

The Minsky Thesis: Keynesian or Marxian?

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ABSTRACT

The short answer to the question of whether Minsky was Keynesian or Marxian is that he was both. The long answer is far more complex, and must acknowledge four congenital weaknesses in the development of non-neoclassical economics. These are the absence of a defined intellectual tradition, the lack of an explicit pedagogy, the pervasive demonology within mainstream economics education which demeans the contributions of those outside the corral of conventional wisdom, and the prevalence of misinterpretation in the development of economic theory. All the above issues apply to Minsky, so that determining his intellectual foundations requires informed reconstruction as much as it does a careful examination of his acknowledged references. His references tell us that the Financial Instability Hypothesis was a conscious blend of Kalecki's "Principle of Increasing Risk", Fisher's "Debt Deflation Theory of Great Depressions", and lastly Keynes's *General Theory* "with the Prince". Reconstruction indicates that Marx's neglected dialectical analysis provides a sound foundation for the crucial Minskian concept of two price levels in capitalism.

The short answer to the question of whether Minsky was Keynesian or Marxian is, of course, “Yes: he was both”. The long answer is far more complex, and must acknowledge several congenital weaknesses in the development of non-neoclassical economics.

The first two weaknesses are the absence of a defined intellectual tradition, and the concomitant lack of an explicit pedagogy. While the neoclassical school has no genuine appreciation of the history of economic thought, the essence of the neoclassical paradigm is distilled in economic textbooks, and each new generation of neoclassicals unconsciously absorbs the creeds of Bentham, Say, Jevons, Walras and Debreu by learning how to recite textbook dogma. On the other hand, each new major non-neoclassical intellect potentially begins in an effective vacuum, and frequently discovers that he or she has intellectual predecessors only by groping blindly backwards through the forest of original works that constitute the intellectual history of our discipline.

The third weakness is the presence of a pervasive demonology within mainstream economics education, which demeans the contributions of those outside the corral of conventional wisdom. Even economists who are endeavouring to escape from the clutches of orthodoxy fall foul of this. Thus even Keynes could write of *Das Kapital* that it is “an obsolete economic textbook which I know to be not only scientifically erroneous but without interest for the modern world” (Keynes 1925:258), allegedly without having read the original.

The final weakness is the prevalence of misinterpretation in the development of economic theory. Economists might like to believe that they can “see so far because they stand on the shoulders of giants”, but it is closer to the truth to say that economists tend to stand on their toes. This is obvious enough (to a non-neoclassical audience) with regard to Keynes, the textbook IS-LM interpretation of whom is an acknowledged travesty. But the same situation, I contend, applies to Marx as well—with his supporters as well as his detractors being complicit.

All the above issues apply to Minsky, so that determining his intellectual foundations requires informed reconstruction as much as it does a careful examination of his acknowledged references.

His references indicate that the first impetus for his movement away from orthodoxy was given by Kalecki, whose “Principle of Increasing Risk” provided a means by which Minsky provided a finance-induced turning point to the upward movement of a multiplier-accelerator model of the trade cycle (Minsky [1957a]1982: 243).

1 Kalecki and Increasing Risk

Minsky’s model was the typical Hansen-Samuelson construct:

$$(1) \quad Y_t = (a + b) Y_{t-1} - b Y_{t-2}$$

where Y is output, a the average propensity to consume, and b the desired incremental stock to output ratio (or the marginal propensity to invest). The accelerator coefficient b was greater than four, which generated a monotonic and extremely rapid increase in the magnitude of Y . Minsky argued that this mechanism could be used to explain the trade cycle if one posited “that the value of b , the accelerator coefficient, depends on money-market conditions and the balance sheets of firms” (Minsky 1957, 1982: 233). Minsky found the mechanism he needed in Kalecki’s argument that the size of an investment a firm would undertake was limited by increasing risk as the proportion of debt financing rose (Kalecki [1937] 1990: 285-293).

Kalecki considered an entrepreneur with capital k to invest, a given method of production, an expected stream of returns and hence an expected internal rate of return e . These could be combined to yield the prospective gross profit $O = k e$. To work out the

prospective net gain g , the entrepreneur must deduct both the market rate of return r , and an allowance for the riskiness of the project, σ . This results in the formula

$$(2) \quad g = o - (q + r) k^1$$

Under the neoclassical assumption that expected gain is a function of capital employed and has a single maximum turning point, the second differential of g with respect to k is negative. The zero of the first differential therefore tells us the optimal amount of capital to invest, so that the condition for the maximum prospective gain is:

$$(3) \quad \frac{do}{dk} = q + r + k \left(\frac{dq}{dk} + \frac{dr}{dk} \right)^2$$

The neoclassical shibboleth of diminishing returns argues that expected profit is an increasing but diminishing function of capital employed, so that $\frac{do}{dk} > 0$. Neoclassical finance theory argues that the right hand side of the equation reduces to $c + r$, since it is assumed that there is no marginal relationship between the market rate of return and the capital of a single entrepreneur, or between risk and individual capital, so that $\frac{dq}{dk} = \frac{dr}{dk} = 0$. Thus profit diminishes as a direct consequence of increasing individual capital until such time as

$$\frac{do}{dk} = q + r.$$

The standard interpretation of this result is that the amount of investment is constrained by diseconomies of scale as k rises, or by imperfect competition (or similar real barriers to expansion). Kalecki rejects this, arguing against the former that “True, every

¹ For simplicity I have used p rather than p_n , as in Kalecki’s paper, where p_n represents the maximum rate of profit, based upon the choice of the most profitable technique of production (Kalecki 1937:)

² The derivatives of s and r with respect to k are not in Kalecki, but are implicit in his argument.

machine has an optimum size, but why not have 10 (or more) machines of this type?”, and against the latter that it is not a relevant objection when an investor can put his funds into a portfolio of projects across a range of industries. Kalecki argues that $\frac{dO}{dk}$ is therefore a constant, and there is no effective real (non-monetary) barrier to the optimal size of k for a single investor (Kalecki 1937: 286-287).

Instead Kalecki argues that to expand k , the entrepreneur must borrow, and the more he borrows the greater is his risk s . If the entrepreneur is not cautious, then “it is the creditor who imposes on his calculation the burden of increasing risk, charging the successive portions of credits above a certain amount with a rising rate of interest” (1937: 288). Thus $\frac{dr}{dk} > 0$, so that it is not declining profitability but increasing risk which restrains the size of an individual capitalist’s investment.

Minsky employed this mechanism (at the macro level) to explain a decline in b —and hence a change in the character of the model from monotonic explosive to cyclical. As an expansion occurs in a model with an infinitely elastic money supply, firms add bank debt to their portfolios, and the debt to equity ratio rises. This leads to rising borrowers’ risk, which attenuates the desire of firms to invest, thus reducing the value of b “which in turn lowers the rate of increase of income. This continues until the accelerator coefficient falls sufficiently to replace the explosive by a cyclical time series, in which there eventually occurs a fall in income.” (Minsky 1957a, 1982: 243)

At this stage, Minsky’s approach to modelling the trade cycle was already distinguished by its integration of financial and real forces, but it was still a long way removed from the Financial Instability Hypothesis. Two illustrations of this are his analysis of the cyclical characteristics of corporate debt, and the manner in which Minsky analysed the impact of bankruptcy in this model.

Minsky presumed that, once the upward turning point had been encountered, corporate debt would then start to fall at the same time that income was falling, as “the excess of ex ante saving over induced investment will be utilised to reduce bank debt” (Minsky 1957a, 1982: 243). The cumulative effects of bankruptcy were also ignored in the statement that “the failure of some firms which have relied heavily upon debt financing will result in the substitution of equity for debt in balance sheets.” The action of debt on investment and profits was thus seen as entirely symmetrical:

The endogenous limits to an explosive accelerator process, in the absence of restrictions on the money supply, are the deterioration of firms’ balance sheets due to debt-financing of investment on the upswing; and the reverse circumstances during the liquidation process on the downswing. (Minsky 1957a, 1982: 243-244)

Clearly, Minsky was not then cognisant of the proposition that an overaccumulation of debt could occur and lead to the decidedly asymmetrical experience of a debt-deflation. Thus while this early model was capable of demonstrating a trade cycle in which finance played an integral part, it was not a model of the Financial Instability Hypothesis. However, as Wray (1992: 162) points out, that same year Minsky published a paper (1957b, 1982: 162-178) which began the development of his theory of endogenous money, with its rich appreciation of the structure of the banking system. Here Minsky first raises the possibility that insolvency for even a single large corporation can set in train a “chain reaction” which affects “the solvency or liquidity of many organisations” (Minsky 1957a, 1982: 173), and argues that the evolutionary changes in banking can increase “the vulnerability of money-market assets to a fall in value” (1957a, 1982: 174). The former issue presaged the issue of debt deflation, on which Fisher had made the seminal contribution to date; the latter would strike a chord with Minsky when he later turned his attention to the disputed intellectual legacy of John Maynard Keynes.

2 Fisher and Debt Deflation

There are two Irving Fishers in mainstream consciousness: the pre-1929 Fisher who is the still revered founder of modern finance theory, and the 1929 Fisher who, on Wednesday, October 15, made the now immortal “blooper” that

“Stock prices have reached what looks like a permanently high plateau. I do not feel that there will soon, if ever, be a fifty or sixty point break below present levels, such as Mr. Babson has predicted. I expect to see the stock market a good deal higher than it is today within a few months.”

There is also a third Fisher: the author of “The Debt Deflation Theory of Great Depressions”, *100% Money*, and many other ignored recantations of the conventional wisdom he helped found. This conventional wisdom was an extension of the neoclassical treatment of the commodity to the subject of finance, with individual time preference determining the supply of funds, investment opportunities determining the demand for them, and the reconciliation of supply and demand via a market mechanism for loanable funds in which the rate of interest “expresses a price in the exchange between present and future goods” (Fisher 1930: 61). Given the undeniable peculiarity of the “market for money” that the supply of the “commodity” substantially predates the payment for it, Fisher attached two conditions which were vital to ensuring that the assumption of equilibrium could be maintained:

“(A) The market must be cleared—and cleared with respect to every interval of time. (B) The debts must be paid.” (1930: 495)

The reality that was the Great Depression manifestly failed to adhere to these two conditions, at great cost to humanity in general and some significant cost to Fisher as well. To his credit, Fisher’s response was worthy of Keynes’s apocryphal statement that “when the facts prove me wrong, I change my mind”. Inspired by the pressing circumstance of the time, Fisher abandoned the static reasoning of his previous treatise to consider the dynamic forces

which could have caused the Great Depression, countenancing the case he previously dismissed, that debts can fail to be repaid.

He ventured the opinion that the “two dominant factors” which cause depressions are “over-indebtedness to start with and deflation following soon after”. Though other factors are important, the combination of these factors with debt—the entry into a contractual obligation to repay principal with interest—and price level disturbances is crucial:

Thus over-investment and over-speculation are often important; but they would have far less serious results were they not conducted with borrowed money. That is, over-indebtedness may lend importance to over-investment or to over-speculation. The same is true as to over-confidence. I fancy that over-confidence seldom does any great harm except when, as, and if, it beguiles its victims into debt. (Fisher 1933: 341)

This insight of Fisher’s can be related to Kalecki’s concept of increasing risk. Kalecki’s analysis considered the level of capital which generated the optimum gain g from invested capital k against a background of rising risk s (see equation 2). Here Fisher argues that overconfidence may lead investors to overestimate the prospective gain from investment, or to underestimate the risks, and thus commit themselves to an unsustainable level of debt, so that in either case the investor commits funds well beyond the level which returns an optimum gain. Such overconfidence is an inevitability in the real world because, though economic variables may tend to equilibrium, “New disturbances are, humanly speaking, sure to occur, so that, in actual fact, any variable is almost always above or below the ideal equilibrium” (1933: 339).

When that overconfidence leads to over-indebtedness in the context of price deflation, a chain reaction of events occurs:

(1) Debt liquidation ... (2) Contraction of deposit currency ... and ... a slowing down of velocity... (3) A fall in the level of prices... (4) A still greater fall in the net worths of business, precipitating bankruptcies and (5) A like fall in profits... (6) ...

losses, bankruptcies, and unemployment... (7) Pessimism and loss of confidence... (8) Hoarding and slowing down still more the velocity of circulation. The above eight changes cause (9) Complicated disturbances in the rates of interest, in particular, a fall in the nominal, or money, rates and a rise in the real, or commodity, rates of interest.”
(1933: 342)

By arguing that the economy is always in a non-equilibrium state, and that the equilibrium itself may be unstable, so that divergences from equilibrium are not self-correcting, Fisher provided a major challenge to the orthodoxy which remained largely unmet and ignored by orthodox and critic alike until 1963, when Minsky attempted to explain the 25% fall in the Dow Jones Index which occurred in the hundred days from mid-March till mid-June 1962. Though Minsky’s paper clearly bears the stamp of Fisher’s analysis, it is substantially enriched by Minsky’s appreciation of the macroeconomic balances which are needed to sustain a process of debt accumulation during a boom.

Minsky commences with the basic Keynesian ex-post identity for a closed economy that

$$(4) \quad (S - I) + (T - G) = 0$$

(where S is savings, I investment, T taxation and G government spending) and observes that “If income is to grow, the financial markets ... must generate an aggregate demand that, aside from brief intervals, is ever rising” (Minsky [1963] 1982: 6).³ Thus for growth to occur in the context of a zero sum for ex-post expenditure and a generally stable or increasing price level, debt must be issued, since

³ The page references to this paper, which is a chapter in Minsky 1982, are to the original.

it is necessary that current spending plans, summed over all sectors, be greater than current received income and that some market technique exist by which aggregate spending in excess of aggregate anticipated income can be financed. It follows that over a period during which economic growth takes place, at least some sectors finance a part of their spending by emitting debt or selling assets. ([1963] 1982: 6)

Similarly, as increasing output requires an increase in debt, the increase in debt requires “the creation of new money” ([1963] 1982: 6). A tight link is thus welded between the phenomena of economic growth, debt, and endogenous money.

Since growth at the macroeconomic level requires an increase in debt, at the microeconomic level some entities may experience a rise in their debt to income ratio. Without at this stage having an explanation for how a rational entity might get itself in this situation, Minsky observes that as the debt to income ratio rises, a stage can be reached at which a small decline in income can “make it difficult, if not impossible, for the unit to meet the payment commitments stated on its debt” ([1963] 1982: 6). In contrast to the 1957 paper, there is now an explicit appreciation of the asymmetrical impact of debt:

However, for any unit, capital losses and gains are not symmetrical: there is a ceiling to the capital losses a unit can take and still fulfil its commitments. Any loss beyond this limit is passed on to its creditors by way of default or refinancing of the contracts. Such induced capital losses result in a further contraction of consumption and investment beyond that due to the initiating decline in income. This can result in a recursive debt-deflation process. ([1963] 1982: 6-7)

At this point in the development of his hypothesis, a debt-induced deflation is a possibility, but not yet a cyclical inevitability. This argument is developed in Minsky (1964), where he argues that the financial structure of the economy—defined as “the assets owned and liabilities emitted by ultimate units, financial intermediaries and governments” (Minsky 1964:

326)—evolves in response to profit opportunities in a manner which leads to increasing fragility. For this case to be made, Minsky needed to explain how the expectations of profit-motivated entities would inevitably induce behaviour which pushed the overall economy from a position of financial security and tranquillity into one of crisis. He found the elements of such an explanation in Keynes, but only after he had discarded the conventional IS-LM interpretation of the General Theory.

3 Keynes: Hamlet with the Prince

The conventional interpretation of Keynes emanated from John Hicks's 1937 review of the *General Theory*, "Mr Keynes and the Classics". In this paper, Hicks argued that the Keynes's "special" analysis could be encapsulated by the three equations

$$(5) \quad \begin{aligned} M &= L(i) \\ I_x &= C(i) \\ I_x &= S(I) \end{aligned}$$

(where M is the exogenous money supply, I income, i the rate of interest, L is the demand for liquidity function, C the investment function, and S the savings function). It is clearly this rendition of Keynes that Minsky has in mind in his second attempt to generate a model of cyclical growth with finance, when he says that

If we make the Keynesian assumption that consumption demand is independent of interest rates, but assume that investment demand, and hence the \mathbf{b} coefficient, depends on interest rates, then a rising set of interest rates will lower the \mathbf{b} coefficient.

(Minsky [1965] 1982: 262)

No mention is made of expectations in this interpretation of Keynes, and as Minsky was later to remark that "Keynes without uncertainty is something like Hamlet without the Prince" (1975: 57), it appears that at this stage in his intellectual development he had not yet

acquainted himself with the original.⁴ Keynes qua Keynes is first cited by Minsky in his comment upon Friedman and Schwartz's argument that business cycles are caused by exogenous changes in the rate of change of the money supply (Minsky 1963: 68). However the reference itself is a cosmetic one, portraying Keynes as merely qualifying orthodox economics, rather than challenging it. At this stage, Fisher's debt-deflation hypothesis remains the dominant critical influence on Minsky's thinking. His perception of Keynes was still clearly a secondhand one when in late 1967/early 1968 he argued that "the successful application of Keynesian policy may result in an economy that is inherently unstable" (Minsky 1968: 331).

The realisation that orthodoxy was based, not on an accurate rendition of Keynes, but on a particularly questionable interpretation, first occurred to Minsky in 1968 when, for the first time, Keynes's 1937 paper "The General Theory of Employment" appears in Minsky's list of references (Minsky 1969a, 1982: 190). In this paper, "Alternative theories of the rate of interest" (Keynes 1937b), and Chapter 17 of the *General Theory*, Keynes developed a perspective on the motive for investment which differs radically from the "Marginal Efficiency of Capital" argument which became the basis of the conventional analysis of investment. There are three key facets to Keynes's distinctly expectations-based explanation of investment in these three works: a dual price level; a volatile basis for the formation of expectations, which determines the desire to invest; and a finance-based demand for money,⁵ in addition to the traditional triad of transactions, precautionary and speculative demand.

⁴ It also appears that Minsky was relying on a second-hand account of Hicks's interpretation of Keynes, since his only "Keynesian" reference is to Pigou's *Keynes's General Theory* (Minsky 1957b, 1982: 253, Note 9)

⁵ The finance demand for money is absent in the *General Theory*, but becomes an important extension to Keynes's reasoning in the 1937 papers.

In Chapter 17, Keynes argued that investment is motivated by the desire to produce “those assets of which the normal supply-price is less than the demand price” (Keynes 1936: 228), where the demand price was determined by the influences of prospective yields, depreciation and liquidity preference. This insight was further refined in “The General Theory of Employment”, where Keynes talks of the progress towards equilibrium between different prospective investments leading to “shifts in the money-prices of capital assets relative to the prices of money-loans.” The concept of two price levels and the focus on capital appreciation as the motive for investment are even more evident in the observation that the scale of production of capital assets “depends, of course, on the relation between their costs of production and the prices which they are expected to realise in the market.” (Keynes 1937a: 217.)

Keynes’ discussion of uncertainty in this article is allied to an increased use of the concept of asset prices, and a much diminished status for the marginal efficiency of capital. Keynes associates the latter with the view that uncertainty can be reduced “to the same calculable status as that of certainty itself” via a “Benthamite calculus”, whereas the kind of uncertainty that matters in investment is that about which “there is no scientific basis on which to form any calculable probability whatever. We simply do not know” (Keynes 1937a: 213, 214). Keynes argues that in the midst of this incalculable uncertainty, investors form fragile expectations about the future, which are crystallised in the prices they place upon capital assets, and these prices are therefore subject to sudden and violent change—with equally sudden and violent consequences for the propensity to invest. Seen in this light, the marginal efficiency of capital is simply the ratio of the yield from an asset to its current demand price. There is therefore a different “marginal efficiency of capital” for every different state of capitalist expectations and its consequent level of asset prices (1937a: 222).

Keynes' explanation for the formation of expectations under true uncertainty had three components: a convention shared by investors that "the present is a much more serviceable guide to the future than a candid examination of past experience would show it to have been hitherto"; the belief that "the existing state of opinion as expressed in prices and the character of existing output is based on a correct summing up of future prospects"; and a reliance on mass sentiment: "we endeavour to fall back on the judgment of the rest of the world which is perhaps better informed" (Keynes 1936: 214). The fundamental effect of shifts in expectations is to change the importance attributed to liquidity, thus shifting the apportionment of funds between assets embodying varying degrees of liquidity, with volatile consequences for the level and composition of investment.

Keynes strengthens this increasingly financial focus with the observation that there exists a finance demand for money, which must be exercised and fulfilled before investment is undertaken. Having neglected this concept in the *General Theory*, he argues here that "it is, to an important extent, the 'financial' facilities which regulate the pace of new investment". It is therefore not a lack of savings which inhibits investment, but a lack of finance consequent upon "too great a press of uncompleted investment" (Keynes 1937b: 247).

Though these observations are potent, they are not as systematic as those in the *General Theory* on the marginal efficiency of capital, let alone as structured as the model in "Mr Keynes and the Classics" (Hicks 1937), which led to IS-LM analysis with its static treatment of expectations (Hicks 1982). Since Keynes adhered to the concept of diminishing returns in the short run, it was difficult for him to explain how the two price levels could diverge. There was no explanation for the state of expectations at any given time, nor for why shifts might occur; nor was there any integration of the question of expectations with the question of supply of finance, and the notion of an endogenously variable supply of finance sits uneasily with the exogenous view of the supply of money presented in the *General Theory*. It

is therefore little wonder that these insights were not developed in the conventional literature. However, with his foundations in Kalecki's theory of investment under uncertainty and Fisher's picture of a debt deflation driven by the collapse of asset prices, Minsky readily assimilated and improved upon Keynes's vision.

Uncertainty then entered the cast of Minsky's capitalist drama, with its first role being as a counterpoint to the fragility of business confidence, under the direction of the central bank. Minsky argued that a central bank emphasis upon "orderly conditions in financial markets" and the function of a lender of last resort will "act upon 'confidence' and thus uncertainty", increasing the former and decreasing the latter. However, deluded both by economic theory which misunderstood the significance of uncertainty and by the passage of time since the Great Depression, central banks had instead come to believe that "active monetary and fiscal policy [can be] used to 'fine tune' the economy... As a result monetary policy is being carried out without the constraints ... that might result from prospects of serious business depressions." This altered behaviour of central banks meant that "instead of acting as an insurer (substituting certainty for uncertainty) central banking has taken on some aspects of a casino (substituting uncertainty for certainty)" (1982: 180).⁶

Uncertainty's second and more crucial role—from the point of view of the development of the Financial Instability Hypothesis—involves a linkage with business confidence and asset management behaviour over the course of the trade cycle. Minsky argues that "A protracted period of rising prosperity ... breeds a view in ordinary business

⁶ Minsky footnotes Friedman M. and Savage L.J., 1948, "The utility analysis of choices involving risk", *Journal of Political Economy*, Vol. 56 at this point, while later stating that his own ideas about uncertainty "seem to be consistent with those of Keynes" (1969a, 1982: 191, footnote 6), citing Keynes 1937a.

corporations and financial institutions which allows them to raise their short-term payment commitments as a ratio, for example, to their expected cash flows from operations” (1982: 186-187). This behaviour is predicated on the belief that, should some short-term refinancing or asset sales be required, they can be undertaken at little cost. Yet this behaviour breeds the very conditions in which these costs are likely to be large.

By 1969, Minsky had firmed in the belief that his perspective and that of Keynes were consistent visions of capitalism. He christened his analysis “unreconstructed Keynesian” (Minsky 1969b: 224), and it was in essence that

capitalism is inherently flawed, being prone to booms, crises and depressions.

This instability, in my view, is due to characteristics the financial system must possess if it is to be consistent with full-blown capitalism. Such a financial system will be capable of both generating signals that induce an accelerating desire to invest and of financing that accelerating investment. (1969b: 224)⁷

With such a vision of capitalism, it might have seemed likely that Minsky would turn to Marx. No such development occurred.⁸ This is unfortunate, since, as I now argue, if Minsky had looked deeply into the historical soul of the Financial Instability Hypothesis, he would have seen Marx staring out.

⁷ This article also marks the first use of the term “euphoric” (224) to describe capitalist expectations in the accelerating phase of a boom. However the paper also has many neoclassical remnants, including the use of utility and expected utility terminology in the discussion of risk aversion (227-228).

⁸ Minsky’s contribution to *The Economic Law of Motion of Modern Society: A Marx-Keynes-Schumpeter Centennial* (Wagener et. Al. 1986) considered only Keynes and Schumpeter.

4 Marx

The conventional understanding of Marx's theory of money is derived from Marx's commodity money model in Volume I of *Capital*, and there is nothing which such a vision of money could add to Minsky's analysis. However I contend that, not only is there much in Marx's analysis of cycles which is consonant with Minsky, but also that Marx's dialectics provides a philosophical foundation for a key aspect of Minsky's theory, the proposition that there are two price levels in capitalism.

The first "Minskian" aspect of Marx is clear and uncontroversial. In *Capital III*, Marx gave a descriptive overview of financially-driven periodic crises. His analysis begins with relatively a simplistic but cyclical perspective on the interaction of the rate of interest with the rate of economic growth:

"If we observe the cycles in which modern industry moves—state of inactivity, mounting revival, prosperity, over-production, crisis, stagnation, state of inactivity, etc.,... —we shall find that a low rate of interest generally corresponds to periods of prosperity ... a rise in interest separates prosperity and its reverse, and a maximum of interest up to a point of extreme usury corresponds to the period of crisis..." (Marx 1894: 360-61)

Marx quickly realises that this relationship is too simple, and elaborates this picture significantly. He starts his analysis at a time of prosperity and full employment. This leads to the money supply growing faster than prices, and to a dramatic expansion in credit —"As concerns the circulation between capitalists, a period of brisk business is simultaneously, a period of most elastic and easy credit." However with easy credit goes rising indebtedness, rising interest rates, and eventually a crisis in which "prices fall, similarly wages; the number of employed labourers is reduced, the mass of transactions decreases" (Marx 1894: 448). During

the slump money is needed more than ever in order to repay debts, but none is forthcoming.

Marx puts this brilliantly:

“It is by no means the strong demand for loans which distinguishes the period of depression from that of prosperity, but the ease with which this demand is satisfied in periods of prosperity, and the difficulties it meets in times of depression.” (Marx 1894: 450)

When the financiers takes the upper hand, a Depression almost inevitably ensues, as Marx decries as he rises to his polemical best:

“Talk about centralisation! The credit system, which has its focus in the so-called national banks and the big money-lenders and usurers surrounding them, constitutes enormous centralisation, and gives this class of parasites the fabulous power, not only to periodically despoil industrial capitalists, but also to interfere in actual production in a most dangerous manner—and this gang knows nothing about production and has nothing to do with it.” (Marx 1894: 544-45).

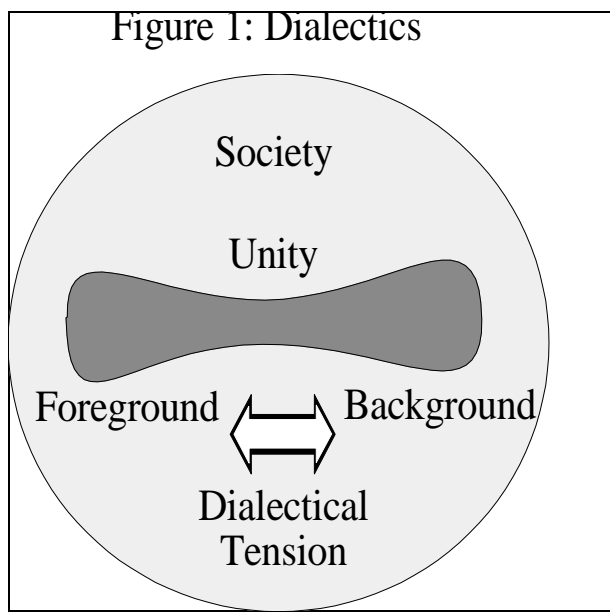
Thus for Marx, as with Fisher and Minsky after him, the essential element giving rise to a Depression is the accumulation of private debt. This aspect of Marx is therefore consonant with Minsky, but adds little to his analysis. For a more significant contribution to the analysis of financial instability, we must turn to another neglected aspect of Marx’s analysis: the dialectic of the commodity. As Rosdolsky observed, while many pay lip-service to “contradiction between use value and exchange value” (Rosdolsky 1977: 133),⁹ few realise

⁹ “How often has the thesis of the ‘contradiction between use value and exchange value’ been repeated? On the other hand, how often has anyone really taken the trouble to develop this thesis or regard it as something more than a survival of the time when Marx ‘coquetted with the Hegelian manner of expression’? In reality we are dealing here with one of the most

how pivotal this concept was to Marx's analysis (see Groll 1980, Keen 1993a, 1993b).

Properly understood and applied, this analysis provides a foundation for Minsky's concept of two price levels in capitalism, a concept which is therefore rightly initially sourced to Marx, rather than to Keynes.

Marx's dialectical analysis starts by treating any component of a society as a social unity—a unity in that it has an existence in its own right, but a social unity in that it must exist in a society, and can only be understood from that context (Marx 1857: 485). He then argues that the material forces of society will initially bring one aspect of the unity to the foreground, and that this necessarily pushes the other aspects of the unity into the background. However, the unity can neither exist nor be fully understood with just the foreground aspect, so there will be a dynamic tension between foreground and background (its “opposite”) will propel the development of the unity (see Figure 1)



Marx identified the commodity as the key social unity in capitalism. By pushing exchange-value into the foreground, and use-value into the background, capitalism makes

fundamental discoveries of Marx's economics, the neglect of which makes his conclusions in the theory of value and money appear utterly distorted.” (Rosdolsky 1977: 133)

value—or colloquially, the cost of production—the determinant of exchange-value.¹⁰ But the commodity continues to be the unity of exchange-value and use-value, and the tension between use-value and exchange-value is thus the pivotal dialectic in capitalism (Marx 1857: 267-68 [footnote]). The well-developed application of this concept to the question of the source of surplus value is instructive,¹¹ since it clarifies Marx’s less well-developed but incisive analysis of finance.

As is well-known, Marx argued that to explain of the source of surplus “you must start from the theorem that, on the average, commodities are *sold at their real values*, and that *profits are derived by selling them at their values*” (Marx 1865: 384). On this basis he dismissed explanations based upon unequal exchange (Marx 1867: 154) or increasing utility through exchange (Marx 1867: 155-58), and concluded that exchange-value as such cannot be the source of surplus value, and that therefore use-value, the dialectical opposite of exchange-value, must hold the key to the source of surplus: “*We are, therefore, forced to the conclusion that the change originates in the use-value, as such, of the commodity, i.e. its*

¹⁰ Marx’s terminology, and his explanation of it, were often convoluted, especially so in his discussions of value. Workable definitions are that value is equivalent to the cost of production, exchange-value to price, and use-value to the objective usefulness of a commodity (as opposed to the neoclassical concept of subjective utility). However the word value also plays a metaphysical role as the manifestation of the unity of the commodity: “Is not *value* to be conceived as the unity of use-value and exchange value? In and for itself, is value as such the general form, in opposition to use-value and exchange value as *particular* forms of it?” (Marx 1857: 267).

¹¹ In Keen 1993a and 1993b, I argue that this analysis contradicts the labour theory of value. However this contentious point is irrelevant to the case developed here.

consumption.” (Marx 1867: 164; emphases added.) Finally Marx reveals that the source of surplus lies in the *quantitative*¹² difference between the exchange-value of labour-power, and its use-value. The capitalist purchaser of labour-power pays its exchange-value, which is equivalent to a subsistence bundle of commodities, but exploits its use-value.

“The past labour that is embodied in the labour-power, and the living labour that it can call into action; the daily cost of maintaining it, and its daily expenditure in work, are two totally different things. The former determines the exchange value of the labour-power, the latter is its use value.” (Marx 1867: 188)

As pivotal as this argument is, it represents only the foundation of Marx’s dialectical analysis; yet it is the only part which he elucidated completely.¹³ As he applied it to more complex issues, Marx developed a further distinction between pure commodities, and unities which were simultaneously commodities and non-commodities—with the key such unities being labour itself, capital assets, and money. These unities experienced a dialectical tension between their commodity aspect, which was brought to the foreground, and their non-commodity aspect, which was thrust into the background. This tension meant that, in

¹² Generally, of course, use-value is qualitative, whereas exchange-value is quantitative, and the two are necessarily incommensurable. However in the case of labour-power as an input to production, both use-value and exchange-value are magnitudes, but unrelated to each other. Marx makes this quite explicit: “Exchange-value and use-value [are] intrinsically incommensurable magnitudes” (Marx 1867: 506)

¹³ Even then his argument was misunderstood, leading to the now discredited positions of Sweezy, Meek, Dobb, Rubin and others that use-value played no role in Marx’s analysis (Groll 1980; Keen 1993a, 1993b).

various ways, the rules that a commodity's value determined its exchange-value, and its use-value was irrelevant, were attenuated.

The most complete such attenuation applied to money loans, where according to Marx, its exchange-value could not be determined by its value—or cost of production:

“What, now, does the industrial capitalist pay, and what is, therefore, the price of the loaned capital?... What the buyer of an ordinary commodity, buys is its use-value; what he pays for is its value. What the borrower of money buys is likewise its use-value as capital; but what does he pay for? Surely not its price, or value, as in the case of ordinary commodities.” (Marx 1894: 352.)

Thus the rate of interest, rather than being set by the cost involved in issuing a loan, *is set by the use-value of the loan itself*, and “Its use-value, however, lies in producing profit” (Marx 1894: 355. See also Marx 1861 [Part III]: 457-58). The market rate of interest is thus governed by the average expectations of profit of the capitalist class.

Marx extended this result to the price paid for capital assets—factories, mines, etc.—which are purchased in order to generate a stream of income (Marx 1894: 353-356, Marx 1861 II: 249, Marx 1861 III: 457-59). Marx chastised Ricardo for explaining the price of minerals in situ on the basis of their “value”, when no labor has gone into their production. Marx points out that they therefore contain no value—though they have obvious potential quantitative use-value, determined by the expected sale price of the estimated quantity of ore. If mining rights and the like could be purchased, like commodities, for their cost of production, they would be free. Hence as with loaned capital, the exchange-value of assets is determined not by their costs of production, but by their *perceived* use-value—that of being a potential source of exchange-value. He concludes that these quasi-commodities are set apart from normal commodities by the fact that their prices are determined, not by their exchange-value, but by their “*possible* use-value and hence the *prospective exchange-value*”:

“Ricardo never uses the word *value* for utility or usefulness or ‘value in use’.
Does he therefore mean to say that the ‘compensation’ is paid to the owner of the
quarries and coalmines for the ‘*value*’ the coal and stone have before they are removed
from the quarry and the mine--in their original state? Then he invalidates his entire
doctrine of value. Or does *value* mean here, as it must do, the *possible* use-value and
hence the *prospective exchange*-value of coal or stone?" (Marx 1861 Part II, p. 249)

The final sentence clearly shows the role of uncertainty and expectations in price
determination for assets, and. Marx’s dialectical analysis of the commodity is clearly
consonant with Minsky’s theory of systemic fragility, and it provides a unified basis for
Minsky’s analysis of capitalism’s two price levels.

5 Conclusion

The first anniversary of Minsky's death is a time of extreme crisis for the global economy, when "It" clearly has happened again in Southeast Asia and Japan, and may yet occur once again in the USA. The economic conditions of today's "It" may thus potentially create an intellectual climate similar to that of the first Great Depression of the 20th century, when as iconoclastic a vision as Minsky's could replace a confused and irrelevant orthodoxy.

It would be a tragedy if this present opportunity to finally force realism upon economic theory were lost as thoroughly as was the last, when a resurgent neoclassicism buried the new Keynesian challenger beneath the deadening vision of the old. The chances of that happening this time round are, perhaps, less than previously. There are many more (true!) Keynesians now than then, and most of them have long since achieved the "long process of escape from habitual modes of thought and expression" which so clouded the interpretation of the *General Theory*, and the weaknesses of the dominant school are well-known, at least to its critics. However today's neoclassical adversary is far more sophisticated than its 1930s forbear, its ideology more ascendant and its influence greater, whatever its intellectual and policy weaknesses.

A key factor in the struggle to ensure that, this time, the new vision is not bastardised, is the recognition of its firm roots in the decidedly non-neoclassical antecedents of Kalecki, the non-equilibrium Fisher, Keynes "with the Prince", and Marx. If we recognise our common roots, then we are less likely to fall prey to the 21st century's equivalent of the Keynesian-neoclassical synthesis.

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