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The Monetary Theory of Kalecki and Minsky

Jan Toporowski[1]

Abstract

The monetary theory of Kalecki and Minsky is usually placed within the Post-Keynesian tradition, deriving from the monetary analysis of John Maynard Keynes. The paper argues that Kalecki and Minsky shared a common inheritance in Swedish and German monetary theory, rather than the Marshallian tradition. Thus the monetary analysis of Kalecki and Minsky emphasises the endogeneity of money through capitalist reproduction, rather than through the mechanisms connecting central bank money to credit creation in the banking system. This provides the link between the monetary theory of Kalecki and Minsky and modern circuit theory.

JEL classification: B30, E12, E51

Keywords: Keynes, Kalecki, Minsky, Money

1. Introduction

The monetary theory of Michał Kalecki and Hyman P. Minsky is usually placed with the Post-Keynesian monetary tradition (see Sawyer 1985, chapter 5, Sawyer 2001, Wray 1990, Wray 2010). By monetary theory is meant here the way in which money circulates in a financially-sophisticated capitalist economy, rather than a universal account of the attributes of money. Money is a social artefact and any account of it necessarily relative to historical circumstances.

This paper does not present a comprehensive account of Post-Keynesian monetary theory, or of German monetary theory, or even the monetary theories of Keynes, Kalecki and Minsky. Hence the rather summary treatment of German and Post-Keynesian theories. Rather the paper highlights particular differences between the monetary theories of Kalecki and Minsky, and Post-Keynesian monetary theory, and particular similarities between the monetary theories of these two individuals and German monetary theory.

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The Post-Keynesian view derives from the work of John Maynard Keynes, with the important modification that money is assumed to be endogenous, a view at variance with the view held by Keynes up to the *General Theory* and beyond (see below), where money and bank credit is set by the central bank (and hence exogenous). The endogenous view, according to which the demand for credit determines its supply, was subsequently revived by Nicholas Kaldor and later Post-Keynesians such as Paul Davidson, Basil Moore, Victoria Chick and Sheila Dow in their well-known works.

The theory of monetary endogeneity locates the agency determining the supply and demand for money in the banking system. The Keynesian tradition places this in the money market in which commercial banks confront the central bank, as the supplier of money, with their demand for central bank money to hold as reserves or convert into banknotes for withdrawal into circulation. Post-Keynesian monetary theory emphasises the mechanisms within the banking system that make it responsive to what Keynes referred to as ‘the fringe of unsatisfied borrowers’. According to Keynes this fringe allowed the banking system to ration credit by means other than the rate of interest:

‘the existence of this unsatisfied fringe and of a variability in the banks’ standards of eligibility of borrowers in respects other than the rate of interest allows the Banking System a means of influencing the rate of interest supplementary to mere changes in the short-term rate of interest … … the Bank of England does not fix bank-rate and leave the quantity of bank-money to find it’s own level; nor does it fix the quantity of bank-money and leave the bank-rate to find its own level. It fixes *both* – and fixes them, to a certain extent independently.’ (Keynes 1930a, pp. 365-6).

Among Post-Keynesians from Kaldor onwards, this central bank control over the amount of bank credit is denied and replaced by the notion that the demand for bank-money or credit is itself determined by the rate of interest and uncertainty that govern the real investment for which credit is required. This is to some degree justified by ‘revolving fund of finance’ arguments from Keynes: money loaned by banks for investment becomes available for lending out again, so that successive tranches of investment may be undertaken without the need for expanding the supply of credit (Keynes 1937, pp. 208-9). This view, for example, modifies the ‘loanable funds’ plus uncertainty interpretation that Asimakopoulos gives to the

Post-Keynesian relationship between credit and investment, into which he incorporates Kalecki (Asimakopoulos 1983), or the passive lending that Jan Kregel sees in Kalecki's theory:

'In simple terms, Kalecki assumes that whenever individual capitalists are inclined to spend in excess of their budget constraints in order to invest, the bank oblige by creating the appropriate amounts of commercial bank credits.' (Kregel 1989).

This paper presents a different view of Kalecki's monetary theory. This is most obvious at the point at which investment, or the process of capital accumulation, is articulated with this theory. In the first place, Kalecki emphasised the priority that firms give to financing investment out of retained profits (Anderson 1964, Kalecki 1954, chapter 9). Furthermore, Kalecki also argued that investment spending generates profits, in the form of accumulations of bank deposits in the accounts of capitalists (Kalecki 1954, p. 50). This is a 'macroeconomic' circuit by which bank lending results in bank deposits. It may be contrasted with the purely banking circuit implicit in Keynes's 'revolving fund of finance' in which bank loans return to them not as deposits, but as loan repayments:

'If investment is proceeding at a steady rate, the finance (or the commitments to finance) required can be supplied from a revolving fund of a more or less constant amount, one entrepreneur having his finance replenished for the purpose of a projected investment as another exhausts his on paying for his completed investment.' (Keynes 1937 p. 209).

The same two mechanisms articulating retained profits with bank loans for investment, and then investment resulting in profits, through a 'macroeconomic' circuit, may also be found in Minsky (1954/1986). The macroeconomic circuit is descended from German monetary theory, rather than the 'medium of exchange' cum money market analysis of Alfred Marshall, from which Keynes built his theory. It is therefore useful, or at least provides some economy of intellectual effort, to consider the roots of the monetary analysis of both Minsky and Kalecki in German monetary theory. In the section that follows, the key features of German monetary theory that influenced Kalecki and Minsky are outlined. This is then followed by a section explaining how Kalecki was brought into the German monetary tradition, and what elements of his work reflect that tradition. In the final section a similar interpretation of Minsky is provided. The paper concludes by reflecting on some of the implications of their work for economic policy in general, and monetary policy in particular.

2. German Monetary Theory (scandalously abbreviated)

German monetary theory is a complex of competing doctrines and methodologies (Ellis 1934 and the forthcoming work by Riccardo Bellofiore, Bellofiore 2011). It includes, for example, an Austrian stream, associated with the work of Mises and Hayek. This stressed convertibility with gold as a regulator of money and credit. But there was another stream, emanating from the work of Knut Wicksell. His *Interest and Prices*, published in Swedish in 1898, was based on an extensive study of English monetary theory, including the Banking School. He also appears to have studied the economic reproduction schemes of Marx, from Volume II of *Capital*. Among the seminal ideas that Wicksell advanced was the idea of a credit cycle, driven by differences between the money rate of interest and the 'natural' rate of interest, the latter being the marginal product of capital. But he took from Marx the idea that the capitalist economy is a system in which money spent circulates in the economy, so that the spending of capitalists on investment and their own consumption comes back to capitalists as profits. Finally, Wicksell put forward the idea of a 'pure credit' economy. In the recent work of Michael Woodford, a 'pure credit' economy has come to mean one in which the money supply is strictly endogenous, to the point where illiquidity is impossible (because additional credit can, by assumption, always be obtained). However, Wicksell's 'pure credit' economy is one in which credit serves as a means of payment, and credit is unconstrained by bank reserves. This is a much better description of twenty-first century banking in the financially-advanced countries, than that of Woodford, if only because it does not exclude all those issues of insolvency and illiquidity that have come to trouble us today.

German monetary theory was carried over into monetary theoretical discussions in the English language by Hayek, Schumpeter and Neisser, only to be overtaken in those discussions by the monetary analysis of Keynes. All three German monetary theorists absorbed the apparently paradoxical proposition of Hartley Withers, that loans create deposits, rather than the other way around, as conventional credit multiplier theory proposes (Withers 1909. See also Chick 1986). In other words, the balance sheet of the banking system is not determined by the deposits that are placed in banks, but by the loans that banks advance to their customers. These then appear as additional deposits of customers from whom borrowers buy goods, services and assets with the loans that they have received.

3. Kalecki's Monetary Theory

The earliest influence on Kalecki's monetary theory was Hilferding's *Finance Capital*. This work highlights the role of banks in the process of regulating corporate finance and managing markets (the Marxian 'concentration and centralisation of capital' by banks). However, Hilferding did not consider the principle of banking reflux, which underlies Withers-type processes of monetary endogeneity. Kalecki seems to have worked it out himself in developing his ideas on corporate liquidity and investment over the course of the business cycle. An early indicator of his thinking occurs in an essay on 'Inflation and War' (*Inflacja a Wojna*) which he wrote under the pseudonym Henryk Braun for a socialist periodical, the Socialist Review (*Przegląd Socjalistyczny*). Here he argued that credit policy could not revive business activity depressed by inadequate demand in the economy. Cheaper and more easily available bank loans, due to 'a more liberal supply of credit by the central bank', would only be taken out in order to pay off existing, more expensive business loans: 'New credits will be used to pay back the old ones and the surprised creditors will bring their repaid credits back to banks thus neatly closing the circle.' (Kalecki 1932).

By then Kalecki was already working with the monetary economist who was to have the biggest influence on him, Marek Breit. Breit's early work, before he met Kalecki, was concerned with the scope and significance of interest rate policy in Poland, and displays an extensive knowledge of German monetary theory. At that time, he leaned towards the ideas of Mises and Albert Hahn. Both Mises and Hahn were preoccupied with the inflationary potential of excessive credit creation. Under the influence of Kalecki, and the depression of the 1930s, he moved to a more sceptical view of credit policy which emphasised the expenditure decision of the capitalist firm as the key moment in mobilising credit, rather than the lending decision of the bank (which predominates most notably in New Keynesian credit theory)(Breit 1933, Breit 1935, Kowalik 1992, pp 239-243). This principle underlies the Principle of Increasing Risk that Kalecki made into the core of his theory of the firm and integrates his analysis of corporate finance with his theory of investment (Breit 1935, Kalecki 1954, chapter 8).

The final link in the reflux of bank lending to bank deposits appears in Kalecki's work in the form of his theory of profits. Here he argued that firms' expenditure on investment returned to them, more or less (depending on the amount of household saving, the fiscal balance, and payments on the foreign trade and capital accounts) as profits:

…(I)f some capitalists increase their investment by using for this purpose their liquid reserves, the profits of other capitalists will rise *pro tanto* and thus the liquid reserves will pass into the possession of the latter. If additional investment is financed by bank credit, the spending of the amounts in question will cause equal amounts of saved profits to accumulate as bank deposits.' (Kalecki 1954 p. 50).

4. The Monetary Theory of Minsky

The link with German monetary theory is much more obvious in the case of Minsky. The supervisor of his PhD dissertation was Schumpeter, until he died. Minsky's doctoral thesis was a critique of the accelerator principle as an element of the business cycle, arguing that it depended on the indebtedness of capitalist firms (Minsky 1954-2004). Minsky's extensive theoretical investigation of money in a sophisticated financial capitalist was part of a research study into private capital markets, commissioned by the Commission on Money and Credit, financed by the Ford and Merrill Foundations. Minsky contributed to this a study entitled 'Financial Crisis, Financial Systems and the Performance of the Economy' (Minsky 1964).

Minsky's study divided money flows into three 'transaction types'. These were flows on 'balance sheet account, income account, and portfolio account' (Minsky 1964, pp. 233-235). The 'balance sheet account' consists of those flows that are necessary to maintain existing balance sheets, that is, payments on existing financial liabilities, or from existing assets. These include all 'contractual dated payments of interest, rent, etc., and the payment of dividends …' The 'income account' consists of money flows being exchanged for goods and services in the economy. Here Minsky added 'it is a matter of research strategy whether all interfirm payments, or only those related to the purchase of final goods and services – the production of gross national product – should be included.' (Minsky 1964, p. 234). Finally, portfolio payments are the money flows due to the exchange of either existing assets and newly-created financial assets. These he proposed to integrate into what we would now call the 'flow of funds' accounts, showing the evolution of money in circulation and portfolio balances. This analysis of money flows is a key and original feature of the study, which provides an early version of what came to be his 'financial instability hypothesis'.

Minsky seems to have had difficulty in knowing where to place intra-firm money payments in respect of business payments for materials, components, and semi-finished products. After excluding such payments from his analysis he noted: ‘It is quite clear that the analysis put forth here would tend to a “Fisherish” concept of transaction velocity rather than a “Marshallian” income, or income and wealth velocity. As a result the firm business to business payments of input-output analysis should be included in any money flows accounting system.’ (Minsky 1964, p. 235). The ‘Fisherish’ reference is to Fisher’s paper *The Debt Deflation Theory of Great Depressions*, a work that Minsky revered. In that paper, Fisher advanced the idea that a capitalist economy that uses credit has two market systems. The first is the well-known system of markets and prices for goods in current production that is the staple of microeconomic theory. The second is the credit system, in which monetary and financial assets are exchanged, giving rise to future payment obligations or receipts (Fisher 1933). The distinction forms the basis for Minsky’s theory of financial crisis.

This analysis turns out to be somewhat similar to that advanced by the German monetary theorist and Marxist Hans Neisser (of whom Keynes wrote ‘I find Dr. Neisser’s general attitude to monetary problems problems particularly sympathetic, and am hopeful he may feel the same about my work’, Keynes 1930b p. 197). In his 1928 book *Der Tauschwert des Geldes* (The Exchange Value of Money) Neisser had divided up cash balances into ‘balance reserves’, held against contingencies by producers and consumers, and the ‘operating funds’ to meet regular shortfalls of income against expenditure. To these Neisser attributed different velocities of circulation (Neisser 1928). In a strange anticipated query of Minsky’s remarks about business to business payments, the writer on German monetary theory Howard Ellis had doubts too about Neisser’s and Hayek’s inclusion of inter-firm payments for materials, components, and semi-finished products, which would increase with firm specialisation (Ellis 1935 pp. 174-175).

Minsky went on, for the late 1970s onwards, to adopt the Kalecki profits theory, according to which investment in a given period yields, in that same period, profits for firms. This appears in his most important work *Stabilizing an Unstable Economy* (Minsky 1986, chapter 8). However, he did not draw the monetary conclusion from this theory, namely that loan financed investment adds to firms’ bank deposits in the form of retained profits (Lavoie and Seccareccia 2001, Toporowski 2010).

Conclusions

Both Kalecki and Minsky derived their monetary economics from the German discussions during the first third of the last century. This led them to the conclusion that the expenditure of capitalists determines the circulation of money in the economy, and credit or monetary policy only affects the balance sheet of the banking system. This is a fundamentally different view from that of Keynes and the Post-Keynesians, who argued and continue to argue that credit or monetary policy determines the circulation of money in the economy (except in the unlikely case of a ‘liquidity trap’) through its impact on the expenditure of capitalist firms. In the case of Keynes and the Post-Keynesians, such expenditure draws down the liquidity of bank balance sheets, but does not expand those balance sheets. Most economists today have forgotten, if they ever learned, the conclusion of Withers, that loans create deposits or, in the version of Kalecki and partially that of Minsky, that loan-financed investment expenditure creates its own profits and equivalent income deposits in the banking system (Toporowski 2010). This link between capitalists’ expenditure and bank credit forms the common theoretical connection between German monetary theory and modern circuit theory of money (Bellofiore, 1989, Halevi and Taouil 2002).

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