Chapter 5 of Jan Toporowski *Interest and Capital The Monetary Economics of Michał Kalecki* (Oxford University Press 2022)

A FABLE ON DEBT AND DEBT MANAGEMENT

A key feature of Kalecki's monetary economics is the financial circulation of money, that is the circulation of money that settles payment obligations under debt contracts. Kalecki explained debt resolution by means of a fable about monetary circulation between mutually indebted individuals. This is reconstructed below and the processes of debt payment in that fable are generalised to show how interest and debt payments depend on the financial circulation of money, rather than profits or income derived from the non-financial economy. Financial circulation makes debt payments dependent upon the liquidity in the financial system and marks a break with the classical theory of interest in which interest is tied to the rate of profit. Bank lending, securitisation and central bank buying of financial assets all have their part to play in maintaining debt payments to avoid default and financial crisis.

In 2015 I published a reconstruction of a Kalecki fable on credit and debt.[1] At the time I thought that it provided an intriguing insight into the working of the monetary transmission mechanism in the financial system. Although my discussion of that working remains, I think, fundamentally correct, I have since been able to think through more carefully the implications of Kalecki's fable for debt and debt management. These are essentially new implications and have radical consequences for policies of debt management. I therefore present those implications and consequences in this paper, along with the version of the fable that I published in 2015.

[1] Toporowski 'A Kalecki Fable on Debt and the Monetary Transmission Mechanism' 2015.

Kalecki would occasionally tell stories illustrating the paradoxical, even irrational, aspects of capitalism, usually to show how inefficient the market system may be, no matter how rational may be the calculations of its participants. Perhaps best-known is his tale of two railway lines in competition with each other and suffering from excess capacity, whose only long-term solution is the construction of successively further railways lines to ensure full capacity utilisation on railways lines already built.[2]

In the course of an exchange of views on the Greek crisis with Kalecki's student, Kazimierz Łaski, I passed on to him a fable of private debts in a Greek village being cleared through the circulation of a €100 note brought to the village by a German tourist, and returned to him at the end of the story. Łaski pointed out that the story was much older and had in fact been originally told to him by Kalecki when the two men were working together in the 1960s. I was able to reconstruct Kalecki's story from the fragments remembered by Łaski, adding to it my own explanatory remarks, to make the story comprehensible to the twenty-first century reader. The story is presented in the next section. A humorous, Mexican version of the story is available on Youtube at https://www.youtube.com/watch?v=Aw6zsJBVMCM&t=42s References to literary versions of debt processes are given in my original paper.

1. Kalecki's Fable

Following the death, in 1935, of the Polish military dictator Józef Piłsudski his regime continued under a group of his military cronies, known as the 'colonels', who increasingly modelled their regime on that of Mussolini in Italy. One of the colonels, who was responsible for economic development, wanted to understand the economic principles behind

[2] Kalecki 'Stimulating the Business Upswing' 1933/1990.

government policies of economic recovery[3]. He called in Kalecki's colleague from the Institute for the Study of Business Cycles and Prices (*Instytut Badań Konjunktur Gospodarczych i Cen*) Ludwik Landau, to explain the principles behind the 'new economics'. Landau had just been fired from the Institute and was now working then at the national statistical office, Główny Urząd Statystyczny.[4]

Landau explained at length the principles of effective demand and credit cycles underlying levels of output and employment at any one time. The colonel had evident difficulty in grasping this. In a final effort to break through the colonel's incomprehension, Landau told the following story:

'In an impoverished Jewish shtetl in Eastern Poland, whose residents were mired in debt and living on credit, a wealthy and pious Jew arrived one day and checked into the local inn, taking care to pay his hotel bill in advance. On Friday, to avoid breaking the Sabbath injunction against carrying money, he handed over to the inn-keeper for safe-keeping a $100 note[5]. Early on Sunday, the wealthy and pious Jew left the inn before the inn-keeper had had a chance to return the banknote.

---

[3] Kazimierz Łaski thinks it may have been Roman Górecki (1889-1946), a lawyer who had joined Piłsudski's 'Legion', a militia formed to fight along-side the Austrian army in 1914. By 1926, just before Piłsudski's military coup against the civilian government, Górecki had been advanced to the rank of General. Shortly after the coup he was appointed head of the National Economic Bank (*Bank Gospodarstwa Krajowego*). Górecki's book, complete with hagiographic descriptions of Piłsudski and his chosen head of state Ignacy Mościcki, concludes its Introduction with the following summary of Polish economic policy: '… the rational economic policy of the Government is based on three fundamental principles: (1) the maintenance of a stable currency based upon a balanced national budget and favourable trade balance. (2) The creation of conditions favourable to the process of internal capitalisation (i.e., investment JT). (3) The adaptation of all elements of economic life to the new conditions brought about by the crisis.

Experiments of every kind have been avoided, particularly the experiment of artificial "manipulation of business conditions," in the belief that only by means of simple, classic, orthodox methods can positive results be achieved.' (Górecki *Poland and Her Economic Development* 1935 p. 17).
Górecki was Minister of Trade and Industry in the Polish Government from October 1935 to May 1936.

[4] see Kalecki 'Ludwik Landau – Economist and Satistician' 1964, and Landau *Wybór Pism* (Selected Writings) 1957.

[5] The Polish currency, the złoty, had been placed on a dollar standard in 1934 at a rate of zł.5.26 to the US$. Efforts to maintain this parity included a restriction on the issue of banknotes. Hence the widespread use of

After a few days, the inn-keeper decided that the wealthy Jew was not going to return. So he took the $100 note and used it to clear his debt with the local butcher. The butcher was delighted and gave the note for safe-keeping to his wife. She used it to clear her debts with a local seamstress who made up dresses for her. The seamstress was delighted, and took the money to repay her rent arrears with her landlord. The landlord was pleased to get his rent at last and gave the money to pay his mistress, who had been giving him her favours without any return for far too long. The mistress was relieved because she could now use the note to clear off her debt at the local inn where she occasionally rented rooms.

So it was that the bank-note finally returned to the inn-keeper. Although no new trade or production had occurred, nor any income been created, the debts in the shtetl had been cleared, and everyone looked forward to the future with renewed optimism.

A couple of weeks later, the wealthy and pious Jew returned to the inn, and the inn-keeper was able to return to him his $100 note. To his amazement and dismay, the wealthy Jew took the note, set fire to it at the paraffin lamp that was on the table, and used it to light his cigarette. On seeing the inn-keeper’s dismay the wealthy Jew laughed and told him that the banknote was forged anyway.'

Landau finished his story and waited for understanding to take hold of the colonel. Beads of sweat appeared on the colonel's forehead, from the intellectual effort at comprehension. Finally, the colonel detected some explanation and exclaimed: 'Ah, I knew from the very beginning that there was something wrong with that Jew. Of course, the money was forged!'

---

informal credit and debt. The Polish writer Stefan Themerson related to the author how, faced with a shortage of banknotes and bank credit, Themerson’s publisher in the 1930s Gebethner and Wolff had offered Themerson a wagon-load of coal in payment for royalties. Themerson refused this payment, and they finally agreed that Themerson would receive as payment a stay in a hotel in the Polish mountain resort of Zakopane, where the publisher had credit.

Kalecki's conclusion from this was that unfortunately too many people think like the colonel, and very few people understand the story as we do.

2. Debt payment processes

This section interprets Kalecki's debt fable as demonstrating how debts may be serviced purely by financial transfers, without any income from the real economy. This interpretation challenges the classical theory of interest according to which the rate of interest is derived from the rate of profit in the economy.

Consider a group of mutually-indebted agents (MIAs) who have no income. These may be rentiers (with assets, in the form of debt claims against each other, but no income, apart from the interest on those claims), or retired persons holding such debt claims and owing money, but without any pensions. How can they make debt payments to each other? The answer, as the above fable shows, is very simple. Those who *receive* interest or debt payments can make payments from the interest or payments on debts that they have received. The rest can *sell* financial assets, in the form of the debt claims that they hold, in order to make their own debt payments. Obviously for such payments to be made, the system requires some minimum holdings of monetary assets (bank deposits), say Ḿ.[6] If actual holdings of money or bank deposits, M, are less than Ḿ, the MIAs have to depend on

[6] Strictly speaking , the money or liquidity required to settle debt payment in this situation depends on three factors. First of all there is the actual sum of debts outstanding (in money terms). Secondly, there is the distribution of debts and debt claims among the MIAs. Total debts obviously equal total debt claims, but not for every agent, so that there will be some *net* debtors and some *net* creditors. Thirdly, there is the sequence over time of contracted debt payment (interest and principal repayment) commitments of the MIAs. In turn these depend on the term(short or long term) of the debts and the interest payments are annual, quarterly or weekly.

net revenue from real activities (surplus). Only in this sense is interest an actual deduction from a surplus generated in the real (non-financial), as affirmed by the theory of interest that prevailed in classical political economy, that the rate of interest is ultimately determined by the rate of profit in the economy.[7] From this classical view is derived the widely held view that interest must somehow be paid out of a surplus generated in the real economy. This link to current surplus is the foundation of the Wicksellian theory: that the money rate of interest may deviate from the rate of profit; that capitalists do not have bank deposits so that interest does not redistribute such deposits among capitalists, but takes those deposits out of circulation among capitalists; and therefore that the rate of profit places a ceiling on the interest that may be paid in an economy. It is this determination of interest by the rate of profit that Kalecki's fable challenged, by considering a situation in which the mutually-indebted characters in the story had no income, but were able to pay off their debts with a token money (the detail of its forgery is incidental to the financial circulation of money).

To test this supposed link between interest and income from non-financial activities we may consider a situation in which the circle of mutually-indented agents not only have no other income, except the interest that they may receive on their debt claims on each other, but also find that their holdings of money, M, are less than the amount Ḿ required to allow payments to be made to each other. In this situation interest payments cannot be made in full. What would our MIAs do now? They would sell the debt claims that they hold in exchange for money, to those MIA's who have money, and use that money to pay what they owe. In this situation, the velocity of circulation of money among the MIAs would increase, because it is now not only being used to pay interest, but it is also being used to buy and sell debt claims.

[7] This is further explained in Toporowski 'Anwar Shaikh and the Classical Theory of interest' 2020.

In a credit economy, commercial banks may ease the shortage of money by offering credit against the security of debt claims held by the borrower. With bank deposits acceptable as means of payment of interest, bank lending has the capacity to ease the shortage of money, but at the expense of increased borrowing by our MIAs, who now not only owe money directly to each other, but also to banks. However, the interest that they pay to their bankers is off-set by the interest that our MIAs may now receive on their bank deposits. Thus, the role of commercial banks is the creation of new debt claims. With each new bank debt claim an equivalent deposit is created (and hence an addition to M).

However, this mechanism requires a commercial banking system willing to grant, on demand, new credit against the value of debt claims. What happens if the MIAs jointly become net sellers of their debt claims. In that situation, the price of their debt claims will fall in relation to the interest that comes with ownership of the debt claim. This price will continue falling until, at some point, the yield on the debt claims will attract into the market for debt claims holders of money who will wish to obtain a generous income from holding debt claims rather than money. This will continue until the market for debt claims has absorbed enough money for the indebted to be able to service their debts.

However, the creation of new credit against existing debt claims, or the attraction of money into the market for debt claims is not a reliable mechanism, not least because holders of money stocks may be deterred from buying debt claims by the prospect that their purchase may not be sufficient to stem the fall in the prices of those debts. The markets for debts are the hunting grounds of speculators who buy debts in the conviction, not always borne out, of a rise in the value of those debts. This, after all, is the basis of Keynes's famous 'beauty contest' theory of financial speculation.[8] If the mechanism of selling off debt claims breaks down, then interest payments cannot be made. Keynes's Treasury rival, Ralph Hawtrey

[8] Keynes *General Theory* 1936, chapter 12.

called this situation a ‘credit deadlock’, clearly in reference to the situation after the First World War, when the foreign debts of the Western powers were supposed to be paid from reparations paid by the government of Germany, which had been stripped at Versailles of its ability to pay those reparations.[9] He recommended that ‘a credit deadlock which is impervious to cheap money may (thus) yield to treatment of through open market purchases of securities’ by the central bank. In Hawtrey’s view such operations would make banks more liquid and therefore more inclined to lend.[10] But the same logic applies to direct purchases of debt claims in the event of a debt market breakdown, if net selling continues. Net selling by indebted agents requires a net buyer and, if commercial banks will not do this on behalf of their depositors, the central bank can perform this operation through its open market operations. We are familiar with this from the Quantitative Easing programmes that have been pursued by central banks in the United States, Europe and Japan, since the crisis of 2008.[11]

The analysis has reached the point where the debts of mutually-indebted agents with no income have been used to expand borrowing from commercial banks, and the liquidity of those banks is maintained by central bank to buying debt claims from commercial banks. These are the conditions for keeping the portfolios of MIA’s are sufficiently liquid for them to make payments on their debts to each other, directly or through commercial bank intermediation, or to the central bank. Over time, more interest is diverted among MIAs,

[9] This contradiction in the financial policies of the Western Powers had been noted by Keynes in his critique of the Versailles settlements, *The Economic Consequences of the Peace* (Keynes 1920, chapters V and VI; see also Keynes 1922, chapter VI).

[10] Hawtrey *A Century of Bank Rate* 1938, p. 256.

[11] This now introduces a fourth factor affecting the minimum money stocks or liquidity necessary to ensure debt payments, namely the class of debt and from which agent debt claims are purchased by the central bank, or the class of debt accepted as security against loans by commercial banks; and in turn the sequence by which the additional liquidity meets the contracted debt obligations of MIAs. This is not a random process, subject to shocks. These factors are given by the structure and distribution of debts inherited from the past at any one time. Ḿ - M is therefore determinate at any one time, even though the process of making debt claims liquid (selling them to the central bank, or to commercial banks, or borrowing against them from commercial banks) will modify the structures of debt and debt claims.

through commercial banks, or paid to the central bank as opposed to other MIAs, as their debts pass into the ownership of the central bank. 'In the long run we are all dead'[12] and on decease our remaining debt claims may pass into the possession of commercial banks or the central bank to help write off debt claims against the deceased held by those commercial banks or the central bank.

3. Some implications for debt management

Four features of this process, of maintaining payments on debts without drawing down on income from the real economy, warrant comment. First of all there is the growing intermediation by banks to maintain a level of money in the economy sufficient to allow payments to be made on debts by our MIAs with income other than the interest that comes with their ownership of debt claims. Agents who started off borrowing money from each other end up owing larger amounts of money apparently to banks but, indirectly to other MIAs who hold bank deposits. These deposits are backed in bank balance sheets by debts owed to banks by MIAs who took out loans against the security of their initial debt claims against each other.

Secondly, there is the market in debt claims. Debt claims can only be used as collateral for additional bank loans if the debt claims can be sold into a market. Transforming debts into marketable securities is a procedure known as 'securitisation'. Hyman Minsky was correct to point out that the function of securitisation is to make portfolios of assets (in this case debt claims) more liquid.[13] Without such securitisation, the system of debt would have collapsed if all MIAs had insufficient money to service their debts. Securitisation allowed them to obtain such money, either by selling their debt claims to each other, or by obtaining credit from a

[12] Keynes *A Tract on Monetary Reform* 1923, p. 80.

[13] Minsky 'Securitization' 2008.

bank secured against an asset or debt claim that the bank could sell if the borrower defaulted. Finally, securitisation allows banks to maintain the liquidity of their balance sheets by selling the debt claims in their possession to another commercial bank or a central bank in exchange for reserves that can be used to settle payments between banks.

Thirdly, the analysis in the previous section explains how financial crisis arises because commercial banks stop lending and the central banks stop buying. Both of these breakdowns in the system were apparent during the 2008 crisis: the suspicion of collateralised debt obligations among banks and in securities markets, and the monetary policies of the central banks that were satisfied by interest rate movements, rather than by open market operations. Such operations (led by the Troubled Asset Relief Program in America) were only re-started after the crisis had taken hold, and quickly stabilised financial systems. Unfortunately by then the damage had been done to the private sector investment that determines the business cycle in market capitalism.[14]

The analysis leads directly to a paradoxical conclusion, namely that the answer to a debt crisis is more debt. This is paradoxical because the first two features discussed above, namely growing financial intermediation and securitisation, are commonly associated with financialisation, which is widely held to contribute to financial crisis. It is an irony of the literature on financialisation that it seeks to constrain, or even eliminate, in the case of securitisation, precisely those mechanisms that facilitate the avoidance of financial crisis. To a great extent this is because of a misreading of the 2008 crisis, which was indeed preceded by rising financing intermediation and securitisation over an extended period. However, to focus merely on this trend is to overlook the failures in financial intermediation, in particular in the capital markets, and the difficulties of securitisation that started in the 1990s, *before* the crisis itself.

[14] Toporowski 'The Crisis of Finance and the Crisis of Accumulation' 2016c

Fourthly, and perhaps least apparent of all, is that in a situation of mutual indebtedness, the problem of payments on debt is essentially a transfer problem, i.e., how to ensure that there is enough liquidity in the portfolios of indebted parties to ensure that mutual debt obligations can be settled. This involves swapping assets (debt claims) for money among the indebted parties, or borrowing from banks (the resulting deposits being backed by banks' loans to indebted parties), or purchase of debt claims by a central bank. In any case, the financial assets that are created by debt (debt claims) remain within the system as a kind of 'inside' debt.

This is not the case when debt is owed to someone who is 'outside' the system, i.e., when the creditor does not owe money to anyone else within the system so that, on receipt of debt payments, the 'outside' creditor merely takes the money and does not use it to make payments to anyone else in the system. To some degree this is the case with the 'central bank' in the system described in the previous section. But that central bank husbanded its resources for the greater good of the financial system, using the reserves that it can today create in order to buy debt claims from MIAs. Of course, the more of these debt claims that it buys, the more monetary resources it will take out of the system in the future, with payments on the debt claims that the central bank has purchased. This is why central banks need to maintain continuous open market operations to regulate the liquidity of the financial system. This is further discussed in the concluding chapter of this book.

A much more obvious case of 'outside debt' was the international gold standard. In that system gold was the ultimate monetary resource, but brought no return to its possessor, since the price of gold was constant. In that situation, the rate of interest was the only incentive for parting with gold. A central bank, mindful of its responsibility to issue only banknotes backed by gold, had only a limited capacity to buy in debt claims, and private

creditors had even less incentive to plough back payments received into buying debt claims. There is a sense in which the gold standard made all debt into 'outside' debt, inhibiting the financial circulation of money. This was the background to the 'classical' theory of interest that tied interest to the rate of profit. This system, with its periodic banking crises when banks ran out of reserves, is the one that the more ardent critics of 'financialisation' would have restored.

It was only with the development of fractional reserve banking and the widespread use of bank deposits as means of payment that a credit system emerged in which commercial banks could lend to create deposits, and central banks buy more freely.[15] By facilitating interest payments through financial circulation, the credit system finally released interest from its dependence on surplus, or income generated in the non-financial economy. As Kalecki's fable illustrates, once debt becomes 'inside debt', interest and payments on debt need only financial circulation for their prompt settlement. For the system as a whole, debts are truly 'fictitious capital' that may be settled with a forged banknote. The interest on fictitious capital may also be fictitious.``````````````````````````````

[15] This is recognised in De Cecco *Money and Empire: The International Gold Standard 1890-1914* 1984, Hobson *Gold Prices and Wages* 1913, pp. 89-92, and Chick 'The Evolution of the Banking System' 1986.