence of supply and demand.

Whereas money or finance or credit enters in an essential way in Keynes investment theory, money, credit and finance do not enter in an essential way in his theory of consumption.

All economists are all familiar with one non-neutral money model. It is the fixed money wage IS-LM model of Hicks. The IS-LM model without a labour market and

without the Patinkin effect that has Δw shifting the C fn. in an appropriate way.

A bit of the history of thought. Pigou had a labour market determination of output prior to Keynes. One objective of the General Theory was to create a model of the economy in which the standard labour market equilibrium was not the determinant of an economy's normal state or center of gravity. Most well trained economists were unwilling to give the monetary-financial sphere

the full partnership in determining aggregate demand that Keynes work pointed towards. The Modigliani Miller theorem asserted that liability structures do not matter: the financial system cannot affect decisions.

Recent work by Caskey and Fazzari, Delong and Summers, Solow and Hahn tend to validate the Keynesian Theorem that if appropriate circumstances rule then an initial condition of unemployment is likely to be made worse, not better by price level flexibility. In this work, if $dp/dt < 0$ then either or both of the burden of private debts increases or the real (price level adjusted) interest rate increases.

Keynesians and macro-economists in general need to distinguish between relative price flexibility and price level flexibility. Relative price flexibility serves a useful purpose in resource allocation whereas the usefulness of price level flexibility in response to excess supply is questionable.

3 The burden of debt is a useful concept for macroeconomic research. We distinguish classes of units in debt: business, households, government and international. During each accounting period a portion of the revenues of each economic agent has been prior committed by debt, equity and lease contracts: these prior commitments are on account of both principle and interest. In the stripped General Theory - Kalecki derived model we have for business firms

$$P_i = I, \text{ Profits equals investment.}$$

In the more complete statement we have

$$P_i = I + \text{Gov. Def} - \text{Bal Tr Def} + C(P_i) - S(w).$$

Internal finance is:

$$\text{Int Fin} = \text{Pi} - \text{Tx}(\text{Pi}) - (\text{Int} + \text{Prin}) \text{Bnds} - (\text{Int} + \text{Prin}) \text{Lns} - \text{Cust Div.}$$

The Minsky Diagram.

P

R

I

decision or

C

ex post.

E

INVESTMENT

Aggregate internal funds is a rectangular hyperbola in the price investment plane. For a fixed aggregate Profits (Pi) the greater the tax rate on profits, the level of indebtedness, the

interest rate and the traditional dividend the smaller the aggregate internal funds.

Lenders and borrowers risk enter into the determination of investment. The P_k depends upon expectations of future P_i , upon the model of the economy that the agents of the economy whose expectations are relevant to investment have.

4. Outline of the Post Keynesian View.

1. The subject is capitalism

A. Characterization of Capitalism

This has taken on increased importance with the dissolution of the Stalinist model of socialism.

B. Varieties of Capitalism

2. Capitalist economy -> capital assets, bonds, firms as well as current output have prices: -> two sets of prices.

$$A. P(K) = K(q, c, l)$$

1. money enters pricing of assets through l and c
2. financial institutions integral to determining $P(K)$

$$B. P(O) = C(W, r, \text{Mkt } P_w)$$

1. W as a cost and P as a way of recapturing costs and a carrier of profits. Treating P as a way of recovering costs and a carrier of profits immediately focuses on business and banker decisions as being vital. Whereas households may be viewed as being solely concerned with the future flow of consumption, business and bankers in particular are concerned with the future flows of money.

2. Wage setting institutions as anchoring $P(O)$ and the link between aggregate demand and price level changes is conditional upon the institutional structure. Weak or strong trade unions: Do the firms sell commodities or products?

3. $M \rightarrow K \rightarrow M'$, $K \Rightarrow \text{Pi}$ (profits). Pi validates the contracts that exchange M for M'. This cash flow perspective is an adaptation of points made by marx.

4. Investment is the result of decisions made by business men that are financed. The standard Minsky diagram as taken up above.

5. The structure of payment commitments (liabilities), Hedge Speculative and Ponzi Finance as determining the vulnerability of the system to financial shocks.

6. Special Minsky Hypothesis w/r/t/ the structure of liabilities through time

A. Hedge \Rightarrow Speculative \Rightarrow Ponzi.

B. Profit seeking financial institutions as
merchants of debt.

1. Profits equation for banks
2. The evolution of banking
3. Bankers as merchants of debt.

C. Making position by selling out position -> PK
collapses

1. Central Bank Prevents PK from collapsing
2. Gov. Def. Sustains Profits -> PK is

sustained

7. Profits (Π). Determination and prior commitment of
through the liability structure. The complete Kalecki structure.
(taken up above)

8. Yesterday, today, and tomorrow, Tomorrow introduces
a subjective element in decision making Tomorrow can exist today

only in the minds of decision makers. How are the relevant ideas about tomorrow formed today. The agents in the model have a model of the model. The two model hypothesis of Ben Friedman.

9. Hysteresis, chaos, deep structures; natural outgrowth of complex non linear dynamics.

A. Built in Stabilizers, Floors and ceilings.

B. Discretionary stabilizers

C. Thwarting incoherence

10. Intervention: the floors and ceilings arguments

A. Intervention can do nothing but mischief

B. intervention can be constructive