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THE ESSENTIAL CHARACTERISTICS OF POST-KEYNESIAN ECONOMICS

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

absolute money prices.

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. Collected Works Vol 13 pp. (one paragraph is broken into parts to help in the exposition).

A commonplace of the current discourse, whether the forum be ~~columns~~ in the press or articles in learned Journals, is the ~~assertion~~ ^{assertion} ~~proposition~~ that Keynesian Economics is dead. Like Peace the economics of Keynes has never really had a chance. Early in the expository history ^{that followed the public's lead} of The General Theory, Keynes' attempt to change the focus of economic theory, which was the deep aim of

the General Theory, was lost as Keynesian economics became a variant of equilibrium analysis.¹

I have selected a passage from Keynes' introduction to the French edition as the "Motto", or taking off point, for my exposition of the Essential Characteristics of Post Keynesian Theory, because of the emphasis upon escaping "from the confusions of the Quantity Theory" and the proposition that "money and the quantity of money are not direct influences" upon the level of output prices for "they have done their work at an earlier stage of the analysis". This earlier stage being where the prices of

capital assets, the financing of positions in capital assets and the pace of investment activity are determined.

There has been a 12-13% increase in the 1. creation of the 'microeconomic' focus of macroeconomics: Keynes in his introduction to the French edition argued that the 'microeconomic' level was not to "escape from the confusions of the Quantity Theory." remains a valid problem for economists of our time. Whether the problem of the currency, and therefore the price level of currency, is being faced by

an economist of the economic advising establishment 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 reflects "the confusions of the Quantity Theory" and the contemporary version of the Neoclassical Synthesis, which is no more than the Quantity Theory dressed up.

The essential theorem of the Quantity Theory of money is not the price level theorem: the essential theorem is the neutrality

1. cite JR Hicks and Oscar Lange

of money.² In the various resurrections of the Quantity Theory transitory non neutrality of money is achieved by introducing dumb workers and smart bosses (Friedman) and confused ^{men & women} bosses who cannot differentiate between relative and absolute price movements (Lucas). ~~is not the~~ But such non neutrality is transitory and the economy follows the rule as stated by Lucas:

"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."³

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

2. 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 respect to the quantity of money and that this is an heroic assumption. eventually get the exact citation.

3 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 enforcer of orthodoxy.

In a similar vein Milton Friedman asserted

In this view the objective of economic behavior is to maximize the present value of expected consumption sequences: the axiom of the reals, i.e. only real things and relative prices matters, is enshrined as a postulate. It is not a theorem.

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 the normal case. Frank Hahn has often stated that the Arrow Debreau model, which he considers the best available starting place for serious economic analysis, has no place for money.⁴ This follows from what Hahn calls the axiom of the reals, that

4. "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 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 model which covers the anomalies even as it involves 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 science involves the willingness to discard well worked out theories and to start anew on the task of clarification and precision when a theory cannot cover something as major as money.

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

ultimately agents care only about the real variables - Lucas' flows of consumption through time.

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 preferences and production technologies determine the stream of output and its distribution - distribution is but another facet of pricing - the impact of monetary changes is at most transitory. This is so because if units really ^o knew the structure of the economy and ^o knew what ^{is} was happening to money and why they ^{will} ~~would~~ adjust their ^{IR} ~~re~~ behavior so that the ~~monetary~~ impact of

monetary changes

~~was~~ nil. In this view fiscal policy, in the sense of deficits or surpluses, can affect the economy only as it changes the quantity of money in a manner that could not be anticipated: all demand management policies operate by surprises that ^{show up in unanticipated} affect the money supply. However all such surprises have transitory impacts upon

real economic behavior. ^{As the surprise works its way through the economy it} monetary changes can only affect the ^{have a} money price level. ^{As the "surprise" works its way through the economy it} the quantity theory of money is validated.

As the surprise works its way through the economy it

Within the Lucas specification of the problem of economics ^{outputs relative to the "natural" rate as determined by production technology and preferences:} ~~and preferences:~~ for all that has changed in the price level the money neutrality result can be overridden by making

relation

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. Thus the new Keynesians ^{has described which} makes much of the structure of information and the possession of private

information (asymmetric) information which make the system

deviate from the result mandated by preferences and technology and which makes policy conditionally effective. Non-neutrality is achieved not as a fundamental property of the system but as result of special assumptions.

The result of this methodology is the game "my rabbi is holier than yours", i.e. my special assumption on expectation formation is better than yours. Questions of evidence and the

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meaning of better now enter.

The Economics of Capitalism

It is obvious that more structure 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 *and less transitory* 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 general theory are applicable to a special case only and not to the general case, the situation of 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 characteristics of the "economic society in which we actually live" include bankers and clients of bankers, firms (corporations) that are the proximate owners of the capital assets of the economy, *a layering of funds so that* and households, *as the owners of wealth own* not titles to capital assets, but financial instruments which are *even the equity liabilities of firms*

liabilities of firms, banks, and other financial institutions.

That is the economic society is capitalist, ^{not key} but it is modern capitalist ^{in that a complex, ever evolving system of financial institutions are integral to}

Keynesian economics is not "General", it is the economics of ^{the functioning of the economy} a modern capitalist economy. The General Theory is virtually

"Schumpeterian" in the praises it bestows upon entrepreneurship.

One aspect of this interpretation of Keynesian economics is that

it ^{is} ~~becomes~~ a type of analytical institutionalism, so that the

behavior of the economy will be affected by institutional changes

that are themselves the result of self seeking activities, and ^{individual}

adjustments to past behavior, ^{and legislative (admin) intervention to affect perceived} There is a "nothing works forever" ^{approach}

^{model functioning} aspect to the attitude towards policy that flows from the

Keynesian view: Policy and structure that is "set" for one structure become ^{"inapt" as learning and adaptation take place}

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 the

operations of C in the economy yields M', which if all goes as

envisaged at the initial contract is greater than M. Anticipated

cash (money) flows are what sets the process off: the 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

from bankers at the beginning, not as an afterthought. Thus

~~separate households~~ units have to broken down into (consuming units), ^{firm} (investing units),

^{financing} and (banking) units as a minimum structure that is needed if a capitalist ^{firm}

^{Because humans are fallible and corruption is always present} the human condition the ability to fulfill the promise in the future is

5. The General Theory of Keynes is best regarded as the special theory of a capitalist economy.

^{not condition} Every financial system must include "reserves" when

the ability to fulfill promises becomes a risk, whether the ^{firm} ^{may include a pound of flesh, debtors prison or a seizure of}

assets. Bankruptcy law and courts that enforce the law are ^{essential institutions in a capitalist economy. Working, labor}

model
is to be
study

Non-neutrality in a deep sense requires that the monetary variables enter in an essentially different way in different parts of the system. ^{The part is} Keynes' solution to this problem ^{is} was to separate aggregate demand into investment, ^{and government} and consumption demand and by ^{allowing for} having two sets of prices (the prices of current output, including investment output (the CPI), ^{and government is a distinct volume} and the prices of capital ^{is a distinct volume} and financial ^{instrument} assets (the Dow Jones) ^{is a distinct volume} whose proximate ^{of the two sets of prices} determinants are quite different. Fundamentally, ^{learn as} the prices of

current outputs are the way in which manufacturers and commercial firms recover their costs. ^{and carry whatever profits market and macroeconomic} In addition prices carry profits ^{and thus allow these profits to be carried by firms prices are what allow} which enable units to meet their obligations to the owners of ^{firms to meet their payment commitments and what after tax div. send} their liabilities. ^{a capital provider has "interest" finance for firms}

Let us return to the passage I used from Keynes' introduction to the French edition as the Logo for this ^{chapter} 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 ^{d. d} was not ~~the determinant~~ ^e of an economy's normal state or center of gravity. Most well trained economists ^{(see from our notes) are} 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

PI
P_i

P_i = I, Profits equals investment.

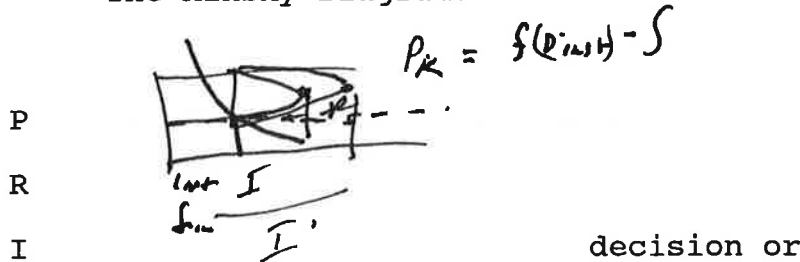
In the more complete statement we have

Pi = I + Gov. Def - Bal Tr Def + C(Pi) - S(w).

Internal finance is:

Int Fin = Pi - Tx(Pi) - (Int + Prin) Bnds - (Int + Prin) Lns - Cust Div_a - λ(s by la)
 λ(s by la) = w_o p_o + a v_o l_o c_o ⇒ C(P_o)

The Minsky Diagram.



C

ex post.

E

INVESTMENT

Aggregate internal funds is a rectangular hyperbola in the price investment plane. For a fixed aggregate Profits (P_i) 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.

$P(K) = K (E \sigma_z \dots)$ $\pi_i = f(\pi_{i-1}, \dots, P_{i-1})$

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

1. money enters pricing of assets through q 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. $M \rightarrow K \rightarrow M'$, $K \Rightarrow \pi_i$ (profits). π_i 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 => Speculative => 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 -> P_K collapses

1. Central Bank Prevents P_K from collapsing

2. Gov. Def. Sustains Profits -> P_K is

sustained

7. Profits (P_i). 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

11. Requirements for a serious depression

12. Post war stabilization policy.