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THE ESSENTIAL CHARACTERISTICS OF POST - KEYNESIAN ECONOMICS

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*money is
arises*

1. On an abstract plane the problem set by Keynes is to develop an economic theory which has the non neutrality of money as an essential theorem. Frank Hahn has often stated that the Arrow Debreau model, which he considers the best available starting place for serious economic analysis, find no place for money. This is summerized in what Hahn calls the axiom of the reals, that ultimately agents care about the real variables - the flows of consumption through time. (Note that in the GT Keynes accepts that the underlying end of economic behavior is a stream of consumption.)

This fundamental neo classical position has been stated by by Lucas as:

"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." (R. Lucas Models of Business Cycles, Yrjo Jahnsson Lectures, Basil Blackwell 1987 p. 20)

Lucas then specifies this to

$$\sum_{t=0}^{\infty} E[U(c_t)] \quad (\text{sigma from } t=0 \text{ to } \infty \text{ } \underline{\hspace{1cm}} \text{ } \text{---})$$

the objective of economic behavior is to maximize the present value of consumption sequences. (E signifies expectations and $U(c)$ is a utility function with consumption as the operative variable.)

Within any model based upon this or a similar specification money can only affect behavior as it affects how expectations are formed. 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 knew the structure of the economy and knew what was happening to money and why, they would adjust their behavior so that the monetary impact 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; all demand management policies operate by affecting the money supply. Monetary changes can only affect the the money price level: the quantity theory of money is validated.

Within the Lucas specification of the problem of economics the money neutrality result can be overridden by making expectaions 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 make much of the structure of information and the possession of private information (assymetric 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 meaning of better now enter.

It is obvious that more structure is needed if the consumption stream only postulate of Lucas is to be abandoned and if money is to be non-neutral for causes more fundamental than the assymetry of information. Chapter 1 of The General Theory ^{in hand} 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 disasterous if we attempt to aply it to the facts of experience." (G. T. p3) /

The characteristics of the actual society in which we live includes bankers and clients of bankers. Bankers and clients of bankers live in an $M > C > M'$ world, where cash flows are the proximate determinants of behavior. The structure of the model for such an economy must include bankers and units that finance activity from bankers at the begining, not as an afterthought. Thus units have to broken down into consuming units, investing units and banking units as a minimum.

Non-neutrality in a deep sense 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 by having 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)) whose proximate determinants are quite different.

Whereas money or finance or credit enters in an essential way in Keynes's investment theory, money, credit and finance do not enter in an essential way in his theory of consumption: *Modern monetary usage as well as the widening of asset ownership make*

2. We 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 delta w shifting the C fn. in an appropriate way.

wss asake
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 centre of gravity. Most well trained economists were unwilling to give the monetary-financial sphere the full partnership in determining aggregate demand that Keynes's 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

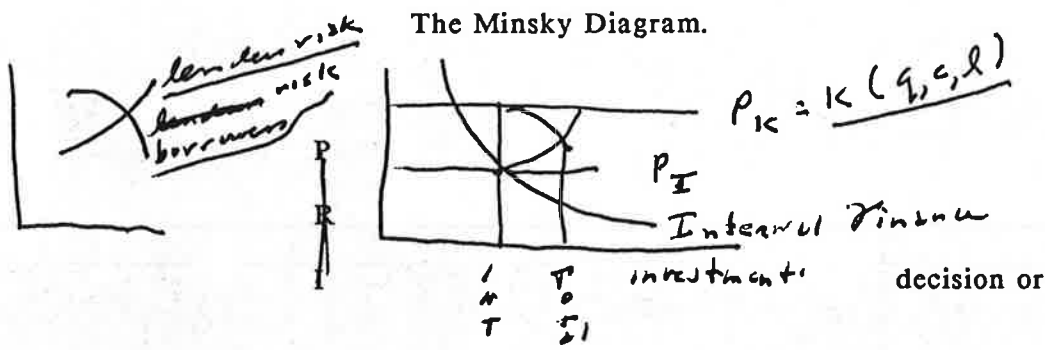
$$P_i = I + \text{Gov. Def} - \text{Bal Tr Def} + C(P_i) - S(w).$$

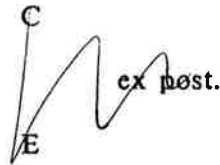
Internal finance is:

Int Fin = $P_i - T_x(P_i) - (Int + Prin) \frac{Bnds}{A} - (Int + Prin) \text{ loans} - \text{Customary dividends}$

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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.

$A] P(K) = K(q, c, l) \rightarrow \frac{P(M) = 1}{q} ; q = E \text{ cash flows}$
 $c = \text{payment commitments}$
 $l = \text{ability to acquire cash by "Kaptol"}$
 "selling" or "hypothecating"
 [liquidity has 2 aspects: "ability to transform assets into cash" & "flow of income over time"]

1. money enters pricing of assets through l and c

$$1.1 \quad P(K) = 1$$

2. financial institutions integral to determining $P(K)$.

Keynes 25 of theory of asset prices

Neoclassical as of theory of output prices: (neo-classical)

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

Assumes $\frac{P(K)}{P(O)} = \text{constant}$

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 ^{output} price level changes is conditional upon the institutional structure.

Weak or strong trade unions: Do the firms sell commodities or products?

Commodities: homogeneous (price takers)

products: differentiation \rightarrow innovation? scarcity

3. $M \rightarrow K \rightarrow M'$, $K \Rightarrow \Pi$ (profits). Π 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. "Banking structure" enters into both P_K and the availability of external finance

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. \rightarrow

1. Profits equation for banks $\frac{\Pi}{\text{Equity}} = \frac{\Pi}{\text{Assets}} \times \frac{\text{Assets}}{\text{Equity}}$

2. The evolution of banking

3. Bankers as merchants of debt. *Innovation: Securitization*

C. Making position by selling out position $\rightarrow P_K$

collapses

1. Central Bank Prevents P_K from collapsing

2. Gov. Def. Sustains Profits $\rightarrow P_K$ 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.

Model 1. nice normal distribution

Model 2. rare event (Poisson distribution) \rightarrow collapse in asset values:

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

1. Lender of last resort

2. Monetary Policy

3. Fiscal Policy

4. Industrial

Regulation

(Monopolies)

appreciation of

Monopoly in Market

(power)

11. Requirements for a serious depression.

12. Post war stabilization policy.

13. Variants of Financial Structure.

A Commercial Capitalism

B Financial Capitalism

C Managerial Capitalism

D Money Manager Capitalism



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