Kaleckianism vs. "New" Keynesianism

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KALECKIANISM VS. "NEW" KEYNESIANISM

Recent developments in macroeconomics have sought to revive "Keynesian" explanations for fluctuations in output and employment by demonstrating that they are an individually rational response to economic shocks. This "new" Keynesianism thus attempts to overcome the criticism that Keynesian macroeconomics lacks adequate "microfoundations" by demonstrating such phenomena as equilibrium credit rationing and efficiency wages to be "rational" behavior in view of the existence of asymmetric information, limited information, and moral hazard in credit and labor markets.

The picture of the economy that this "new" Keynesian view arrives at, however, displays some striking similarities to the economics developed by Michal Kalecki earlier in this century. The major difference between Kalecki's macroeconomics and the New Keynesianism is that Kalecki's system takes its departure from the idea of a "scheme of reproduction," as found in Karl Marx (1967 [1893], Vol. II), plus the conditions of the ownership and distribution of wealth and income, rather than starting from the neoclassical vision of individual maximizing behavior. There are other differences, mainly that Kalecki's system derives fluctuations endogenously as opposed to examining the reactions of the economy to external shocks[1] and that Kalecki does not discuss

[1] Kalecki's cycle models might be said to be shock-dependent, though, in that his linear cycle models with damped oscillations require erratic shocks to sustain the cycle. With explosive oscillations of course shocks are not needed, and the existence of a "ceiling" and "floor" to contain the oscillations keeps the fluctuations from becoming ridiculously large. The model also thus becomes non-linear. See Kalecki (1971 [1954], Chap. 11). Non-

wage and price rigidity, at least not in the same way as most of the New Keynesians, as a source of fluctuations in output and employment.

Returning to the major difference, though, it could be said that what the New Keynesians are doing is providing adequate microfoundations not only for John Maynard Keynes's macroeconomics but also for Kalecki's. Is there, though, something important in Kalecki not in the New Keynesianism? And, is there something in the idea of a scheme of reproduction or ownership conditions that furnishes a more adequate foundation for macroeconomics than reasoning from individual maximizing behavior? These are the questions this paper will address after surveying the salient points of the New Keynesian and Kaleckian theories.

What Is "New" Keynesianism?

The body of thought I am describing here as New Keynesianism arose I believe most directly as a response to the "New Classical" macroeconomics. There was an earlier body of thought called New Keynesian, associated with such economists as Robert Clower, Axel Leijonhufvud, and Jean-Paul Benassy. This way of thinking put forth the proposition that Keynesian economics was "disequilibrium dynamics." "Old" Keynesianism was said to be the hypothesis of rigid money wages, since in the full "neoclassical synthesis" of the IS-LM model with "Keynes" and "Pigou" effects the only way to have "underemployment equilibrium" was if money wages would not

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linear "Kaleckian" models generating limit cycles have since been created. See, e.g., Reiner Franke and Willi Semmler (1988).

fall in response to unemployment. The Clower, *et al.*, New Keynesians proposed rather that in an economy without an "auctioneer" quantities should move in response to a demand shock faster than prices. This thus came to be known as "non-Walrasian" economics and finally, ironically, as the "fixed price" analysis.[2]

The New Keynesianism we are discussing here argues rather for an equilibrium approach to macroeconomics. It has in common with the earlier New Keynesianism an emphasis on imperfections in the availability of information, but it seeks to be much more determinate than the disequilibrium school and sees unemployment as an equilibrium phenomenon. The most unabashed standard-bearers of the "new" New Keynesianism are Bruce Greenwald and Joseph Stiglitz.[3] Greenwald and Stiglitz (1987, p. 123) identify "the major ingredients of this new perspective" to be efficiency wage theories, capital market imperfections, credit rationing, and a revised view of the role of monetary policy. In Greenwald and Stiglitz (1988a) they add implicit contracts and search in labor markets and menu costs and imperfect competition in product markets.

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[2]Robert Barro and Herschel Grossman (1976) and Edmond Malinvaud (1980) are good examples of where this point of view ended up.

[3]See Greenwald and Stiglitz (1987, 1988a, 1988b, and 1988c). References to the rest of most of the existing literature that could be associated with New Keynesianism can be found there, though an important one too recent to be listed there is Ben Bernanke and Mark Gertler (1989). Many of the articles associated with this way of thinking are authored or co-authored by Stiglitz, who perhaps should be considered the godfather of this school.

The efficiency wage hypothesis holds that labor productivity is a function of the real wage paid to workers and thus the equilibrium wage exceeds the wage that would clear the labor market. Janet Yellen (1984) identifies four foundations for this argument: a device to raise the cost of job loss and so to discipline labor, a device to reduce turnover, an attempt to raise the quality of job applicants, and a sociological theory of partial gift exchange between workers and firms. Theories of search and implicit contracts simply add to this further reasons for wage rigidity. Menu costs and imperfect competition serve to give a rationale for price rigidity in product markets. I will argue below that Kalecki's discussions of macroeconomic fluctuations do not depend upon wage or price rigidity *per se* but upon a type of mark-up, or cost-price margin, rigidity. This argument has some relation to similar arguments about the behavior of mark-ups found in Greenwald and Stiglitz (1988a, 1988c).

The point of establishing a degree of wage and price rigidity (and New Keynesians do not argue for absolute rigidity) to the New Keynesian theory is of course to demonstrate the necessity or at least the possibility of non-market clearing equilibria in labor and product markets. Turning to credit markets, we find the next and, in my opinion, most important building block of New Keynesianism, the theory of credit and equity rationing.

The argument for credit rationing rests on the hypothesis of adverse selection if interest rates are allowed to rise to clear

credit markets. With lower than market-clearing rates plus credit rationing lenders can avoid lending to riskier projects or riskier borrowers. The ability of firms to raise equity is also constrained by incentive effects and signalling effects. Debt finance gives managers greater incentive to produce returns than equity finance does due to the costs of bankruptcy, the fixed nature of the payments, and the greater ability to withdraw the funds. Also, firms which attempt to sell equity may be sending a signal that they are unwilling or unable to bear greater debt and so represent riskier investments. These arguments all derive from the necessary limitations on and asymmetries of information in the debt and equity markets.[4]

The consequence of such rationing of credit and equity is that movements in interest rates following upon changes in the supply of or demand for money are attenuated and made less relevant to investment spending by firms. Firms thus are much more reliant upon financing generated internally through profits, and the cost of capital rises in response to a shock to the economy. Borrowers are more afraid to borrow and lenders more afraid to lend when profits are lower. Investment spending is therefore procyclical.[5]

The preceding paragraph arrives at what I think is the most significant contribution of New Keynesianism. That is placing the

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[4]For a more thorough summary of these arguments see Greenwald, Stiglitz, and Andrew Weiss (1984).

[5]The best discussion of this is found in Greenwald and Stiglitz (1988c). See also Bernanke and Gertler (1989).

support for a "Keynesian" view of fluctuations in output and employment on fluctuations in profits due to their providing the major source of internal finance and attraction for external finance. Greenwald and Stiglitz in the references listed above have spelled out how this point of view plus the arguments about wages and prices explains the phenomena macroeconomists would like to be able to explain. This of course is of great importance, but to say fully why I find this view to be so important, I have to turn to a discussion of Kalecki's economics.

What is Kaleckianism?

Kalecki's macroeconomic theory begins by dividing national income in a closed economy with no government sector into wages and profits.[6] He assumes that all of wages is spent on consumption goods.[7] Therefore, all spending out of profits (on consumption plus investment) returns as profits and so determines profits.[8] A fixed percentage (the propensity to consume) of profits is assumed to be spent on consumption. Kalecki varies the determinants of investment spending some over the course of his work, but largely we can take it to be an increasing function of profits and a

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[6]References to Kalecki's work unless otherwise noted will all be assumed to come from Kalecki (1971), which is a compendium of original or revised versions of his most important papers.

[7]If there is saving out of wages, as long as the propensity to save out of wages is less than the propensity to save out of profits, there is little modification of what follows. See Tracy Mott (1985-86).

[8]See also Keynes (1971 [1930], Chap. 10).

decreasing function of the capital stock.[9]

The rationale for profits to affect investment at least in part is based on Kalecki's "principle of increasing risk."[10] This argument holds that the fundamental limit on the expansion of any firm is the size of its own capital. Limits on growth due to diseconomies of scale Kalecki rejects on the grounds that any technical or engineering limitation can be overcome through replication of the optimal scale unit. Limits due to market size under less than perfect competition Kalecki accepts, but he argues that this is not enough to explain every limitation, e.g., why large and small firms are started at the same time in the same industry.

Kalecki says that the limit coming from the size of own capital arises because the more of one's own wealth tied up in a particular fixed investment, the more danger one is exposed to in the event of failure and the more trouble one would be under in case of a sudden need for liquidity. Issuing debt compounds this problem by setting up an additional outflow of liquidity. Issuing new equity avoids the fixed commitment of repayment but dilutes the value of the investment to the original holders more than debt by letting new shareholders in on an equal footing. The limit to issuing new equity Kalecki holds to come from the risk of a drop

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[9]This of course is the mechanism that generates cycles endogenously, through the interaction among investment, profits, and the capital stock.

[10]See Kalecki (1937; 1971 [1954], Chap. 9).

in the value of the existing shares should the return on investment fall or the stock market be unwilling to absorb the new issue at the existing price.

This argument then is another way of making the points raised by Greenwald, Stiglitz, and Weiss (1984) concerning credit and equity rationing. Kalecki does not discuss the issues of adverse selection and signalling. His emphasis rather is on the costliness of illiquidity. We will discuss below the significance of this difference.

To obtain models with positive profits Kalecki must specify "imperfect" competition.[11] The determinants of the "degree of monopoly," to use Kalecki's phrase, are the level of industrial concentration, the importance of selling costs, the ratio of overhead to prime cost, and the degree of trade union strength.[12] Mainly due to the rise in the ratio of overhead to prime cost Kalecki states that mark-ups, or price over prime cost margins, should rise in cyclical downturns and fall in upswings.[13] This

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[11]Keynes in the *Treatise on Money* (1971 [1930]) tries to create a "Kaleckian" model (= spending out of profits determines profits) with perfect competition by having positive profits occur as "windfalls" in disequilibrium. That this was not successful even in Keynes's own mind can be inferred by the fact that he abandoned the windfalls in the *General Theory* (1964 [1936]). From a Kaleckian perspective of course Keynes should rather have abandoned perfect competition.

[12]See Kalecki (1971 [1954], Chap. 5).

[13]In a footnote, Kalecki (1971 [1954], p. 51) writes, "This is the basic tendency; however, in some instances the opposite process of cut-throat competition may develop in a depression."

pattern accords with the evidence of Kalecki's empirical studies and with that of a recent study by Mark Bils (1987). Greenwald and Stiglitz (1987, 1988c) argue also that mark-ups should be countercyclical because of the nature of the intertemporal tradeoff which firms face when recruiting customers. Higher prices today lead to higher profits today but lower profits tomorrow. When the cost of capital rises, as it does in recession, the tradeoff tilts in favor of higher profits today.

What the cyclical behavior of the mark-up does for Kalecki is to ensure that any decline in investment spending is not offset by a rise in consumption spending. In his models where investment and profits largely co-determine one another, consumption is mainly a function of wages. If mark-ups were to decline when investment fell, consumption would rise due to the rise in real wages. In this way one could say that Kalecki's argument for fluctuations in output and employment rests on a type of mark-up rigidity, i.e., that mark-ups are rigid downward in the face of a downturn in demand.

For this reason also the question of wage or price rigidity by itself becomes less important. Since a decrease in the real wage in response to unemployment would decrease consumption at a time when investment was low and unlikely to rise, it would worsen the unemployment. With respect to a decrease in money wages matched by a decrease in prices, the mark-up remaining constant, we are relying on that weak reed, the real balance effect, to restore full employment. Kalecki (1944) argues that due to the

existence of debt fixed in nominal terms the effect might as well be supposed to work in the reverse direction, i.e., falling money wages and prices might *decrease* aggregate demand.[14] Greenwald and Stiglitz (1988b and 1988c) repeat this argument in their discussion of the effects of credit and equity rationing.[15,16]

Kaleckianism vs. New Keynesianism

So far I have emphasized mostly the similarities between the Kaleckian and New Keynesian views. Looking at matters this way, the New Keynesians have provided helpful and important support for and extensions of Kalecki's work. All that remains is for the New Keynesians to acknowledge Kalecki as a forerunner of their framework, which they have begun now to do.[17] We should say then that New Keynesianism gives microfoundations based ultimately on

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[14]The indexing of debt to the price level would eliminate purchasing power risk but increase default risk, since issuers' product mark-ups would not be perfectly correlated with price level changes. Such indexing also of course would eliminate any *positive* real balance effect if the indexing of financial assets were complete.

[15]See also Irving Fisher (1933) and Bernanke and Gertler (1989).

[16]Kalecki (1971 [1943], Chap. 12) does present an argument which is similar to one strand of the efficiency wage theory, as exemplified by an article by Carl Shapiro and Stiglitz (1984), entitled "Equilibrium Unemployment as a Worker Discipline Device." Kalecki's well-known paper, entitled "Political Aspects of Full Employment," argues that "Keynesian" policies to *maintain* full employment will not prevail in capitalist democracies due to political opposition arising because of the effect of continuous full employment on labor discipline among other things.

[17]See Greenwald and Stiglitz (1988c) and Michael Woodford (1988).

informational imperfections, which Kalecki did not bother to furnish, showing why rational, utility maximizing individuals would behave so as to give Kaleckian macroeconomic results. In this way Kalecki was the partially perceptive ancestor, formulating Keynes's insights perhaps on a better basis than Keynes himself, but also failing to break through to the ultimate foundation for these views in imperfect information. It is also proper to call the school "New Keynesian" rather than "New Kaleckian," since the kind of unemployment problems we are trying to explain are associated mainly with the name of Keynes.

The major failing of Kalecki then is the old one of simply writing macroeconomic models without providing adequate microfoundations--the charge hurled at all Keynesian macroeconomics until the recent work. But why did Kalecki come closer than others to seeing the microeconomic point on which New Keynesianism now rests? In the 1954 revision of Kalecki's original article on the principle of increasing risk Kalecki (1971 [1954], p. 109) writes,

> The limitation of the size of the firm by the availability of entrepreneurial capital goes to the very heart of the capitalist system. Many economists assume, at least in their abstract theories, a state of business democracy where anybody endowed with entrepreneurial ability can obtain capital for starting a business venture. This picture of the activities of the "pure" entrepreneur is, to put it mildly, unrealistic. The most important prerequisite for becoming an entrepreneur is the *ownership* of capital.

This is an unstated but required point of and for Greenwald and Stiglitz's work. The reproduction of capital in the hands of a limited number of capitalists and of labor as having little or

nothing to sell but its labor-power must take place for there to be efficiency wage considerations in the labor market and imperfections in the capital market. To the extent that workers have an independent accumulation of capital they may become immune to efficiency wage considerations. Higher pay may not motivate them to work harder, quit less often, and so on. If they are less dependent upon employment for their living, they should also be less sensitive to changes in their pay, though of course it is possible that the opposite phenomenon of greater demands for pay and greater resistance to pay cuts could occur. The point is, though, that it is only people with independent means who can really make such choices about their labor supply. Similarly, if every actual or would-be entrepreneur were well endowed with own capital, finance constraints of the type that Greenwald and Stiglitz demonstrate would not be binding. Finance, or liquidity, constraints, which play such an important role in New Keynesianism, are fundamentally wealth constraints.[18]

The New Keynesians seek to base these phenomena ultimately on informational imperfections, but the type of principal-agent problems and other informational imperfections we have in capitalism are a result of the social conditions of ownership of capital. Limited and asymmetric information are just the other

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[18]See also the literature on the excess sensitivity of consumption to current income due to liquidity constraints, e.g., Glenn Hubbard and Kenneth Judd (1986). It is precisely the households which are not wealthy which cannot consume on the basis of expected lifetime income.

side of the coin of wealth-distributional divisions. When agglomerations of finance are not in the hands of workers and firms, investment is governed by retained profits.[19] Samuel Bowles and Herbert Gintis (1988) call the situation arising from the informational asymmetries which result from ownership differentials "contested exchange."[20]

Wealth need not be divided unequally to have these problems, but then there must simply be a low level of wealth in the society. The insight of the Ricardian branch of the old classical economics was to see in some way that wealth had to be in the hands of a certain social class to generate economic growth. The insight of "underconsumptionism," associated with Thomas Malthus and to some extent Marx and revived by Kalecki and Keynes, was that too unequal a distribution would impede growth by providing too little effective demand. In this way distribution and ownership were held to determine most fundamentally macroeconomic outcomes.

Kalecki then may have more adequate microfoundations for his macroeconomics than New Keynesianism, since the New Keynesian microfoundations really rest on the ownership conditions identified by Kalecki. Credit rationing and equity rationing result from the role of own capital in the logical nexus of the capitalist system. This is how the system produces the wealth that it produces and the

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[19]See Steven Fazzari, Hubbard, and Bruce Petersen (1988).

[20]The problems of the relations between capital and labor implied by both the New Keynesian and Kaleckian perspectives may be no more important than the problems also implied of the relations between finance and industry. See Mott (1989).

barriers to wealth production that it creates.[21] This need not imply that capitalism is "bad" or worse by some criteria than other economic systems. It can be shown to imply that there are Pareto-superior steps that can be taken to improve matters.[22]

The fact that Kalecki's models are couched in terms of income distribution and based on reproduction schemes then is no accident. The distribution and reproduction of ownership claims is what governs the macroeconomy. At this point the term "microfoundation" becomes pointless. What we have are simply "foundations," or even "macrofoundations," since we are talking about systemic determinations of individual behavior. This is not to say that what individuals do does not matter, but it is to say that the system can produce unintended consequences of individual action and more fundamentally that the system determines the behavior of individuals, not by ordering them around but by constraining their roles. They are, for example, risk averse not so much by nature or by unconstrained choice but due to the fact that they are systematically punished or eliminated if they don't behave that way.

Earlier I said that Kalecki based his argument for credit and equity rationing not on incentive problems such as adverse selection or signalling but rather more elementarily on the risks

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[21]Cf. Marx (1967 [1894], Vol. III, p. 250): "The *real barrier* of capitalist production is *capital itself*."

[22]See Greenwald and Stiglitz (1988d).

of illiquidity and that there might be some significance to this beyond what was immediately apparent. In the framework which sees ownership conditions, income distribution, and reproduction schemes to be the governors of the economy the economic problem is one of owning or accumulating wealth and investing this wealth in ways that create more wealth.[23] A unit of capital is thus concerned with giving up liquidity in order to receive back eventually an enhanced amount of liquidity.

Identifying concerns about adverse selection and signalling adds significantly to our understanding of the problem of financing investment. It is, though, a result or example of the more fundamental concern for liquidity arising from the nature of an economic system in which capital is privately owned. It may be said, however, that this concern should be taken to be fairly obvious, though usually one is required to assume the explicit existence of risk-averting behavior. Yet, as remarked above, this all should be the necessary outcome of a system in which there is limited access to capital. The New Keynesians are adding a great deal to our understanding of how such a system works. What they have so far left unstated is that they are in fact talking about such a system.

Kalecki's principle of increasing risk and the New Keynesian ideas should be seen to revolutionize Keynes's theory of liquidity preference. Rather than giving the idea that liquidity preference

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[23]See Marx (1967 [1867], Vol. I, Chap. IV).

has merely to do with agents' exogenously determined preferences to hold "money" vs. bonds or even short-term vs. long-term securities, however, Kalecki's formulation tells us that it comes from the way our economic system works and that it applies to *every* investment decision. The central "Keynesian" concern for the level of aggregate effective demand then is also a matter of liquidity preference so understood. How willing investors, physical *and* financial, are to become illiquid is what determines the level of output and employment. Investment "mistakes" cannot be liquidated and reconstructed without new sources of finance. Neither can they be hedged or insured against beyond a low limit, because the risk that would need to be shed is not idiosyncratic. A falling tide may not run all boats aground, but those still left floating cannot pull many of the others off the shoals. It takes wealth to generate more wealth.[24]

In an economy with a great deal of productive capacity already in existence "printing money" and giving it to those who will spend it will alleviate this problem somewhat because it will allow the wealth that exists to begin to work. Just making money available in the form of bank reserves, however, will not help as much because of the problem of getting lenders willing to lend when

[24]The fixed, or illiquid, nature of capital goods in this way creates problems for a capitalist economy. A planned economy may suffer in a different way from the same condition, as witness the success of the Soviet economy in building capital goods to make more capital but its failure to be able to shift this capital into adequate consumer goods production.

balance sheets and profitability don't look so good.[25]

Conclusions

The economics of Kalecki and of the New Keynesianism exhibit remarkable parallels. The major doctrine they have in common is that of business net worth, or equity, as the major determinant of business expansion. The New Keynesians arrive at their understanding of this point by reasoning from rational behavior in the face of informational imperfections. Kalecki's view derives from a perspective on the capitalist system coming ultimately from Marx which starts with asking how the economic system produces and reproduces itself. The New Keynesians develop arguments that make Kaleckian ideas intelligible to economists educated in the neoclassical tradition. In their eyes perhaps Kalecki was a forerunner of their views with a somewhat *ad hoc* presentation of the story.

Why Kalecki, starting from Marx, rather than Keynes himself, should present "Keynesian" economics in ways that seemingly "anticipate" the New Keynesians is already suggestive. When we look closer, we see that this is no accident but a consequence of starting from methodological foundations concerned with the accumulation and reproduction of wealth. In fact it is the New Keynesians who have not seen fully the foundations and implications of their views.

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[25]See also Greenwald and Stiglitz (1988b, 1988c). This is the "revised view of monetary policy" which Greenwald and Stiglitz identify as one of the "major ingredients" of New Keynesianism.

Greenwald and Stiglitz (1987, 1988c) imply that their work is an alternative to neoclassical ways of thinking. One should be clear, though, about what one means by the term "neoclassical." If it means economics based on rational maximizing behavior, then the New Keynesian theory is neoclassical. But if rational maximizing behavior just means that everyone does the best he or she can with what he or she has, then we are all neoclassicals. Greenwald and Stiglitz seem rather to identify non-neoclassical analysis with market imperfections.

From the Marxian-Kaleckian perspective,[26] however, these are not imperfections. The economy is not seen as the equivalent of a "swap meet," in which the economic problem is the allocation of actual and potential resources among competing uses given exogenous preferences and the initial distribution of endowments, so that any interference with this process of allocation is an "imperfection."

In a swap meet participants can be indifferent to sources of finance and preservation of the value of their capital and labor. Once one is dependent for one's livelihood on the swaps, though, these matters do become of concern. Trading also then becomes a vehicle for the extension of the division of labor and the growth of the wealth of nations. The accumulation and reproduction of capital which thus occurs produces and reproduces wealth, and it also creates barriers to the production of wealth which do not

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[26]The term "accumulation theory" has been suggested by Carol Heim (1986) to refer to the emphases we find in Marx and the old classical economists that connect with the issues raised by Kalecki and Keynes.

permit individual rationality to exploit all the gains from trade. The New Keynesian theory is both dependent upon and pointing the way to this perspective on the economy.

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