Krzysiowi

Rozum otwiera okna pamięci

... we should clearly trace the lines of tradition – positive as well as negative – from the older generations of economists in order to prevent our literature from falling any more than necessary into Babylonic barbarism.

(Gunnar Myrdal, *Monetary Equilibrium*, p. 31)

Theories of Financial Disturbance

An Examination of Critical Theories of Finance from Adam Smith to the Present Day

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In a different context, the philosopher Bernard Williams said of analytical philosophy that 'when you had taken the problems of philosophy apart, you'd find that many of its traditional questions had not been solved but had disappeared'.[63] It would be tempting to see the dispute in political economy about usury as just such an intellectual debate that went out of fashion, and was replaced by a newer way of looking at the issues. However, the newer way of looking was itself precipitated by events: the inflation of the Napoleonic Wars and the deflation that followed, and the inconvenience of the usury laws for the burgeoning business of finance. These events did not resolve the questions raised by Smith about finance, but served as the pretext for setting them aside. Those questions were then transmitted to modern generations of students as an uncharacteristic questioning of the wisdom of *laissez-faire*. But Smith's argument in favour of usury laws was not about the wisdom of unregulated markets, but the respective roles of finance and enterprise in a market economy. The issues that he raised were to be revived, albeit in a guise more suited to their circumstances, in the twentieth century.

PART II

Critical Theories of Finance in the Twentieth Century: Unstable Money and Finance

This social character of capital is first promoted and wholly realised through the full development of the credit and banking system ... The distribution of capital as a special business, a social function, is taken out of the hands of the private capitalists and usurers. But at the same time, banking and credit thus become the most potent means of driving capitalist production beyond its own limits, and one of the most effective vehicles of crises and swindle.

(Marx, *Capital Volume III*, p. 607)

3. Thorstein Veblen and those 'captains of finance'

Because his work marks the first break with classical political economy over finance, Veblen may be regarded as the first theorist of modern finance. Finance was crucial to his vision of how the modern capitalist economy operates. He dismissed the neo-classical version of economics not only because it was ahistorical, but also because it derived its so-called 'laws' from axioms about barter. It was not only the 'neo-classicals' who were guilty of this. The Swedish monetary economist and near contemporary of Veblen, Knut Wicksell, derived his notion of a 'natural' rate of interest explicitly from considerations of exchange and capital productivity in a barter economy.[1] The earlier classical political economy was less relevant, in Veblen's view, because its monetary analysis was based on commodity money. Yet the critical feature of the modern capitalist economy is the predominance of credit. Credit, in Veblen's view, infuses virtually every transaction in the capitalist economy with a different meaning and different consequences to those which such transactions may have in the barter economy that is the staple of classical and neo-classical economics.[2] In this respect, Veblen was arguably the first Post-Keynesian. He criticised Tugan-Baranovsky for arguing that money was a negligible factor in economic crises. 'He thereby commits himself to the position that these crises are phenomena of the material processes of economic life (production and consumption), not of business traffic ... Substantially the same is true of Marx, whom Tugan follows, though with large reservations.'[3]

1. CRITICAL FINANCE IN *THE THEORY OF BUSINESS ENTERPRISE*

In three seminal chapters of his book *The Theory of Business Enterprise*, published in 1904, Veblen put forward a number of ideas which have since become standard in mainstream and critical finance. Among them is the first capital asset pricing model, deriving the present value of capital assets from the discounted stream of expected future income. In a striking anticipation of Hawtrey's and Keynes's later views, Veblen made clear that economic crises are a monetary phenomenon ('The shrinkage incident to a crisis is chiefly a

pecuniary, not a material, shrinkage.'[4]) Moreover, he argued that expectations of future income are projections into a future which cannot be known, and are therefore the outcome more of sentiment and confidence than rational calculation. The following remark could just as easily have been made by Keynes:

> It will be noted that the explanation here offered of depression makes it a malady of the affections. The discrepancy which discourages business men is a discrepancy between that nominal capitalization which they have set their hearts upon through habituation in the immediate past and that actual capitalizable value of their property which its current earning-capacity will warrant. But where the preconceptions of the business men engaged have, as commonly happens, in great part been fixed and legalized in the form of interest-bearing securities, this malady of the affections becomes extremely difficult to remedy, even though it be true that these legalized affections, preconceptions, or what not, centre upon the metaphysical stability of the money unit.[5]

However, in contrast to Keynes and most subsequent economists, Veblen did not see credit inflation as in any way adding to productive capacity: 'borrowed funds do not increase the aggregate industrial equipment'.[6] Instead, the funds are used to secure better control of markets and existing industrial capacity:

> All these advances afford the borrower a differential advantage in bidding against other business men for the control and use of industrial processes and materials, they afford him a differential advantage in the distribution of the material means of industry; but they constitute no aggregate addition to the material means of industry at large. Funds of whatever character are a pecuniary fact, not an industrial one; they serve the distribution of the control of industry only, not its materially productive work.[7]

Veblen combined this model with the social philosophy of emulation, which he had already made famous in his earlier book *The Theory of the Leisure Class*, into the first financial cycle theory. Borrowing in anticipation of future profits gives an enterprise a competitive advantage over other enterprises in its business. Such a 'credit extension' from securities markets or banks induces emulation among competitor firms. The effect of such lending against collateral is to increase the value of the collateral. The gains expected from their credit extensions become cumulative rather than cancelling each other out because they raise the value in the financial markets of the collateral against which credit is obtained. In this way a credit boom is engineered: 'The extension of credit proceeds on the putative stability of the money value of the capitalized industrial material, whose money value is cumulatively augmented by this extension itself.'[8] However, the foundations of the credit boom lie not in any increase in productive capacity, or income and corporate sales revenue,

but in the expectations of the financiers that Veblen viewed as increasingly running industry, and the way in which the financial markets value the collateral on which they lend. Competitive lending is both the result of higher expectations of gain and itself enhances that gain through increases in market valuations of assets, and hence expectations of future gains. Such gains, he argued, depended on the ability of business to raise prices faster than wages.[9] But the difficulty with this is that it limits the market for output. Here Veblen endorsed Hobson's under-consumptionist theory of depressions.[10] Inevitably, when the enhanced expectations of gain are confounded, the boom breaks into a financial crisis:

> the money value of the collateral is at the same time the capitalized value of the property, computed on the basis of its presumptive earning-capacity. These two methods of rating the value of collateral must approximately coincide, if the capitalization is to afford a stable basis for credit; and when an obvious discrepancy arises between the outcome given by the two ratings, then a re-rating will be had in which the rating on the basis of earning-capacity must be accepted as definitive, since earnings are the ground fact upon which all business transactions turn and to which all business enterprise converges. A manifest discrepancy presently arises in this way between the aggregate nominal value (capital plus loans) engaged in business, on the one hand, and the actual rate of earning-capacity of this business capital, on the other hand; and when this discrepancy has become patent a period of liquidation begins.[11]

> on the consequent withdrawal of credit a forced rerating of the aggregate capital follows, bringing the nominal aggregate into approximate accord with the facts of earning-capacity ... the shrinkage which takes place in reducing the aggregate rating of business capital from the basis of capital goods plus loans to the basis of capital goods alone, takes place at the expense of debtors and nominal owners industrial equipment, in so far as they are solvent ... apart from secondary effects, such as a heightened efficiency of industry due to inflated values, changes of the rate of interest, insolvency, etc., the main final outcome is a redistribution of the ownership of property whereby the creditor class, including holders and claimants of funds, is benefited.[12]

The rate of interest, Veblen argued, could influence the course of the business cycle, but only where business committed itself to interest rates that then fell in a recession, and where the costs of converting to a lower rate of interest were too high.[13] Moreover, lower interest rates in a depression would tend to raise the present value of existing industrial establishments relative to new capacity, discouraging new investment.[14]

With the rise of stock market credit, the possibilities of credit extensions are greatly increased. Large industrial corporations are kept permanently in a state of 'over-capitalization' in relation to earning capacity by means of 'stock-watering'. Additional stock is issued and the proceeds are not used to increase productive capacity. This excess capital corresponds to 'good-will', or

'franchise', that is, intangible sources of future earnings. Such capital is valued on the stock market at a price that fluctuates inversely with the 'long-period fluctuations of discount rates in the money markets'. Adjustments of credit values to the true earning capacity of industry then take place through changes in stock prices.[15] The main function of this more sophisticated credit is a continuous process of mergers, acquisitions and balance-sheet restructurings in which the company promoter and investment banker benefits from an artificially induced turnover of credit: 'This syncopated process of expanding capital by the help of credit financiering, however, is seen at its best in the later-day reorganizations and coalitions of industrial corporations ...'.[16] This, he argued, was what distinguished the instability of actual corporate financing from the kind of 'speculation' that Henry Crosby Emery at the time was suggesting offered certainty and financial stability to business.[17]

By 'heightened efficiency', Veblen meant 'heightened intensity of application and fuller employment of industrial plant'.[18] His insistence that 'credit extensions' are not spent on additions to the material prerequisites of production would suggest that the 'credit inflation' corresponds to increased holdings of liquid assets by companies, rather than mere 'good-will'. However, Veblen does not appear to have thought through such implications of balance-sheet identities. His suggestion that 'heightened efficiency' in industry is a largely insignificant by-product of credit extension further highlights the absence of a systematic exposition of the credit cycle, as opposed to the description of pertinent symptoms, which he evidently hugely enjoyed writing.

Nevertheless, excluding this anomaly, his account would be not too different from contemporary theories of 'rational bubbles'.[19] However, the more recent theories are rooted in equilibrium values reflecting the best of all possible outcomes in production and distribution. Reversion to such values is the basis of most recent theories of financial instability, and their scope is limited by the financial markets themselves. By contrast, Veblen's cycles are explanations of how finance disturbs the rest of the economy. As numerous commentators, such as Heilbroner, have pointed out, Veblen reached intellectual maturity at the time of 'robber baron' capitalism in America, when finance was a critical tool of plunder, as a means of gain as well as a way to launder illicit gains.[20] In June 1893 there had occurred 'one of the severest crises in the history even of American credit', as Ralph Hawtrey described it with characteristically English condescension. Banks throughout the USA, with the exception of those in Chicago, suspended cash payments. Bank failures were followed by a major crisis in industry and trade.[21] As it proceeded, the economic depression was marked by a wave of industrial consolidations, mergers and takeovers, leaving the American banks and stock markets preoccupied with corporate restructurings. Veblen drew much of his

data from the testimony of witnesses before the Industrial Commissions of the US Congress, which held hearings in the 1890s into the financial and industrial excesses of American corporations. Veblen therefore regarded finance as a tool of what he called 'capitalist sabotage', which set the 'captains of finance' against the honest 'engineers' seeking industrial efficiency. In a capitalism dominated by finance, the absentee owners of industry are obliged to limit production to get the highest possible profit that 'the market can bear', and to disturb markets with their shifting coalitions between various corporations and industrial interests. Veblen argued that the 'captains of finance' and absentee owners owe their incomes and their control of industry to the legal conventions surrounding the laws of contract and property established in the eighteenth century. In the wake of the Russian Revolution, he looked forward to the day when more rational attitudes would prevail and the 'engineers' would overthrow 'the captains of finance'.[22] He was to be disappointed. After a slow start, the 'New Capitalism' of 1920s America flourished, motivated by the stock market boom.

2. VEBLEN'S LATER THOUGHTS

In 1923, Veblen published his last book, *Absentee Ownership and Business Enterprise in Recent Times: The Case of America*. In this he broadly reiterated the analysis that he had put forward in *The Theory of Business Enterprise*, albeit now expressing considerably less optimism concerning the possibility that the 'engineers' may take over from the 'captains of finance' (whom he now dubbed 'captains of industry'). He also qualified, in a characteristically off-hand way, his earlier view that cost minimisation by employers would render workers unable to raise their wages above subsistence level. This had been the basis of Hawtrey's later dismissal of Veblen for establishing his theory of profit 'on the Ricardian theory of a subsistence wage'.[23] In a footnote Veblen suggested that the limitations of aggregate demand in a capitalist economy make enterprises engage in 'salesmanship' in order to expand their market. This has the effect 'of establishing a conventional need for articles which have previously been superfluities'. The '(moral) subsistence minimum to be provided out of wages will be raised, without a corresponding increase in the workman-like efficiency of the wage-earners'.[24] The somewhat misogynous examples he gave of 'moral' necessities, rather than the 'requirement of subsistence or physical comfort', were 'furs, cosmetics or high heels'.[25]

But the main change he now introduced into his analysis concerned finance and its role in the economy. Whereas in *The Theory of Business Enterprise* financial instability was a major factor agitating the economic stagnation of

capitalism, in his later work, financial disturbances disappeared. In 1913, in large part because of earlier financial instability, the US Congress had established the Federal Reserve system. This set up a network of wholesale banking markets and an official mechanism for discounting bank assets, ensuring that banks could not run out of liquidity. Veblen saw this as a centralisation of the credit system, underwriting the fortunes of investment banking.[26] As a result, credit expands to take control of all business, with the aim of 'recapitalising' it and loading it with financial liabilities:

> Stability, greater security from unforeseen or undesigned contingencies, will enable trading in credits and capitalisation on a thinner equity; which signifies a larger volume of fixed charges payable to the makers of credit, on the resultant increased volume of outstanding obligations; which means that the custodians of credit are enabled to take over the assets of the business community with increasingly greater expedition; which in turn will increase the stability of the business as well as the measure of control exercised by the keepers of credit over the conduct of business and industry at large.[27]

However, this over-capitalisation of companies occurs using debt instruments (bonds or bank loans). This, in turn, gives rise to high equity gearing (ratio of debt to equity), Veblen's 'thinner equity', which would nowadays be taken as indicating financial fragility, that is, a enhanced possibility of financial collapse if the 'fixed charges' could not be paid. But Veblen saw it in rather more conventional terms that would have been familiar to Thornton or John Stuart Mill, as a cause of price inflation in the real economy:

> Directly or indirectly, the resulting credit instruments go to swell the volume of collateral on which the fabric of credit is erected and on which further extensions are negotiated. These credit extensions in this way enable the concerns in question to trade on a thinner equity. That is to say, such business concerns are thereby enabled to enter into larger commitments and undertake outlays that are more largely in excess of their tangible assets than before; to go into the market with a purchasing-power expanded by that much – or a little something more – beyond their available possessions, tangible and intangible. Which goes to enlarge the effective purchasing-power in the market without enlarging the supply of vendible goods in the market; which will act to raise or maintain the level of prices, and will therefore enlarge the total of the community's wealth as rated in money-values, independently of any increase of tangible possessions; all of which is 'good for trade'.[28]

This inflation is at the expense of industry:

> It foots up to an inflation of the total volume of wealth in hand as rated in terms of price, with no corresponding increase of tangible possessions; whereby the investment bankers and their clients come in for an increased share of wealth in hand, at the cost of the general body of owners and workmen.[29]

Although Veblen did not mention Hilferding, Lenin, Bukharin or Varga, the outcome is their system of finance capital, but devoted to usury (expanding 'the capitalisation of overhead charges' of credit) rather than 'the socialisation of capital':

> Eventually, therefore, the country's assets should, at a progressively accelerated rate, gravitate into the ownership, or at least into the control, of the banking community at large; and within the banking community ownership and control should gravitate into the hands of the massive credit institution(s) that stand at the fiscal centre of all things.[30]

The stability of the system proved to be illusory. Veblen died in 1929, weeks before the 'captains of finance' overthrew themselves. In later years the common view was that the 1930s reforms of banking and finance (the Glass–Steagall Act of 1932, the extension of the powers of the Federal Reserve system and the establishment of lender of last resort facilities) rendered Veblen's theories of finance irrelevant.[31] This leaves open the possibility that recent deregulation may have renewed their currency. There is no doubt that his explanations suffered from a lack of consistency and system. This was a common feature of economic analysis in his time, and may arguably be found also in the contemporary work of writers such as Hobson, and even Keynes and Schumpeter. Paul Sweezy later pointed out the serious analytical omission in Veblen of a theory of aggregate demand.[32] This had the result that he brought in arguments for particular purposes, and seems to have ignored them otherwise. A notable example is his treatment of company balance sheets, in which the counterpart of excess capital is strangely absent, except as further claims on the cash flow of companies. The issue of excess capital liabilities would normally add to the cash reserves of a company or would be used for investment. The conventional view is that increased reserves stabilise corporate finances. Further explanation is required to make overcapitalisation consistent with financial instability, under-investment and industrial stagnation, as he suggested.

4. Rosa Luxemburg and the Marxist subordination of finance

Rosa Luxemburg is best known for her attempt in her book *The Accumulation of Capital* to show that capitalist accumulation requires external markets in order to overcome a tendency to stagnation. These external markets formed the basis of her theory of imperialism, which was taken over by Lenin and subsequent Marxists. However, in chapter XXX of that book, on 'International Loans', Rosa Luxemburg examined the role of finance in capital accumulation. This analysis was perhaps peripheral to her argument. But it has sufficient critical elements to warrant a place for Luxemburg among the pioneers of critical finance, while the fate of that analysis among Marxists reveals how the most important school of radical political economy in the twentieth century came to an attenuated view of finance as a factor in capitalist crisis.

1. ROSA LUXEMBURG'S CRITICISM OF INTERNATIONAL BANKING

For Luxemburg, the context of the system of international loans was crucial. Advanced capitalist countries faced crises of 'realisation', that is, inadequate demand to allow profits to accrue. At the same time, developing countries lacked the markets for commodity production to take place on a capitalist scale. She argued that international loans are crucial in providing finance so that dependent and colonial countries can buy the equipment to develop their economic and industrial infrastructure, reaching political independence but tied into financial dependence on the older capitalist states:

> In the Imperialist Era, the foreign loan played an outstanding part as a means for young capitalist countries to acquire independence. The contradictions inherent in the modern system of foreign loans are the concrete expression of those which characterise the imperialist phase. Though foreign loans are indispensable for the emancipation of the rising capitalist states, they are yet the surest ties by which the old capitalist states maintain their influence, exercise financial control and exert pressure on the customs, foreign and commercial policy of the young capitalist states ... such loans widen the scope for the accumulation of capital; but at the same time they restrict it by creating new competition for the investing countries.[1]

The raising of the loans and the sale of the bonds therefore occur in exaggerated anticipation of profits. When those hopes are dashed, a crisis of over-indebtedness breaks out. The governments of the dependent and colonial territories are obliged to socialise the debts, and make them a charge on their tax revenues. However, by this time the loans have served their primary purpose, which is to finance the export of capital equipment from the advanced capitalist countries, thereby adding to their profits and capital accumulation. With the crisis, capital accumulation comes to a halt, before new issues of bonds and loans finance capital exports to another country and capital accumulation is resumed.

The financial crisis is overcome mainly at the cost of destroying the agricultural economy of the developing countries:

> While the realisation of the surplus value requires only the general spreading of commodity production, its capitalisation demands the progressive supercession of simple commodity production by capitalist economy, with the corollary that the limits to both the realisation and the capitalisation of surplus value keep contracting ever more.[2]

Ultimately the peasants have to pay the additional taxes and are destined to see their markets taken over by mass capitalist production. Luxemburg gave an extensive account of international loans in Egypt as an example. Here,

> the transactions between European loan capital and industrial capital are based upon relations which are extremely rational and 'sound' for the accumulation of capital, because this loan capital pays for the orders from Egypt and the interest on one loan is paid out of a new loan. Stripped of all obscuring connecting links, these relations consist in the simple fact that European capital has largely swallowed up the Egyptian peasant economy. Enormous tracts of land, labour and labour products, accruing to the state as taxes, have ultimately been converted into European capital and have been accumulated ... As against the fantastic increase of capital on the one hand, the other economic result is the ruin of peasant economy together with the growth of commodity exchange ...[3]

Similarly, in Turkey,

> railroad building and commodity exchange ... are fostered by the state on the basis of the rapid disintegration, ruin and exploitation of Asiatic peasant economy in the course of which the Turkish state becomes more and more dependent on European capital, politically as well as financially.[4]

Luxemburg's analysis of finance did not win the favour of contemporary Marxist economists. In his pamphlet, 'Imperialism, the Highest Stage of Capitalism', written in 1916, Lenin did not even mention Rosa Luxemburg, but based his economic explanation of imperialism on his critical reading of

Hobson's *Imperialism*, and his view of the role of finance on Hilferding's *Finance Capital*. Hilferding's book had been published in 1910, three years before Luxemburg's, and put forward a more benign view of finance. Hilferding generalised from the experience of banking in Germany, where 'universal' banks organised the capital markets and thereby came to own often controlling stakes in large companies. He argued that banks were a crucial factor in the emergence of monopoly capitalism and the cartelisation of the capitalist economy. In Hilferding's view, the banks not only financed the industrial expansion of capitalism into dependent and colonial territories, but also restrained competition between capitalists and financed their cartels. If crises arose, they were due to disproportions in production and class struggles. By stabilising the markets and finances of the capitalists in their cartels, banks were able to shift the costs of those crises onto non-cartelised capitalists. Because it concentrates control over industry, finance capital facilitates the eventual socialisation of the means of production.[5]

2. THE MARXIAN REFLECTIVE VIEW OF FINANCE

In his insistence that capitalist crisis can only be due to disproportions in production, or struggles between the classes involved in it, Hilferding was undoubtedly the more orthodox Marxist. Marx's views on money and finance do not constitute a consistent analysis, largely because in his time finance was only just emerging into economic pre-eminence. Recent research by Anitra Nelson and Riccardo Bellofiore suggests that those views themselves appear to have been mangled in the course of Engels's editing of Marx's notes into the widely accepted versions of the second and third volumes of *Capital*.[6] However, in at least two respects Marx was in advance of the conventional, Ricardian thinking of his time. First of all, Marx distinguished explicitly between the rate of interest and the rate of profit: in the classical political economy of David Ricardo, the rate of interest and the rate of profit were virtually interchangeable.

Second, and related to his distinction between the rate of interest and the rate of profit, Marx distinguished between real, or productive, capital and the 'fictitious' capital of financial assets.[7] Real capital is the stock of plant, equipment and materials out of which goods will be produced. Fictitious capital is the structure of financial claims on that capital. This is crucial for the process of equalising the rate of profit across industries. It is through the market for fictitious capital that money capital may be advanced to particular industries, and through that market, money may be taken out of particular industries and firms and transferred to others.

The scope and significance of finance in Marx's analysis is clearly laid out in chapter thirty-six of volume III of *Capital*. With the title 'Pre-capitalist Relations' it may seem an odd chapter in which to find Marx's conclusions on the role of finance in capitalism. But it does conclude Part V of the volume, a part that is entitled 'Division of Profit into Interest and Profit of Enterprise. Interest-Bearing Capital'. Moreover, the chapter has the added merit of authenticity: in his Preface, Engels wrote that 'The greatest difficulty was presented by Part V which dealt with the most complicated subject in the entire volume.' After fruitless attempts to complete various chapters in it, Engels confined himself to 'as orderly an arrangement of available matter as possible'. Of these chapters, the manuscript of 'the "Pre-capitalist" chapter (Chapter XXXVI) was quite complete'.[8]

The chapter discusses the historic emergence of credit from medieval systems of usury. Marx wrote that

> The credit system develops as a reaction against usury. But this should not be misunderstood, nor by any means interpreted in the manner of the ancient writers, the church fathers, Luther or the early socialists. It signifies no more and no less than the subordination of interest-bearing capital to the conditions and requirements of the capitalist mode of production.[9]

Marx viewed the battle against usury as a 'demand for the subordination of interest-bearing capital to industrial capital'.[10] In this way, capital ceases to be the fragmentary wealth that is at the unhindered disposal of individual capitalists, but is socialised to be reallocated where the highest return may be obtained.

What is crucial here is the use of the word 'subordination'. It clearly indicates the view that finance and credit are led by developments in productive industry.[11] As Engels succinctly put it in a letter to Eduard Bernstein in 1883, 'The stock exchange simply adjusts the *distribution* of the surplus value *already stolen* from the workers ...' (Marx and Engels, 1992, p. 433). In Volume III of *Capital* such adjustment is supposed to facilitate convergence, among firms and different activities, on an *average* rate of profit, whose decline then sets off *generalised* industrial crisis in capitalism.[12]

Although this could not have been foreseen at the time when Marx was writing, the development of the capitalist system went not towards the 'subordination' of finance to industrial capital, but towards the subordination of industrial capital to finance. Hence the sluggish development of industry in capitalist countries that have come to be dominated by rentier capitalism, most notably the UK and the USA from the 1880s through to the 1930s, and from the 1980s onwards.

This development is central to the theory of capitalist crisis. In Marx, economic depressions are supposed to arise from a decline in the *industrial* rate of profit. Marx, however, recognised that excessive expansion of credit

may also give rise to crisis when confidence in that credit falls and demand for cash settlements rises. In Volume III of *Capital*, he suggested two kinds of such crisis. One was an internal banking crisis,

> when credit collapses completely and when not only commodities and securities are undiscountable and nothing counts any more but money payment ... Ignorant and mistaken bank legislation, such as that of 1844–1845 can intensify this money crisis. But no kind of bank legislation can eliminate a crisis.[13]

The other kind of crisis that was familiar to Marx was the drain on gold for international payments attendant upon a balance of payments deficit. This results in the successive ruin of first importers and then exporters:

> over-imports and over-exports have taken place in all countries (we are not speaking here about crop failures etc., but about a general crisis); that is over-production promoted by credit and the general inflation of prices that goes with it.[14]

However, more modern crises of finance capitalism appear to be set off by disturbances in the financial system, which then spread to industry by devastating the balance sheets of industrial corporations. Notable examples of this are the 1929 Crash and the Japanese economic crisis after 1991. For Marxists these raise very fundamental questions concerning the scope of Marx's analysis, that is, the degree to which it indicates salient features of the capitalism of his time, and the degree to which that analysis remains true of capitalism everywhere at all times. This is not a dilemma peculiar to Marxists. It is one that affects adherents of all 'defunct economists'. Perhaps most of all it affects those 'practical men who believe themselves to be quite exempt from any intellectual influences' and who therefore do not yet understand that their 'obvious' ideas were invented by some defunct economist to enlighten circumstances that have since passed away.

Marx made one further assumption that today would be considered controversial. This concerns the manner in which capitalist finance operates. One paragraph below his statement that capitalist finance is subordinated to industry, Marx wrote the following:

> What distinguishes interest-bearing capital – in so far as it is an essential element of the capitalist mode of production – from usurer's capital is by no means the nature and character of this capital itself. It is merely the altered conditions under which it operates, and consequently also the totally transformed character of the borrower, who confronts the money-lender. Even when a man without fortune receives credit in his capacity of industrialist or merchant, it occurs with the expectation that he will function as a capitalist and appropriate unpaid labour with the borrowed capital. He receives credit in his capacity of potential capitalist. The circumstance that a man without fortune but possessing energy, solidity, ability and business acumen may become a capitalist in this manner – and the commercial value of each

> individual is pretty accurately estimated under the capitalist mode of production – is greatly admired by apologists of the capitalist system. Although this circumstance continually brings an unwelcome number of new soldiers of fortune into the field and into competition with the already existing individual capitalists, it also reinforces the supremacy of capital itself, expands its base and enables it to recruit ever new forces for itself out of the substratum of society. In a similar way, the circumstance that the Catholic Church in the Middle Ages formed its hierarchy out of the best brains in the land, regardless of their estate, birth or fortune, was one of the principal means of consolidating ecclesiastical rule and suppressing the laity. The more a ruling class is able to assimilate the foremost minds of a ruled class, the more stable and dangerous becomes its rule.[15]

This Schumpeterian vision comes close to the perfectly efficient intermediation view of finance. It is still the view that prevails in contemporary economics. The more fundamental critic of capitalism, in this regard, turns out to have been Michał Kalecki, who concluded that the key factor in capital accumulation was the 'free' capital owned by the entrepreneur. He wrote:

> 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 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.[16]

Hints at a more complex view of finance by the founders of the Marxist school emerge in their correspondence, in particular the later letters, which show a lively sensitivity to the way in which finance acquired economic importance as the nineteenth century progressed. In a letter in 1881 to the Russian economist and translator of *Capital* Nikolai Danielson, Marx noted how an influx of gold reserves can insulate the financial system from the industrial crisis: 'if the great industrial and commercial crisis England has passed through went over without the culminating financial crash at London, this *exceptional* phenomenon was only due to French money'.[17] In a later letter to the German social democrat leader August Bebel, in 1885, Engels noted how inflated financial markets would drive down interest rates. In the absence of higher returns from industry, money markets would stay liquid, but their liquidity would not induce industrial investment, a premonition of later English theories of liquidity preference:

> The chronic depression in all the decisive branches of industry also still continues unbroken here, in France and in America. Especially in iron and cotton. It is an unheard-of situation, though entirely the inevitable result of the capitalist system: such colossal over-production that it cannot even bring things to a crisis! The over-production of disposable capital seeking investment is so great that the rate of discount here actually fluctuates between 1 and 1½ per cent per annum, and for

money invested in short-term credits, which can be called in or paid off from day to day (money on call) one can hardly get ½ per cent per annum. But by choosing to invest his money in this way rather than in new industrial undertakings the money capitalist is admitting how rotten the whole business looks to him. And this fear of new investments and old enterprises, which had already manifested itself in the crisis of 1867, is the main reason why things are not brought to an acute crises.[18]

Finally, in 1890, looking back on his early years as an industrialist, Engels bemoaned the distorted view of industry that prevails in the financial markets and their self-regarding nature. He admitted that financial crises may occur that have little or no foundation in industrial reverses. Finance may develop in its own way, but is an arena for the struggle between various industrial interests. But ultimately the financial system must reflect production 'taken as a whole'. Engels's letter to the Swiss journalist Conrad Schmidt, dated 27 October 1890, stands out as a succinct statement of the Marxian 'reflective' view of finance:

The money market man only sees the movement of industry and of the world market in the inverted reflection of the money and the stock market and so effect becomes cause to him. I noted that in the 'forties already in Manchester: the London Stock Exchange reports were utterly useless for the course of industry and its periodical maxima and minima because these gentry tried to explain everything from crises on the money markets which were generally only symptoms. At that time, the object was to explain away the origin of industrial crises as temporary over-production, so that the thing had in addition its tendentious side, provocative of distortion. This point has not gone (for us, at any rate, for good and all), added to which it is indeed a fact that the money market can also have its own crises, in which direct disturbances of industry only play a subordinate part or no part at all – here there is still much, especially in the history of the last twenty years, to be examined and established ...

As soon as trading in money becomes separate from trade in commodities it has (under certain conditions imposed by production and commodity trade and within these limits) a development of its own, special laws and special phases determined by its own nature. If, in this further development, trade in money extends in addition to trade in securities and these securities are not only government securities but also industrial and transport stocks and shares, so that money trade conquers the direct control over a portion of the production by which, taken as a whole, it is itself controlled, then the reaction of money trading on production becomes still stronger and more complicated. The money traders have become the owners of railways, mines, iron works, etc. These means of production take on a double aspect: their working has to be directed sometimes in the immediate interests of production, but sometimes also according to the requirements of the shareholders, in so far as they are money traders. The most striking example of this is the American railways, whose working is entirely dependent on the stock exchange operations of a Jay Gould or a Vanderbilt, etc., these have nothing whatever to do with the particular railway concerned and its interests as a means of communication. And even here in England we have seen struggles lasting for tens of years between different railway companies over the boundaries of their respective territories – struggles in which an enormous amount of money was thrown away, not in the interests of production and communications, but simply because of a rivalry which usually only had the object of facilitating the stock exchange dealings of the shareholding money traders.[19]

In his critique of Luxemburg, Lenin's associate Nikolai Bukharin rebuked her for exaggerating the need for external markets and her neglect of finance as a centralising element in monopoly capitalism.[20] In line with Hilferding's analysis of finance as coordinating monopoly capitalism, Marxist critics have largely followed the founders of their school of thought to adhere to a 'reflective' view that, if financial crisis occurs, it is because correctly 'reflects' critical developments in production: a fall in the rate of profit, increased class struggle, disproportions and so on. Even after the 1929 Crash, the Hungarian–Soviet economist Eugene Varga provided a Marxist orthodoxy according to which 'the cause of the cyclical course of capitalist production is the accumulation of capital' resulting in excess industrial capacity.[21] The collapse of the long-term capital market was caused by such excess capacity.[22] More recently, Suzanne de Brunhoff went as far as any Marxist critic has gone in writing that

the financial cycle is only a reflection of the economic cycle: monetary and financial movements reflect non-monetary and non-financial internal and international disturbances. But they reflect them *in their own way* because of the existence of specific financial structures.[23]

However,

the capitalist form of production is unable to give an entirely functional character to the conditions under which it functions; the credit system preserves a relatively autonomous development. The resurgence of the monetary system in times of crisis is a sign of that autonomy, since the demand for money is completely outside the movement of real production. But the financial crisis also reduces the 'fictitious' mushrooming of credits and restores the monetary basis of credit.[24]

But this is because stock prices and credit can fluctuate with a degree of independence of real capital, and inversely with the rate of interest.[25]

Karl Polanyi, in his pioneering study of the social and institutional roots of economic and financial collapse in the 1930s, wrote that

Marxist works, like Hilferding's or Lenin's studies, stressed the imperialistic forces emanating from national banking, and their organic connection with the heavy industries. Such an argument, besides being restricted mainly to Germany, necessarily failed to deal with international banking interests.[26]

In this regard Rosa Luxemburg was exceptional. Her analysis of the

international loans system in the period preceding the First World War may have been incidental to her main argument about capitalist accumulation. But the view she portrayed of a financial system that visits repeated catastrophes on the traditional economy, in the course of incorporating it in the modern international capitalist economy, anticipates much of the experience of developing countries since the 1970s. The elements of critical finance in her work survive better than the model of accumulation in which they were framed.

5. Ralph Hawtrey and the monetary business cycle

If thoughtful individuals, well read in contemporary economic theory in the 1920s, had been asked at that time which economist was most likely to revolutionise twentieth-century monetary economics (and indeed had already started doing so), it is likely that, without hesitation, they would have given the name Ralph Hawtrey, rather than that of his rival, which we would now give, John Maynard Keynes. J.C. Gilbert recalled studying monetary theory from Hawtrey's *Currency and Credit* at the London School of Economics in the 1920s, and Hicks was told by Austin Robinson that this was the standard work used in the Cambridge Tripos at that time.[1] Forty years later, his standing had been reduced to that of one of the 'also-rans' of monetary theory. For example in Roll's standard textbook *A History of Economic Thought*, he merits only one mention as a theorist of credit policy.[2] Schumpeter remarked that 'Throughout the twenties, Hawtrey's theory enjoyed a considerable vogue. In the United States, especially, it was the outstanding rationalization of the uncritical belief in the unlimited efficacy of the open-market operations of the Federal Reserve System that prevailed then.'[3] But this was largely because Hawtrey's ideas were taken up by Allyn Young at Harvard University, who was an occasional advisor to Benjamin Strong, the influential Governor of the Federal Reserve Bank of New York from 1922 to his untimely death in 1928. As late as 1947, Lawrence Klein referred to Hawtrey as Keynes's 'rival for the leadership of British monetary policy'.[4] But Charles Goodhart's scholarly study of *The Evolution of Central Banks* does not even mention Hawtrey.

Much of the obscurity into which his work has fallen is the outcome of the notoriety that became attached to his name because of his authorship and his prolific and sophisticated advocacy in the Great Depression of the 1930s of what was known as the 'Treasury view'. This opposed fiscal stimulus, because it would 'crowd out' private sector investment, and urged 'prompt and large cuts in wages' and, less notoriously, devaluation and credit expansion, alongside Keynes's advocacy of these measures, as policies for economic revival.[5] Hawtrey's fiscal pessimism and regressive distributional values contrasted inevitably with Keynes's more optimistic view. In the progressive Keynesian consensus that followed 1945, even serious scholars have been

inclined to dismiss Hawtrey's work. This is despite the methodological sophistication of his disequilibrium analysis of banking and finance which, unlike that of Keynes, does not obscure that disequilibrium by presenting it in equilibrium terms.[6]

Patrick Deutscher has recently suggested a number of reasons why his analysis fell into disuse. His emphasis on stock-holders' responses to interest rate changes seemed relevant to an earlier, mercantile capitalism, rather than an industrial capitalism based on fixed capital investment. But his earlier work does contain a theory of fixed capital investment. Deutscher says that his ideas were disadvantaged by his absence from an academic milieu. But other, later contemporaries, such as Michał Kalecki and Paul Sweezy, also worked outside an academic milieu and did not suffer obscurity as a result. Third, Deutscher argues, because Hawtrey was widely perceived to have lost the policy argument of the 1930s, it was assumed that 'the facts falsified his theories'. This was indeed a serious disadvantage for Hawtrey. But it was to some degree remedied when the monetarist counter-revolution brought his ideas back into favour, albeit now with superficially Keynesian elements of expectations, rather than stock-holding, as the crucial monetary transmission mechanism. Fourth, Hawtrey's 'aversion to formalism prevented him from working fully within the framework of mainstream economics and obscured his theoretical contributions'.[7] But this is precisely what made him such a popular author in the 1920s. This aversion certainly did not diminish the authority of economists such as Joseph Schumpeter and Gunnar Myrdal, and even added a certain bohemian notoriety to the reputation of John Kenneth Galbraith. Finally, Deutscher argues that Hawtrey was 'dated and made obsolete' by the Keynesian revolution.[8] Much the same could be said of David Ricardo and Keynes's teacher Alfred Marshall, and many students today are taught little more than Ricardo and Marshall in their economics courses. His reputation indeed never recovered from the exposure of his regressive economic values, through his association with the 'Treasury view' that is supposed to have shaped the 'hungry 'thirties'. Moreover, as macroeconomics developed, his approach, in which everything hung on the short-term rate of interest, proved to be methodologically untenable. It was Hawtrey's misfortune that the monetary transmission mechanism from short-term interest rates has become such conventional wisdom in contemporary economics that his immense contribution to the establishing of this transmission mechanism as the key relationship in economic dynamics is overlooked today.

In the final analysis, it was the inability of his ideas to make the transition from the interwar ruins of the era of finance that flourished, in the unstable kind of way that he perceived, before the First World War. In the era of planned public sector stabilisation of economic disturbances, after the Second World War, there could be little relevance in a monetary theory of the business

cycle. But his most serious failure as an economist was also that aspect of his work which was his greatest achievement from the point of view of this study in critical finance. His underlying economic philosophy that money and finance, left to themselves, will disturb the capitalist economy remains worthy of re-examination in our present era of finance.

1. UNSTABLE MONEY

Hawtrey himself was not discouraged by the success of his younger contemporary, and the apparent anachronism of his own analysis. Towards the end of a life that spanned the final decades of the gold standard, and the beginnings of the emergence of finance at the end of the twentieth century, he reiterated his view as follows:

> To unstable money are to be traced nearly all our economic troubles since 1918: the unemployment of the inter-war period; the over-employment and scarcity of labour since the Second World War; the labour unrest incidental to perpetual wage demands; the hardships and dislocation caused by the declining value of small savings, annuities and endowments; the vexation of continual price rises even for those whose incomes on the whole keep pace with them; the collapse of the prices of Government securities through distrust of the unit in which they are valued.[9]

By 'unstable money', Hawtrey meant considerably more than instability of the purchasing power of money, due to fluctuations in prices. 'Unstable money' meant for him a complex way in which monetary and financial institutions destabilise the economy in which they operate. However, monetary theory was the starting point of Hawtrey's analysis, and it is for his monetary theory of the business cycle that he was best known in his time. Hawtrey's theory is different in a very fundamental way from other monetary business cycle theories. In the monetary business cycle theories of Hayek, and, in the latter part of the century, Friedman, Lucas and, most recently, Wojnilower, monetary disturbances in economic activity are induced by incorrect economic or, more strictly, monetary *policy* decisions. For Hayek and Friedman, the economy is disturbed when the authorities expand credit by more or less than the amount required to finance the level of investment and economic activity desired by the private sector.[10] For Lucas, unexpected changes in the money supply disturb economic equilibrium.[11] In Wojnilower's analysis, 'credit crunches', or withdrawals of loan facilities in response to the authorities' reregulation and monetary tightening, cause financial crises.[12] The starting point, whether explicit or implied, is that in a 'natural' economy, that is, without intervention by the authorities, the economy would proceed without financial crisis.

Hawtrey's starting point was different. He recognised that the institutional forms through which the capitalist system evolved have been conditions in which money and finance disturb the economy. The roots of his analysis were in his historical studies of monetary and financial arrangements and, in particular, the efforts of central banks to ease the constraints of the gold standard on the credit system in the century before the First World War, and the attempts to resurrect that standard after that war. This is epitomised in the content and title of the last book that he prepared for publication in 1962, a third edition of *A Century of Bank Rate*. The central banks' interest in more flexible currency policy arose out of a necessity to avoid the financial crises that the 'cross of gold' periodically inflicted upon the economy because of changes in the global supply of gold, and shifts in its distribution among trading countries. For Hawtrey, therefore, the monetary and financial system disturbs the economy naturally, and requires appropriate economic policies to limit the resulting instability. Of the authors cited in the previous paragraph, only Friedman, perhaps and certainly not consciously, with his idea of a constitutionally ordained rate of monetary expansion to stabilise the economy, comes anywhere near to Hawtrey's critical approach to finance.[13]

Hawtrey was largely self-taught in economics. So it is unlikely that the Swedish originator of credit cycles, Knut Wicksell, influenced Hawtrey, although both reflected in their respective analyses a more general sense that money markets do not 'naturally' complement a general economic equilibrium.[14] Wicksell postulated a 'natural' rate of interest that keeps the economy in equilibrium by equalising saving with the demand for it for investment purposes. However, in a money economy, the actual or money rate of interest is determined in the money markets by the demand for and supply of money by banks. Since this is subject to change according to the cash position of banks, the actual rate of interest differs from the natural rate. If the market rate of interest is above the 'natural' rate, 'forced' saving causes prices and production to fall until equilibrium is reached between the two rates of interest. If the market rate of interest is below the 'natural' rate, saving is too low and prices and production rise until again equilibrium is restored, with stable prices and production and equality between the two rates of interest.[15] The centrality of the notion of equilibrium in Wicksell's work is confirmed, and criticised, by Gunnar Myrdal in his *Monetary Equilibrium*, chapter III. Myrdal and his Swedish contemporaries, Erik Lindahl and Erik Lundberg, developed the elements of a monetary business cycle, based on Wicksellian cumulative disequilibrium process. However, they stopped short at showing that non-equilibrium interest rates change prices and the level of economic activity. Hawtrey went further and showed how banks can systematically generate and propagate disequilibrium in the economy. Similarly, Irving

Fisher had published a theory of a credit cycle, which was brought to the attention of Hawtrey, probably by Keynes, before the writing of *Good and Bad Trade*. But this too, as Keynes was to point out, failed to show systematic generation of economic disturbances.[16] Alfred Marshall, the doyen of English economists at the end of the nineteenth century, had put forward a credit cycle as early as his first excursion into systematic economics with his wife, Mary Paley Marshall, in *The Economics of Industry*. In this, rising prosperity stimulates an expansion of credit which raises prices until speculation is stopped.[17]

But Marshall too was likely to have been only an indirect influence on Hawtrey. He had not taught Hawtrey at Cambridge, where the latter had studied mathematics and had picked up a basic economics education from Sir John Clapham, a distinguished economic historian who also wrote prolifically on banking and financial history. It is perhaps this early influence that is apparent in Hawtrey's inclination throughout his work to explain by reference to the working of markets and institutions rather than to some immanent intellectually derived equilibrium.[18] His analysis bears more than a passing resemblance to the criticisms of the Birmingham Banking School in the first half of the nineteenth century, in particular Thomas Attwood, who criticised (albeit unsystematically) the instability of the gold standard, and questioned the wisdom of allowing 'the pressure of the metallic standard to fall upon the poor' as well as 'the industrious, the useful and the valuable classes of the community'.[19]

In his first book, *Good and Bad Trade*, published in 1913, Hawtrey examined a credit cycle mechanism, but without any equilibrium being brought about by the markets. Capital investment by traders and entrepreneurs is undertaken in expectation of a rate of profit which he defines in labour value terms. If this rate of profit is greater than the market rate of interest, then entrepreneurs will invest and expand production. But if it is less, then investment and production will be reduced. Investment and production decisions involve commitments for longer periods of time, during which currency is drawn out of banks and into the cash economy in which the majority of the population in Hawtrey's time still operated. During a boom, therefore, companies find themselves drawing down their balances in banks. To stem the drain on cash, banks raise their interest rates. Because these take time to influence current investment and production, banks find themselves raising interest rates by successive amounts until investment and production are brought down to levels that will conserve, and even increase, the cash in bank tills. At this point interest rates are too high, and depression sets in until falling interest rates have their (delayed) effect on output and trade. In any case, in contrast to Wicksell's analysis, no equilibrium is ever reached: 'there is an inherent tendency towards fluctuations in the banking institutions which

prevail in the world as it is'.[20] Hawtrey later criticised the quantity theory of money over its presumption of stability:

> The banks, by restricting credit, can start the vicious circle of deflation, or, by relaxing credit, can start the vicious circle of inflation. Either process, once started, tends to continue by its own momentum. In the one case there will ensue a cumulative shrinkage of demand, curtailment of output and decline of prices; in the other a cumulative expansion of demand, increase of output and rise of prices.
>
> Credit is thus *inherently unstable*.[21]

> In practice it seldom, perhaps never, happens that a state of equilibrium is actually reached. A period of expanding or contracting credit, when it comes to an end, leaves behind it a legacy of adjustments, and before these are half completed a new movement has probably already set in.[22]

Hawtrey's distinctive innovation was to lay out this, already in his time established explanation of investment on the basis of a theory of credit and interest rates, and a theory of trade that are very modern, in the sense of explaining investment and trade in the sophisticated mechanisms of a finance-dominated economy, rather than in reduction to the elements of a 'natural' economy. In *Good and Bad Trade*, he compared the functioning of an 'island' economy without money with economies using money, and then credit. He used this not to establish 'natural laws' or relationships, but to show that a credit economy will not converge on a stable equilibrium, but will continue to be disturbed by the changing liquidity of the banking system (chapter VI of *Good and Bad Trade* is entitled 'A Monetary Disturbance in an Isolated Community with a Banking System'). In his later expositions of his theory, he dropped even this primordial artifice. But it served its purpose to show that, in his view, economic instability is associated with the emergence of money and credit. (In his later years, he made the following admission: 'I thought that the alternations of good and bad trade must be of interest to all who concerned themselves with public affairs. The method of exposition starting with a simplified model, and dropping the simplified hypotheses one after another, was intended for this wider circle.'[23])

In his next book, *Currency and Credit*, first published in 1919, Hawtrey extended this analysis. By 'currency' he meant metallic money and the notes issued by the central bank, while credit meant essentially deposits with the commercial banks. Currency of course circulates around the economy. But an 'unspent margin' is paid into banks or held as what would now be called money balances. Somewhat confusingly, Hawtrey includes in the 'unspent margin' all credit available in the economy.[24] But this was to show that his theory is consistent with the quantity theory of money: 'given all the other economic conditions, the price level is proportional to the unspent margin'.[25] If the theories are consistent, then it is only by ignoring the main conclusions

of Hawtrey's analysis, described in his words above, that fluctuations in money and credit are the cause of economic instability, rather than proportional changes in prices. It was more than just a factor in instability. When spent, credit is transformed into income, and income then determines expenditure, for which he used the term 'effective demand' that later became associated with Keynes's critique of the 'classics' who adhered to Say's Law.[26] However, he insisted that 'in the long run' income is equal to expenditure.[27] Hence 'saving' was not a problem which he admitted to his system. But his insistence that credit creates incomes marked an important step away from the quantity theory of money.[28]

According to Hawtrey, the amount of currency in bank tills determines the amount of credit that banks may advance. However, they cannot induce borrowers to borrow from them. All that they can do is to vary the rate of interest on their loans in the hope of attracting borrowers, or discouraging them if the commercial banks wish to conserve their currency, or raise the cash ratio which is crucial for their ability to pay currency on demand against deposits. But the amount of currency that the banks have in their tills depends on four factors. First the amount of banknotes issued by the central bank and the amount of gold bullion in the country which, under the gold standard rules, determined the note issue of the central bank. After the First World War Hawtrey advocated cooperation between central banks to stabilise credit and the foreign exchange markets. He represented the British Treasury at the Genoa Conference on international monetary cooperation in 1922.[29] Later on, following the collapse of the gold standard and the onset of the Great Depression of the 1930s, Hawtrey advocated open market operations (the purchase of government bonds) as a way of improving the liquidity of the banking system, and low interest rates as a means of reviving trade.[30] A second influence on the liquidity of the banking system that is rarely mentioned in discussions of Hawtrey is the distribution of income. In Hawtrey's time, only the rich, and businesses using credit, had bank accounts which they used for payments. Hawtrey was a pioneer in monetary economics in recognising that the use of bank accounts in payments was a way of economising on currency. A corollary of this was that the more workers were employed in an enterprise, the more currency they took out of the banking system.[31]

The third and, in Hawtrey's original view, the most important factor influencing the liquidity of the banking system was the amount of activity in the economy, which determined the proportion of currency issued that was circulating outside the banks. Here the crucial part was played by retail or wholesale 'traders' who financed their stocks with bank credit. If interest rates increased, traders were induced to economise on their use of credit by reducing the stocks of goods that they held. They could not do this by increasing sales (since that is a decision for their customers), but they could

reduce orders to producers. Lower orders and falling prices would reduce the rate of profit. Output employment and income would be reduced. Unemployment would then last for as long as it took wages to fall until the rate of profit was restored. With a given amount of currency in the economy, production and exchange at lower wages and prices would cause an accumulation of cash in bank tills. Banks would then lower the rate of interest to stimulate borrowing.[32]

A fourth factor increasingly preoccupied Hawtrey during the interwar period: international trade under the gold standard meant periodic shipments of gold bullion between trading countries.[33] Under the gold standard, a fall in gold reserves due to excessive imports obliged the central bank to reduce the number of its banknotes in issue. This was sometimes done by the sale of government bonds. Such open market operations would drain the currency from banks, causing them to cease lending and raise their rate of interest to attract currency deposits and discourage borrowing. More commonly, the central bank would raise the rate of interest at which it discounted bills, known in Britain as the bank rate, allowing the central bank to issue less paper money in exchange for a nominal amount of bills. The First World War had a devastating effect on the distribution of gold reserves around the world, concentrating them in the creditor countries, principally the USA. The belligerent countries restricted their gold payments and for six years after hostilities ceased British governments and their advisers wrestled with the problem of how to return to full gold convertibility with prices, wages and a currency issue inflated by war expenditure. Britain's return to the gold standard at the pre-war parity was finally achieved in 1925, setting off a litany of complaint by manufacturers, reiterated periodically through the rest of the century, that they were being priced out of their export markets by the exchange rate. With the collapse of the US market, following the 1929 Crash, the gold standard was blamed for the trade crisis, both because of the high value of sterling that it required in relation to other currencies and because of the high bank rate required to maintain sterling's parity with gold. In 1931, Britain finally abandoned the gold standard. But Hawtrey remained convinced that the 1930s Depression was caused by the earlier high interest rates.

2. UNSTABLE FINANCE: THE CLASH WITH KEYNES

The vicissitudes of the currency, at a time of economic instability and depression, confirmed Hawtrey's conviction that money causes economic fluctuations, a view that was to be echoed by a later generation of monetarist economists.[34] In the case of the US stock market speculation, Hawtrey, like

Keynes, associated it with a boom in fixed capital investment attendant upon a fall in the long-term rate of interest. However, in an interesting anticipation (of which both parties were unaware) of Kalecki's principle of increasing risk and the later theories that companies use stock markets to re-finance successful fixed capital investment,[35] Hawtrey pointed out that 'Resources for new investment are derived mainly from profits ... a large proportion of the capital has been supplied not by issues in the market at all, but by the limitation of dividends and the retention of a large proportion of profits in the form of reserves.'[36] Hawtrey argued that there was virtually no net increase in capital issues by industrial and commercial companies. With rising profits, companies could obtain a higher return by lending money to brokers rather than placing it on deposit with banks. Brokers' loans, or 'call money', fuelled the speculation on the stock market until the Federal Reserve raised its rediscount rate from 3.5 per cent in three stages in the first half of 1928 in order to reduce the speculation, but also to stop an outflow of gold from the USA. It was finally raised to 6 per cent in August 1929. Meanwhile, the rate of interest on 'call money' had risen from 4.24 per cent at the beginning of 1928 to 9.23 per cent in July 1929, just before the Crash. When prices collapsed, the effect on speculators' incomes was to reduce their spending power. The collapse was made worse by the failure of the Federal Reserve to reduce interest rates sufficiently after the Crash.[37] The subsequent depression could only be effectively combated by a policy of cheap credit and open market operations in the principal gold-holding country, the USA, to force currency into circulation by buying in bonds.

By 1931, Hawtrey was urging 'that the fall of wages should *overtake* the fall of prices', which he thought would be sufficient to give a country a competitive advantage in trade.[38] The problem with this was that if all industrial countries reduced wages together, none would gain any advantage. In a rather confused passage he concluded that 'decisive action still rests with the banking system – that is to say, with the central banks of the world'.[39] He nevertheless returned with an emphasis that seems almost visceral: 'As to unemployment, that need not increase greatly *provided* workpeople all over the world are willing to acquiesce at short intervals in prompt and large cuts in wages.'[40] This and his opposition to deficit spending by the British government (the notorious 'Treasury view') made him reviled by Liberals and Socialists alike.[41] There was a greater consistency to his analysis than they would often allow. His opposition to fiscal stimulus in Britain was not one of principle, but was consistent with his belief that such action was either unnecessary, if sufficient credit was available in the financial system to finance the government's deficit, or would threaten the gold and foreign currency reserves held by the central bank. These would be depleted by the increase in imports that would come with an economic recovery in Britain.

Only the USA had sufficiently strong gold reserves to be able to sustain an economic recovery.[42]

In addition to his hint of later developments of Kalecki's principle of increasing risk, Hawtrey appears to have become convinced by the 1929 stock market crash that the stock market is not permanently in that state of equilibrium so beloved of later financial economists. He argued that the relevant measure of supply and demand was the placing of new issues and their purchase by investors out of their saving. Echoing Wicksell's analysis of the capital market, Hawtrey saw the balance between supply and demand in it as made up by the borrowing of brokers, or their repayment of loans:

> The new issues will not be exactly equal to the savings. If they exceed the savings in any interval of time, the excess has to be held by the dealers in the investment market (stock jobbers) and they have to borrow money for the purpose. If the new issues fall short of savings, the dealers in the market receive more money than they pay out, and are enabled to repay bank advances.[43]

In addition to their later polemics about fiscal activism, Hawtrey and Keynes conducted an extensive correspondence on economic and monetary theory. The account of this that is given below is necessarily selective. A fuller account is given by Patrick Deutscher in his book *R.G. Hawtrey and the Development of Macroeconomics*. Deutscher's two chapters on Keynes and Hawtrey confirm that much of the difference between them was terminological, or was perceived as such by them. An inordinate amount of their correspondence consists of detailed explanation of terms which they themselves had invented. Keynes and Hawtrey had disagreed when the latter presented evidence to the Macmillan Committee on Finance and Industry in 1930, of which Keynes was a member. Their initial differences over terminology crystallised into a fundamental divergence concerning the importance of the short-term rate of interest in the economy. In Volume I of his *Treatise on Money* Keynes dismissed the idea that low interest rates stimulated 'speculation' in commodities. He quoted with approval Thomas Tooke's refutation nearly a century earlier of Joseph Hume's view that lower interest rates encouraged such excess: 'It is not the mere facility of borrowing, or the difference between being able to discount at 3 or at 6 per cent that supplies the *motive* for purchasing or even for selling', but the difference between the expected rate of profit on the speculation and the rate of interest on the borrowing that finances it.[44] Keynes went on to argue that the stocks held by traders did not vary, as Hawtrey argued, inversely with their working capital, and were in fact much more modest than Hawtrey supposed. Moreover, Keynes argued, the interest cost of stocks was 'perhaps the least important' of their expenses, by comparison with the deterioration in their quality, warehouse costs and the risk of price changes.[45]

Keynes's criticisms were echoed by his disciple Nicholas Kaldor, who cited the 1959 Radcliffe Report on the Working of the Monetary System to dispose of Hawtrey with the argument that 'stocks of commodities are extremely insensitive to interest rates'.[46] This was a characteristic oversimplification of Hawtrey's view that traders' *desired* rather than their *actual* stocks vary with the rate of interest. In the fourth, 1950, edition of his *Currency and Credit* Hawtrey inserted on page 69 a paragraph arguing that, in response to an increase in short-term interest rates, 'it is very easy for the trader to reduce the average quantity of goods held in stock, and so his indebtedness to the banker'. But this would always depend on the volume of demand. In his earliest work, he stated that 'traders' attempts to reduce stocks to economise on interest charges will be frustrated by reduced demand in a recession'.[47] Stocks were important for Hawtrey not so much because they varied with the business cycle, but because attempts to reduce them transmitted to industry, and eventually consumers, the effects in lower orders of higher interest rates. It was Hawtrey who gave Keynes the idea that a fall in investment relative to planned saving would result, initially at least, in a rise in stocks of unsold goods.[48] Such a fall in investment, in Keynes's analysis, would be associated with a rise in rates of interest relative to the marginal efficiency of capital, i.e. the prospective return on the investment of new capital.[49] In such circumstances, higher stocks would be associated, temporarily at least, with a higher relative rate of interest. In his contribution to the symposium in the *Economic Journal* on 'Alternative Theories of the Rate of Interest' Hawtrey again referred to the possibility that excessive stocks may be expected, but the trader may be unable to prevent them from accumulating. Kaldor's view, echoing Keynes's early criticism, thus did not take into account the qualifications that Hawtrey made in his analysis of the business cycle to his view of stocks as a monetary transmission mechanism. Kaldor's alternative view of money, the theory that money supply is 'endogenous' or determined by the level of activity in the economy, is largely consistent with Hawtrey's view that credit supply is elastic as long as banks have sufficient reserves.[50]

Hawtrey responded by criticising Keynes's oversimplified idea that the long-term or bond rate of interest moves up and down with the money rate of interest:

> There is no fixed relation between the average short-term rate and the long-term rate, and expectations regarding the short-term rate depend on circumstances. Such expectations, when they extend beyond a few months, are extremely conjectural. The short-term rate also may *exceed* the long-term rate.[51]

Hawtrey seems to have persuaded Keynes to moderate his optimism that the long-term rate of interest would respond readily to changes in the short-term bank rate. By this time, Hawtrey's studies had revealed to him the relative

stability of the long-term rate of interest.[52] Hawtrey concluded that long-term finance for investment from the stock market was rationed, rather than regulated, by the interest or dividend yield on securities:

> the volume of capital outlay is remarkably insensitive to the rate of interest, and in practice equilibrium is preserved in the investment market, at any rate over short periods, rather by a system of refusing to float more enterprises than the market can absorb than by varying the rate of interest.[53]

However, underlying their difference over which was the crucial rate of interest, the long-term, or the short-term one, lay a profounder difference over which was the crucial variable transmitting changes in the rate of interest to the economy as a whole. For Keynes it was investment in fixed capital. For Hawtrey it was stocks. It was Hawtrey rather than Keynes whose theory was considered to be disproved by empirical studies conducted by Jan Tinbergen and, in Oxford, P.W.S. Andrews and his associates. These concluded that interest rates had very little effect on business investment in either stocks or fixed capital.[54] But, in retrospect and unacknowledged, Hawtrey may have won the battle for the hearts and minds of the economics profession. The interpretation of Keynes that took over after Keynes's death was essentially a Hawtreyan one, of a credit economy (monetary production economy) regulated by fiscal policy and monetary policy concentrating increasingly on short-term interest rates and control of the money supply.[55] A generation of economists were taught their 'Keynesian' economics in a form, popularised by John Hicks and Paul Samuelson, of an IS/LM model of equilibrium in the goods market and the money market, an equilibrium that was between money market rates of interest and equilibrium between saving and investment.[56] An important difference is that, in the last quarter of the twentieth century in the main industrialised countries, what Hawtrey termed 'currency', that is, notes and coins, ceased to be important for anything other than marginal or black market transactions as only a small minority of poorer citizens remain operating without a bank account. Another important difference is that monetary conditions are now thought to influence investment in fixed capital directly, rather than through changes in stocks.

In putting forward this Hawtreyan credit economy in the form of a Keynesian 'short-period' equilibrium it was also conveniently forgotten that Hawtrey presented an explanation of economic instability in a credit economy before the emergence of finance/capital markets as determining fluctuations in a capitalist economy. Arguably, Hawtrey's view of the capitalist economy was essentially the banking economy that Britain was for most of the nineteenth century. This has to be borne in mind when examining the work of the twentieth-century economists who took up his ideas selectively, principally Milton Friedman.

Hawtrey's analysis of emerging capitalism reliant on banks for finance still has relevance to the developing countries and newly industrialised countries, where finance has yet to mature. In those countries, the credit system faces a similar constraint to that analysed by Hawtrey under the gold standard. However, in place of gold, credit is limited by the inflow of convertible currencies, chiefly the dollar. Credit in the developing and semi-industrialised countries is therefore obliged to expand and contract with fluctuations in foreign currency inflows and reserves. The system is supposedly regulated by the central banks using Hawtrey's recommended instruments of open market operations and the short-term rate of interest. With outflows of foreign currency reserves, interest rates are raised, and credit is contracted in the kind of deflationary crisis that was familiar to Hawtrey, and has come to be familiar to us from events in Mexico in 1995, East Asia in 1997–98, Russia in 1998 and Turkey in 2001. Modern times have, however, added a dimension that was not available at the time of the gold standard, when Hawtrey developed his analysis. At that time for countries on the gold standard the exchange rate was fixed, and the only way out was to suspend the convertibility of central banknotes against gold. The inflexibility of these arrangements was recognised in the Bretton Woods arrangements allowing a change in the exchange rate under exceptional circumstances. After the breakdown of these arrangements, depreciation of the exchange rate came to be widely used as a means of obtaining competitive advantage in export markets, but also to economise on foreign currency reserves: for a given amount of domestic currency which investors and importers wish to convert into foreign currency, the central bank has to supply less foreign currency out of its reserves. In developing countries, where credit is increasingly influenced by the amount in foreign currency reserves, depreciation has therefore come to be a means of economising on bank reserves. These were problems which the main capitalist countries struggled with during the 1930s. In the limit, under a currency board system, credit is only determined by such reserves, depreciation is not allowed, and the only way of supporting the exchange rate is in the gold standard way, by offering a higher rate of interest for foreign currency deposits with the central bank. The currency board therefore corresponds to a modern kind of gold standard with all the dangers of banking and economic instability which Hawtrey had exposed.

This issue, with implications for banking at the end of the twentieth century, had been raised by the American economist Alvin Hansen, who went on to become a distinguished exponent of Keynes's views in the USA. Before his conversion by Keynes, Hansen had adhered to Hawtrey's views on the monetary business cycle. However, he noted that Hawtrey's business cycle arose because the expansion of credit is followed by a drain of reserves from the banking system, and banks have no other way of regulating their reserves than by raising their interest rates.

In one other respect Hawtrey looked forward to later theoretical developments. In his earlier-cited criticism of Keynes's *General Theory*, Hawtrey argued that Keynes was wrong to overlook the internal liquidity of industrial and commercial companies in his analysis of the speculative demand for money:

> It is curious that Mr. Keynes seems to limit the scope of the function $L_2(r)$ to an *individual* disposing of saving (current or past) out of income ... It is reasonable to suppose that the omission of redundant cash accumulated by business concerns is accidental, and that he would include the idle working capital of a business in the idle balances.[57]

Anxious to rehabilitate his 'traders'' role in transmitting the effects of credit expansions and contractions to the rest of the economy, Hawtrey himself overlooked the fact that businesses possess liquidity over and above their working capital. This is the liquid reserves out of which they finance their fixed capital investment or which they hold as security against excess financial liabilities. The analysis of the economic consequences of such internal finance was developed from the 1930s onwards by Marek Breit, Michał Kalecki and Josef Steindl as the principle of increasing risk, relating the business cycle to corporate finance in the modern form of finance capitalism.

6. Irving Fisher and debt deflation

The views of Veblen's near-contemporary Irving Fisher on finance have tended to be obscured by the blow that his reputation suffered after his pronouncement, on the eve of the 1929 Crash, that 'stock prices have reached what looks like a permanently high plateau'.[1] Shortly after the Crash, he published a book entitled *The Stock Market Crash – And After*, in which he argued that the stock market boom that preceded the Crash was justified by structural improvements that had taken place in the US economy during the 1920s. Mergers and acquisitions, he felt, allowed economies of scale to take place, along with scientific breakthroughs and innovations. The 'scientific management' movement of Taylorism, improved layout of manufacturing plants, and a greater cooperation of trades unions in industrial management were also destined to increase the productivity of business, and the earnings of stock-holders.[2]

However, Fisher was a much more thoughtful commentator on economic developments than Galbraith's selective quotations, and Fisher's initial response to the Crash, would suggest. When he had reconciled himself to the loss of his sister's wealth under his management in the Crash, Fisher reflected on a possible connection between the financial inflation that had caused him this loss, and depression that followed. In 1931, in the course of his lectures at Yale, he first enunciated his theory of debt deflation. He wrote up his reflections and analysis on business in his book *Booms and Depressions*.[3] By way of highlighting his distinctive views on the subject, he distilled his main conclusions from that book into a paper on 'The Debt Deflation Theory of Great Depressions', which was published in a memorable first issue of *Econometrica*.[4]

Fisher's paper is extraordinary, not only for the originality of his theory, but also because it belies the commonly held view that, as a mathematical economist, he was somehow a 'fellow-traveller' of the neo-classical, equilibrium school of economics. He had already advanced a credit cycle theory in his 1907 book, *The Rate of Interest*. However, these cycles were not caused by the autonomous operations of the credit system, but by the limited outlook and perceptions of borrowers and lenders. This causes them to make future financial commitments without knowing what the future price level will be, with the result that the real value of debts can change. Such changes then

cause fluctuations in investment as well as redistributing wealth between borrowers and lenders:

> periods of speculation and depression are the result of *inequality* of foresight ... *imperfection* of foresight transfers wealth from creditor to debtor, or the reverse, *inequality* of foresight produces over-investment during rising prices, and relative stagnation during falling prices. In the former case society is trapped into devoting too much investment of productive energies for future return, while in the contrary case, under-investment is the rule.[5]

In 1933 he pointed out right at the start of his paper that equilibrium is an imaginary state of affairs: 'Only in imagination can all ... variables remain constant and be kept in equilibrium by the balanced forces of human desires, as manifested through "supply and demand".'[6] Business cycles are part of economic dynamics which occur because of 'economic dis-equilibrium'. Therefore no two cycles are the same.

Fisher argued that cycles occur because of inconsistencies at any one time between a whole range of variables, such as investment, the capital stock, and industrial and agricultural prices. But serious 'over-speculation' and crises are caused by the interaction between debt and 'the purchasing power of the monetary unit':

> Disturbances in these two factors ... will set up serious disturbances in all, or nearly all, other economic variables. On the other hand, if debt and deflation are absent, other disturbances are powerless to bring on crises comparable in severity to those of 1837, 1873, or 1929–1933.[7]

This identification of two crucial monetary and financial variables with a virtually all-pervasive destabilising effect on a (credit) economy was to be developed in the 1970s by Hyman P. Minsky in his financial instability hypothesis. 'A capitalist economy ... is characterised by two sets of relative prices, one of current output and the other of capital assets.' The first of these determines money incomes. 'The second determines assets and, liabilities. "The alignment of these two sets of prices, which are based on quite different time horizons and quite different proximate variables, along with financing conditions, determines investment." In turn investment determines the evolution of an economy over time.'[8] This distinction between the price system of the financial markets and the price system in the markets for goods and services is a crucial distinction between the respective analyses of Fisher and Minsky, and that of Keynes. Bertil Ohlin, an early sympathetic critic of the *General Theory*, pointed out that 'Keynes's construction ... seems to regard the rate of interest as determined "outside" the price system, or at least as having almost no connection with the system of mutually interdependent prices and quantities.'[9]

Fisher argued that debt deflation was set off by over-indebtedness. This in turn was often set off by over-borrowing, due to too low interest rates raising the temptation 'to borrow, and invest or speculate with borrowed money'. Commonly this is associated with 'new opportunities to invest at a big prospective profit'. Thus over-borrowing may be induced by inventions and technological improvements, war debts and reconstruction loans to foreign countries. But 'easy money is the great cause of over-borrowing' and Fisher mentions 'the low interest policy adopted to help England get back on the gold standard in 1925' as a factor.

Once over-borrowing takes hold, borrowers try to reduce their debt by increasing sales of their assets. This distress selling causes prices to fall. Falling prices in turn raise the real value of money ('a swelling of the dollar') and in turn the value of debts denominated in nominal terms. A paradoxical situation develops, in which the more borrowers try to reduce their debt, the more it grows. The result is a process whereby debt reduces the velocity of circulation of bank deposits, causing a fall in the level of prices, falling profits and bankruptcies. Falling output and employment in turn lead to pessimism and hoarding which further slows down the velocity of circulation.

This was Fisher's explanation of the 1930s economic depression. Two possible solutions to the depression were possible. The 'natural' one occurs when, 'after almost universal bankruptcy, the indebtedness must cease to grow greater and begin to grow less'. The recovery that followed would enable debt to start growing again, opening the way for the next bout of over-borrowing. However, waiting for such a spontaneous recovery involved 'needless and cruel bankruptcy, unemployment, and starvation'. A far better way is to reflate the economy. Fisher mentioned the open market policies pursued by the Federal Reserve under President Hoover as reviving prices and business in the summer of 1932. He also suggested that deficit spending could help.

After the Second World War Fisher's analysis failed to attract mainstream interest in the economics profession. A rather obvious reason is the crucial role in it of falling prices ('swelling of the dollar'). In the main industrialised countries with sophisticated financial systems, prices have not fallen since the Second World War. If anything, they have risen. Fisher's analysis was overshadowed by Keynes's more sophisticated explanation of depression, and languished in obscurity until Minsky discovered it in the 1940s and made it the starting-point of his reinterpretation of Keynes.

More crucially, Fisher himself shifted his point of view later in the 1930s towards a more purely monetarist explanation of the Depression. In a public lecture at the Cowles Commission annual research conference at Colorado College on 10 July 1936, Fisher argued that, among all the factors contributing to the Depression,

> one cause towers above all the other, the collapse of our deposit currency. The depression was a money famine – a famine, not of pocket-book money but of check-book money ... our deposits subject to check. In 1929, our check-book money amounted to 23 billion dollars. In 1933, before our 'bank holiday' it was only 15 billions ...[10]

It was this monetarist explanation of the Depression that was subsequently reiterated by Milton Friedman in his monetarist *Monetary History of the United States 1867–1960*.

7. John Maynard Keynes's financial theory of under-investment I: towards doubt

As an exponent of critical finance John Maynard Keynes requires a degree of reinterpretation. Hyman P. Minsky recognised that Keynes's analysis of how finance disturbs the capitalist economy needs to be retrieved from the neo-classical makeover of his views that appears in economics textbooks. (For example, in the Hicks–Hansen IS/LM system, finance is reduced to the money markets of an economy.) On closer examination, it turns out that his views may not have been evolving in quite the direction which Minsky perceived in them.[1] The interpretation given in this and the following chapter is perhaps more consistent with that of Keynes's contemporaries, most notably his friend, rival and correspondent on monetary and policy issues, Ralph Hawtrey.[2] Keynes's purpose, as he made clear in the closing paragraphs of his *General Theory*, beginning with the question 'is the fulfilment of these ideas a visionary hope?' (and continuing 'the power of vested interests is vastly exaggerated compared with the gradual encroachment of ideas ... it is ideas, not vested interests, which are dangerous for good or evil'[3]), was to change the ideas of policy-makers, academics, and the educated public. This rhetorical, *ad hominem* aspect of his exposition accounts for much of the incoherence which his critics observed, and continue to find, in his analysis. His style, his championing at various times of ideas which were not necessarily consistent with each other, and his own notorious apostasy from views previously advocated, make Keynesian exegesis a particularly fruitful, if treacherous, endeavour and afford a modicum of validity to different interpretations.[4]

1. KEYNES'S EARLY VIEWS ON FINANCE

Keynes's early views on finance were little distinct from the views of his Cambridge teacher Alfred Marshall. Marshall's views on the role of credit in the business cycle, as expressed in his early book (co-authored with his wife Mary Paley Marshall) *The Economics of Industry*, and in his later work *Money Credit and Commerce*, is another instance of his broadly equilibrium approach

to finance. An 'easing' of credit, the willingness of banks to lend more at interest rates below prospective rates of profit in particular lines of business, stimulates business activity and inflationary speculation. The need to sell speculatively purchased or produced goods to repay debts (or avoid losses), or higher interest rates, then brings the boom to an end. Such speculative booms are propagated internationally by the rise in imports that occurs with increased business activity. Marshall's views on this remained largely unchanged from the earlier views of John Stuart Mill (see Chapter 2 above), and changed little over the span of Marshall's own work. Indeed, the account he gave in *Money Credit and Commerce*, which he first published in 1923 but drafted much earlier, is much the same as the accounts given in his *Principles of Economics* and *Economics of Industry*.[5] Since the span of that work coincided with many of the dramas and crises in the financial markets that inspired Veblen's critique, it was not surprising that Marshall had views on financial speculation. But these turned out to be common wisdom, in their time and ours: such speculation drove stock market values away from equilibrium values determined in the real economy by profits and saving, and gave windfall profits to traders in securities with 'inside' information, at the expense of 'outside' amateurs. All this he felt, naturally enough, was morally deplorable. But it was deemed to be an aberration, so that its broader economic consequences were not considered.[6]

Recent research by Michael Lawlor has revealed that, in addition to Marshall, the other influence on Keynes's early thought on finance was the work of a now obscure American lawyer who dabbled in financial economics, Henry Crosby Emery. In Cambridge before the First World War, Keynes lectured on 'Modern Business Methods' and 'The Stock Exchange and the Money Market'. Curiously, he listed Veblen's *Theory of Business Enterprise* as reading recommended to his students. But his lectures drew most heavily on Emery's book *Speculation on the Stock and Produce Exchanges of the United States*.[7]

Emery put forward a theory that, in its essentials, was to be advanced during the 1970s as market efficiency theory. This reflects perhaps less the way in which economists ignorant of the history of economic thought acquire spurious originality by rediscovering the ideas of 'defunct economists', and more the way in which certain attitudes prevail during particular financial conjunctures. Emery was concerned to show that the sophisticated secondary and futures markets in the USA of the 1890s were performing a useful service. This was to provide arguments against attempts in the USA and in Germany to legislate against what were regarded as speculative abuses in those markets. Emery was especially concerned with the futures contracts with which speculators made their profits and hedged their speculative positions. He argued that speculation had always accompanied trade, hence suggesting that

limitations on speculation were likewise limitations on trade. However, speculation he held was 'limited to commodities of an uncertain production' and financial securities 'in the face of the many and hidden causes affecting value, involving the same uncertainties as the purchase of commodities under the new conditions of a world market'.[8] Speculators were therefore necessary to provide certainty of future values to traders and industrialists faced with a risky and uncertain future. Indeed, speculation was essential to provide liquidity and establish equilibrium prices. This warranted raising such activity to a fourth factor of production, after land, labour and capital. He detailed his analysis in a chapter with the suggestive title 'The Economic Function of Speculation'. In his chapter on 'Some Evils of Speculation' he argued that those evils were largely moral, while the benefits were largely economic:

> Even in the case of 'gambling stocks' there is no need for the bona fide investor to be injured. His investment may be made elsewhere. The direct losses in the matter of these securities are borne by those speculators among the public who are foolish enough to tamper with such fraudulent schemes. Hence the economic evil is not great. The moral evil which results from the fact that such operators go unrebuked is of far greater consequence.[9]

Bourgeois propriety was maintained by making fraud the only pretext for regulation, because the benefits of arbitrage for all markets were so much greater.

Emery's explanation of how business involves commitments to future values, and how financial markets deal with uncertainty and risk, would have been philosophically congenial to the young Keynes, who had just completed his *Treatise on Probability*. But Emery was not the only influence on Keynes. Frederick Lavington, a former bank employee, came to study economics at Cambridge in his late twenties, and attended Keynes's Political Economy Club until his untimely death in 1927. He had an insider's knowledge of the scandalous manipulations in the London Stock Exchange that followed the Boer War. He attended Keynes's lectures, and himself lectured at Cambridge during the 1920s. Lavington's conclusion on speculation was considerably more critical than that of Emery:

> there are considerable numbers of expert speculators who, in effect, deal through the Jobber with less well-informed members of the public and use their superior knowledge of securities or of moods of the public to transfer wealth from these other parties to themselves. The unskilled speculators and investors with whom they deal obtain some protection from the Jobber, and can, if they choose, obtain almost complete protection by acting only on the advice of a competent broker; but the facts show that they do not avail themselves fully of this safeguard. In so far as the expert speculator levies his toll from the speculating public without still further exciting their activities his operations are not without some advantage to society, for they tend to discourage the public from a form of enterprise which can rarely yield

> any net social advantage. In so far as he deals with investors he takes from them the advantage of price movements without giving any adequate return, and the *direct* effect of his operations is a net social loss.[10]

However, even in the Indian Summer of Edwardian capitalism before the First World War, Keynes showed an awareness of the crucial role that financial relations played in the generation of economic instability. In 1913, he presented a paper to the Political Economy Club with the provocative title of 'How Far are Bankers Responsible for the Alternations of Crisis and Depression?'. In this paper Keynes put forward an explanation of how banks may make an economy fluctuate between over-investment in an economic boom and under-investment in a recession. Banks, he suggested, hold the 'free resources' or savings 'of the community'. These are lent out for business investment. But without control over the investment process, banks cannot prevent over-investment. When this requires even more credit to sustain it, banks call in loans and raise interest rates until loans are repaid regularly and promptly again. Thus it is not a shortage of cash, as Fisher and Hawtrey suggested, that causes banks to reduce their lending, but the illiquidity of loans committed to excessive investment.[11] At this stage, Keynes's thinking was clearly still rooted in something like a loanable funds analysis (banks are trying to equilibrate saving and investment indirectly by regulating the liquidity of their loans). The notion of an increasing illiquidity of investment was a feature of Austrian capital theory, but in Keynes's case was probably more the influence of Jevons. The latter's *The Theory of Political Economy* was the first economics book that Keynes read, and he had recently reviewed the fourth edition of that book.[12] The fundamental flaw in the analysis is Keynes's failure to grasp the principle of banking reflux. As investment proceeds, and even if it turns into over-investment in relation to saving or 'free resources', the payments made, with money borrowed or owned, for investment equipment delivered, is credited to their bank accounts as additional 'free resources' by the suppliers of investment equipment. In this way, the credit system inflates itself automatically in the course of an investment boom. Only when the investment boom breaks, and producers find themselves with equipment financed with bank credit, which they are unable to repay from the reduced proceeds of their output, do the banks find their loans becoming systematically illiquid. But the problem then arises in the real economy, and not in the banking system.

2. MANAGING THE CREDIT CYCLE

The development of Keynes's earlier thinking on the role played by finance in the capitalist economy came later and, as mentioned above, came as a

by-product of his monetary analysis. In his *Treatise on Money*, whose proofs he revised in the wake of the 1929 Crash, Keynes, like Marshall and Fisher, distinguished between the financial circulation of money and its industrial circulation in order to refine the quantity theory of money. This was necessary for his argument that saving may not always equal investment. But the 'credit cycle' which he put forward in the first volume of the *Treatise* turned out to be a Wicksellian cycle in which saving and investment diverge cyclically, as the actual rate of interest deviates cyclically from the 'natural' rate of interest. His interest was in the effect of this cycle on investment, prices and monetary circulation.[13] A 'bull' market in securities could coincide with over-investment, but only because the actual rate of interest would be below the natural rate of interest.[14]

As is well known, by the time he came to writing his *General Theory*, Keynes's views had changed. But there was a core that had not changed. Already in the *Treatise on Money* Keynes had recognised that it was not the short-term, or money, rate of interest that affects the level of economic activity, but the long-term, or bond, rate of interest. Early on in the *Treatise* he disputed Hawtrey's claim that changes in the short-term rate of interest would influence the inclination of traders to speculate on the prospects of profit or higher prices.[15] In the second volume of the *Treatise* Keynes included a chapter on 'The Control of the Rate of Investment'.[16] He introduced here the distinction between short-term and long-term rates of interest. Keynes cited research published by the American economist Winfield William Riefler, whose conclusion he quoted:

> The surprising fact is not that bond yields are relatively stable in comparison with short-term rates, but rather that they have reflected fluctuations in short-term rates so strikingly and to such a considerable extent.[17]

Keynes then provided tables comparing the average bank rate and the yield on unredeemable government stocks ('consols') from 1906 to 1929 to argue that there are similarly synchronised movements of short-term and bond rate in the UK. 'It is rarely the case that bond yields will fail to rise (or fall) if the short-term rate remains at an absolutely higher (or lower) level than the bond yield even for a few weeks.'[18] This clearly implied a yield curve of relatively constant slope which moved up and down along its whole length in response to changes in the money market rate of interest. The relative stability of the slope of the yield curve was a crucial element in his analysis of monetary policy. However radically he changed his views on money in writing the *General Theory*, he retained basically the same view of the yield curve.[19]

In the *Treatise* Keynes argued that the relatively stable relationship between short-term and long-term rates was due to arbitrage by banks and financial

institutions, which would shift the composition of their portfolios towards bonds if the money market rates became too low. Rising bond prices would then reduce bond rates more or less correspondingly. Conversely, higher money market interest rates would cause these institutions to prefer the more liquid assets with higher returns, and the bear market would reduce bond prices and increase their implied yield.[20] Keynes appears to have been influenced here by the ideas of Frederick Lavington.[21] Richard Kahn, Keynes's closest research associate in the 1930s, suggested in the 1950s that the yield curve was formed by banks' regulating their liquidity by buying and selling government bonds, that is by the 'liquidity preference' of banks.[22] Keynes believed that while the effects of changes in money market rates of interest on working capital were likely to be small,

> the direct effects of cheap money operating through changes, even small ones, in the bond market ... is probably of more importance ... In the modern world, the volume of long-term borrowing for the purposes of new investment depends most directly on the attitude of the leading issue houses and underwriters [in the market for long-term securities].[23]

Hence Keynes's remedy for persistent under-investment was for the central bank to buy long-term securities until the long-term rate of interest had fallen sufficiently low to stimulate new investment. This, he believed, would be effective because, in practice, only a small proportion of outstanding stock is actually turned over in the secondary market where the yield for securities is determined.[24] Furthermore, if the central bank supplied

> banks with more fund than they can lend at short-term, in the first place the short-term rate of interest will decline towards zero, and, in the second place, the member banks will soon begin, if only to maintain their profits, to second the efforts of the Central Bank by themselves buying securities.[25]

Keynes admitted that buying of securities by a central bank may require them to be purchased 'at a price far beyond what it considers to the long-period norm', so that, 'when in due course they have to be reversed by sales at a later date, [they] may show a serious financial loss'. But, Keynes went on, 'this contingency ... can only arise as the result of inaccurate forecasting by the capitalist public and of a difference of opinion between the Central Bank and long-term borrowers as to the prospective rate of returns'.[26]

There is another difficulty which Keynes did not mention, perhaps because at this stage he still regarded the supply of central bank credit as having a fairly immediate impact on interest rates. Flooding the markets with more funds than banks can lend short term merely reduces the excess demand for funds in the wholesale money markets. Usually this excess demand would be supplied by the central bank. If it is reduced, then less will be supplied by the central bank

at the request of banks and money-brokers (discount houses in Keynes's time). This would reduce the effect of the attempt to increase the supply of money. Even after any excess demand in the money markets may have been extinguished, the fear of capital loss in the market for longer-term securities may effectively prevent banks from buying such securities.

Keynes reinforced this view in three lectures which he contributed to a series organised by the Harris Foundation, at the University of Chicago in July 1931. Here he contrasted the experience of the USA during the 1920s, where investment activity was high, in spite of high interest rates, with the relatively lower investment activity in the UK. He argued that a decline in investment had started as early as 1929, and, 'according to my theory, was the cause of the decline in business profits ...'[27] The fall in investment was due to excessive interest rates, in relation to business profits. The very high interest rates in the USA brought gold into that country from the rest of the world, causing credit contraction in other countries.[28]

In these lectures, Keynes gave a revealing summary of the reflux theory of profits, and its connection to finance, that he had enunciated in his *Treatise on Money*:

> The costs of production of the entrepreneurs are equal to the incomes of the public. Now the incomes of the public are, obviously, equal to the sum of what they spend and of what they save. On the other hand, the sale proceeds of the entrepreneurs are equal to the sum of what the public spend on current consumption and what the financial machine is causing to be spent on current investment.
>
> Thus, the costs of the entrepreneurs are equal to what the public spend plus what they save; while the receipts of the entrepreneurs are equal to what the public spend plus the value of current investment. It follows ... that when the value of current investment is greater than the savings of the public, the receipts of the entrepreneurs are greater than their costs, so that they make a profit; and when, on the other hand, the value of current investment is less than the savings of the public, the receipts of the entrepreneurs will be less than their costs, so that they make a loss ...[29]

Keynes then reverted to an imbalance in the real economy as an explanation for economic disturbances: 'The whole matter may be summed up by saying that a boom is generated when investment exceeds saving, and a slump is generated when saving exceeds investment.'[30] Public works should be undertaken and confidence needed to be restored to lenders and borrowers, to raise investment and hence profits. Ultimately, 'the task of adjusting the long-term rate of interest to the technical possibilities of our age so that the demand for new capital is as nearly as possible equal to the community's current volume of savings must be the prime object of financial statesmanship'.[31]

Keynes recognised that this could not be done through the banking system,

'for prima facie the banking system is concerned with the short-term rate of interest rather than the long'. It had to be done by a combination of lowering the short-term rate of interest, open market operations, and restoring 'the attractions of non-liquid assets'.[32]

3. THE FAILURE OF MONETARY POLICY

The reflux theory of profits of the *Treatise on Money*, outlined in Chicago, was poorly received by his academic colleagues. Keynes abandoned it following discussions with his Cambridge acolytes, grouped informally in the Cambridge 'Circus' (see Chapter 12 below). More important, from the point of view of the development of his financial theory of investment, was the apparent failure of low interest rates to generate the predicted recovery of investment. In 1932 the Bank of England reduced its bank rate to a historic low which, however, failed to revive economic activity. On 30 June 1932 bank rate was cut to 2 per cent (it had been as high as 6 per cent when the Bank had suspended gold payments in 1931). Interest on overnight loans in the money market fell to below 0.75 per cent. But the stock market revival was halting. In a rarely noted example of central bank open market operations designed to improve the liquidity of the market for long-term securities, the Bank also entered the market to buy government securities, before a conversion later that year of 5 per cent War Loans to 3.5 per cent. Similar measures of monetary expansion were undertaken in the USA and Europe. The net effect was to increase the liquidity of the banking system, with only a limited recovery in real investment,[33] an outcome that was widely regarded as confirming a causal link between liquidity preference in the financial markets and under-investment in the real economy.

In June 1933, in an article published in the *American Economic Review*, Edward C. Simmons criticised Keynes's 'scheme for the control of the business cycle' by influencing the long-term rate of interest through manipulation of the short-term rate. Simmons argued that the relationship between the short-term and long-term rates of interest had been unstable in recent years, from 1928 to 1932, and therefore Keynes's 'scheme' would not work. Keynes replied by pointing out that the relationship between long- and short-term interest rates was by no means as unstable as Simmons suggested: 'even in these abnormal years the *directions* of changes in the two rates were the same'. Furthermore,

> I am not one of those who believe that the business cycle can be controlled solely by manipulation of the short-term rate of interest ... I am indeed a strong critic of this view, and I have paid much attention to alternative and supplementary methods of controlling the rate of interest.[34]

Keynes went on to argue that the influence of the short-term rate on the long-term rate, while not

> infallible ... is not so negligible as one might have expected ... My proposals for the control of the business cycle are based on the control of *investment* ... I have been foremost to point out that circumstances can arise, and have arisen recently, when neither control of the short-term rate of interest nor even control of the long-term rate will be effective, with the result that direct stimulation of investment by government is the necessary means. Before a very abnormal situation has been allowed to develop, however, much milder methods, including control of the short-term rate of interest, may sometimes be sufficient, whilst they are seldom or never negligible.[35]

By the mid-1930s, therefore, Keynes was entertaining doubts about the ability of the monetary authorities to control investment, and hence the business cycle, by acting upon the short-term rate of interest. As recently as 1930, he had confidently asserted that

> A central bank, which is free to govern the volume of cash and reserve money in its monetary system by joint use of bank rate policy and open market operations, is master of the situation and is in a position to control not merely the volume of credit but the rate of investment, the level of prices and in the long run the level of incomes ...[36]

Keynes was now working on the drafts that were to become his *General Theory of Employment Interest and Money*. In the course of his preparation, he had to uncover the reasons for the ineffectiveness of monetary and financial policy in bringing the economy to a more 'normal' situation, where such policy *could* bring about the desired levels of investment and employment. He did this by moving away from a business cycle methodology, in which the economic situation in a given period is explained by its antecedents in the previous period, or periods, towards short- and long-period equilibria. The characteristics of these equilibria were to be determined by generalised properties of commodities and individual human agents, with the short-term equilibrium dominating, but subsequent equilibria emerging through financing and capital commitments.

8. John Maynard Keynes's financial theory of under-investment II: towards uncertainty

In the *General Theory* Keynes abandoned the view expounded in the *Treatise on Money* of the capitalist economy made unstable by credit cycles and re-cast his analysis as an explanation of under-employment *equilibrium*, reflecting the stagnationist trend in the capitalist economies during the 1930s. This emphasis on equilibrium was to challenge those economists who expected an imminent return to full employment. But it also placed an ambiguity at the heart of his work, inviting, on the one hand, a search for the market 'rigidity' ('sticky real wages') that was preventing the realisation of a full employment equilibrium, while retaining, on the other, the elements of his critique of a capitalism made wayward by its financial system.[1] The *General Theory* also contains, alongside the analysis of an under-employment equilibrium created by the *financial* system described below, a theory of a capitalist economy brought to under-employment by its use of money. This latter theory became the staple of later Keynesian explanations of economic disturbance and stagnation. Expounding a *monetary* theory of economic disturbance in the context of a financial one increased the scope for the interpretative ambiguity that has dogged Keynes's economic thought.

On his way to a more generalised theory that would incorporate factors capable of producing the 'abnormal' under-investment not amenable to financial or monetary policy, Keynes advanced a theory of 'own' rates of interest. This is distinctive in being peculiar to the *General Theory*, although Keynes refers to Sraffa as having originated it.[2] It advanced a *monetary* explanation of under-employment, as opposed to the *financial* theory of under-investment *in the face of uncertainty* with which he ended the *General Theory*.

1. FROM OWN RATES OF INTEREST TO SPECULATION

The theory of 'own rates of interest' was drafted at the end of 1934, when it formed chapter 19 of the first draft of the *General Theory*. The first title of that chapter, 'Philosophical Considerations on the Essential Properties of Capital,

Interest and Money', reveals Keynes's attempt to step back from his policy focus on a transmission mechanism from the financial markets to company investment, to take in more general characteristics of economic activity. The chapter eventually appeared as chapter 17 in the published book with its title 'The essential properties of interest and money' unchanged from the first draft. In an attempt to escape capital productivity theories of interest, an essential feature of the 'classical' economics which he now sought to overturn, Keynes put forward the idea that all commodities may be deemed to have their 'own' rate of interest. This is the net benefit from holding them over time. Keynes argued that this net benefit consists of the yield or net output of the commodity (income and appreciation in money terms), minus its carrying cost (cost of storage), plus its liquidity premium (the 'power of disposal over an asset'). Included in this was also supposed to be a 'risk premium', that is, the holder's 'confidence' in the expected yield of the commodity. Because money cannot be easily produced (it 'has both in the long and in the short period, a zero, or at any rate a very small, elasticity of production'), and has a negligible elasticity of substitution, its own rate of interest, the money rate of interest, is the standard against which other own rates are measured. If the own rates of other reproducible commodities are higher, more of those commodities will be produced for gain, gradually reducing their 'own' rate of return until there is no advantage in production, as opposed to holding money:

> Thus, with other commodities left to themselves, 'natural forces', i.e., the ordinary forces of the market, would tend to bring their rate of interest down until the emergence of full employment has brought about for commodities generally the inelasticity of supply which we have postulated as a normal characteristic of money. Thus, in the absence of money and in the absence – we must, of course, also suppose – of any other commodity with the assumed characteristics of money, the rates of interest would only reach equilibrium when there is full employment.[3]

This analysis gave rise to long discussions with Hawtrey and Robertson over the meaning and significance of 'own' rates of interest. Keynes eventually concluded:

> I admit the obscurity of this chapter. A time may come when I am, so to speak, sufficiently familiar with my own ideas to make it easier. But at present I doubt if the chapter is any use, except to someone who has entered into, and is sympathetic with, the ideas in the previous chapters; to which it has, I think, to be regarded as posterior. For it is far easier to argue the ideas involved in the much simpler way in which they arise in the chapter on liquidity preference.[4]

However, even Keynes's partisans have been considerably more critical of the chapter. Alvin Hansen described it as 'a detour which could be omitted without sacrificing the main argument'.[5] More recently, Fiona MacLachlan

has written that it 'is undoubtedly muddled and it appears that Keynes was grasping at ideas that he had not successfully sorted through in his own mind'.[6]

It was Hicks who put his finger on the essential inconsistency in Keynes's analysis in this part of the *General Theory*. There is no evidence that he had been involved in Keynes's discussions on this chapter when they were being drafted, although the parallels with Hicks's own thinking are apparent, and Hicks was lecturing in Cambridge from 1935 to 1938. They corresponded afterwards, but the correspondence was quickly taken up with the interpretation that Hicks put forward of the *General Theory* in his seminal article 'Mr. Keynes and the Classics'. However, their correspondence started with Hicks's review of the *General Theory*. In particular, their earlier letters focused on Keynes's liquidity preference theory of money. At one point, Hicks wrote up his criticisms, of which the bulk was a section headed 'The own rates of interest'. Here he concluded:

> After a great deal of thought, I have become convinced that the argument of your chapter 17 gets tied up because you do not distinguish sufficiently between investment that does employ labour and investment that does not. If the monetary system is inelastic, a mere increase in the desire to hold stocks of coffee, which itself does nothing directly for employment, may raise the rate of interest, and thus actually diminish employment on balance – at least apart from the effect on anticipations, and hence on the production of coffee. Similarly, in a coffee world, a rise in the desire to hold stocks of money will raise the coffee rate of interest (if the supply of coffee is imperfectly elastic) and this will similarly tend to lessen employment.[7]

Hicks was evidently here trying to recover the stable relationship between the rate of interest and investment that was a feature of his exposition in 'Mr. Keynes and the Classics', a draft of which Hicks enclosed with his letter to Keynes. But it is nevertheless a curious intervention, because Hicks himself had earlier sketched out some of the ideas that Keynes was to put into his *General Theory* in a paper which Hicks read at the London Economic Club in 1934. This appeared the following February in *Economica* as 'A Suggestion for Simplifying the Theory of Money'. The paper is today known mainly as one of the first expositions of a 'portfolio' theory of money. Here he presented 'a sort of generalized balance-sheet, suitable for all individuals and institutions'. This had on the assets side the whole range of commodities available in a modern capitalist economy, including perishable and durable consumption goods, money, bank deposits, short- and long-term debts, stocks and shares and 'productive equipment (including goods in process)'.[8] Eshag later indicated that 'the relationship between the rate of earnings on different categories of assets and their degree of marketability' could be traced back to Lavington, Thornton and Giffen.[9]

It was Nicholas Kaldor who may arguably be said to have made the best

sense out of the chapter in his 1939 paper on 'Speculation and Economic Activity'. Kaldor's paper sought to make Keynes's theory of 'own rates of interest' consistent with not only the liquidity preference theory of money, presented in chapters 13 and 14 of the *General Theory*, but also Keynes's analysis of speculation in chapter 12 of that work. Kaldor argued that 'if Keynes had made the theory of the own rate of interest, suitably expanded, the centre-piece of his exposition in the *General Theory*, a great deal of the subsequent interest controversy might have been avoided'.[10] In his view the theory was an explanation of speculative behaviour. However,

> in the real world there are only two classes of assets which satisfy the conditions necessary for large-scale speculation. The first consists of certain raw materials, dealt in at organised produce exchanges. The second consists of standardised future claims to property, i.e. bonds and shares. It is obvious that the suitability of the second class for speculative purposes is much greater than that of the first. Bonds and shares are perfect objects for speculation; they possess all the necessary attributes to a maximum degree. They are perfectly standardised (one particular share of a company is just as good as any other); perfectly durable (if the paper they are written on goes bad it can be easily replaced); their value is very high in proportion to bulk (storage cost is zero or a nominal amount; and in addition they (normally) have a yield, which is invariant (in the short period at any rate) with respect to the size of the speculative commitments. Hence their net carrying cost can never be positive, and in the majority of cases is negative.[11]

George Shackle and Victoria Chick have drawn attention to a complementary interpretation, which was advanced by Hugh Townshend, a former student of Keynes's, in response to a review article by Hicks on the *General Theory*. Townshend argued that the rate of interest is not determined by conditions of supply and demand in some notional market for new loans, as Hicks's loanable funds interpretation of the *General Theory* suggested, but in the market for existing loans. There, as Keynes had argued, values are essentially conventional: 'the influence of expectations about the value of existing loans is usually the preponderating causal factor in determining the common price'.[12] Since the values of longer-term securities can change overnight, no equilibrium between the supply of funds and the demand for new loans is possible. Accordingly, both Shackle and Chick have put forward Townshend's view as a methodological critique of general equilibrium interpretations, rather than as a theory of financial disturbance.[13]

In chapter 12 Keynes made a fundamental distinction between the purchase of securities for resale at a higher price, which he termed speculation, and enterprise, buying securities for long-term income. He lamented the predominance of speculation over enterprise, which he believed reduced companies' productive investment in plant, machinery and technology to incidental outcomes of a 'casino', mere 'bubbles on the whirlpool of speculation'. But he

concluded that there is no other effective way of providing additional finance for productive investment.[14]

In that same chapter, Keynes put forward his theory of stock prices, the famous beauty contest, in which speculators buy and sell stocks according to how they believe that the other speculators or participants in the market will on average evaluate those stocks in the future:

> professional investment may be likened to those newspaper competitions in which the competitors have to pick out the six prettiest faces from a hundred photographs, the prize being awarded to the competitor whose choice most nearly corresponds to the average preferences of the competitors as a whole; so that each competitor has to pick, not those faces which he himself finds prettiest, but those which he thinks likeliest to catch the fancy of the other competitors, all of whom are looking at the problem from the same point of view. It is not a case of choosing those which, to the best of one's judgement, are really the prettiest, nor even those which average opinion genuinely thinks the prettiest. We have reached the third degree where we devote our intelligences to anticipating what average opinion expects the average opinion to be. And there are some, I believe, who practise the fourth, fifth and higher degrees.[15]

Market evaluations are a '*convention* ... that the existing state of affairs will continue indefinitely, except in so far as we have specific reasons to expect a change'.[16] It is impossible to resist 'average opinion' in favour of more rational, long-term considerations: 'For it is not sensible to pay 25 for an investment of which you believe the prospective yield to justify a value of 30, if you also believe that the market will value it at 20 three months hence.'[17]

2. CONCENTRATING ON UNCERTAINTY

The reason for this dependence on subjective evaluations and their coagulation into conventional market values is uncertainty. Like the entrepreneur deciding whether to install new equipment, the speculator cannot know the future value of his investment. He can only make judgements with a greater or lesser degree of 'confidence' according to the 'weight' of the evidence he has available to him. Accordingly, speculators' 'confidence' veers between optimism and pessimism. Furthermore, expectations in their turn are determined more by recent experience than the more distant past.[18] Such confidence therefore tends to become over-optimistic as a boom matures, and over-pessimistic as a recession is prolonged.

Uncertainty about the future is the key to understanding the adherence of traders to conventions and past experience. It also explains an apparent inconsistency that arises in Keynes's 'Notes on the Trade Cycle' in the

General Theory, where he expounded his view of an expectations-driven business cycle. He argued that 'a serious fall in the marginal efficiency of capital also tends to affect adversely the propensity to consume ...' through 'a severe decline in the market value of Stock Exchange equities'. The marginal efficiency of capital was defined by Keynes in subjective terms as 'the *expectation* of yield' in relation to 'the *current* supply price of the capital-asset'.[19] He then proceeded to argue that changes in securities' prices affect the consumption of rentiers, 'the class who take an active interest in their Stock Exchange investments'. The fall in consumption 'serves to aggravate still further the depressing effect of a decline in the marginal efficiency of capital'. No mention is made here of Keynes's earlier justification of the stock market as a source of finance for business investment, and its implication that such finance would be less readily available, and certainly more expensive, if stock prices are falling. Hence Shackle's later opinion that chapter 12 may 'appear at first reading as a strange intruder into the main current of thought' of the *General Theory*. Shackle believed that opinion on the stock market may be less self-regarding, and more symptomatic of general business confidence.[20] Later, in response to criticism of his monetary analysis from Bertil Ohlin, Keynes stated that entrepreneurs who cannot finance investments out of their own savings do so by borrowing from banks. This then became an additional, 'finance', motive for augmenting the demand for money.[21] In this view, business investment depends more on the rate of interest than on stock market prices.

It was Keynes's theory of the speculative demand for money which gave him the clue as to how finance may lead to a permanent regime of under-investment. The speculative demand for liquidity, as Keynes called it, was the money held by traders in the securities markets awaiting profitable investment opportunities in those markets. As Keynes put it, it has 'the object of securing profit from knowing better than the market what the future will bring forth'.[22] In this respect it is a counter-tendency to the conventions established by the 'beauty contest' in the stock market. Only if the speculative demand for money is held in check will increases in the supply of money reduce the rate of interest.[23] But even this may not be enough to overcome business uncertainty about the prospective yield on investments. Once this yield falls, then even a low interest rate may be insufficient to stimulate investment: 'a high rate of interest is much more effective against a boom than a low rate of interest against a slump'.[24] Keynes thus identified the limits to the manipulation of economic growth by monetary policy. This lay in the volatility of the prospective yield on investments:

> Thus the remedy for the boom is not a higher rate of interest but a lower rate of interest. For that may enable the so-called boom to last. The right remedy for the trade cycle is not to be found in abolishing booms and thus keeping us permanently

in a semi-slump, but in abolishing slumps and thus keeping us permanently in a quasi-boom.

The boom which is destined to end in a slump is caused, therefore, by the combination of a rate of interest, which in a correct state of expectation would be too high for full employment, with a misguided state of expectation which, so long as it lasts, prevents this rate of interest from being in fact deterrent. A boom is a situation in which over-optimism triumphs over a rate of interest which, in a cooler light, would be seen to be excessive.[25]

Hence, in contrast to his resignation in the face of 'speculation' in chapter 12, Keynes concluded his analysis by urging the 'euthanasia of the rentier' and the socialisation of investment.[26] This was because of the dependence of capitalist investment on the conjuncture in the financial markets. This dependence on finance put expectations of yield at the forefront of investment considerations. It required the lowering of the rate of interest to raise investment to the point where full employment was achieved:

the scale of investment is promoted by a *low* rate of interest, provided that we do not attempt to stimulate it in this way beyond the point which corresponds to full employment. Thus it is to our best advantage to reduce the rate of interest to that point relatively to the schedule of the marginal efficiency of capital at which there is full employment.[27]

In the long run, however, this dependence of investment on finance was already in the process of being overcome: 'the euthanasia of the rentier, of the functionless investor, will be nothing sudden, merely a gradual but prolonged continuance of what we have seen recently in Great Britain, and will need no revolution'.[28]

Keynes reiterated this explanation of under-investment a short time later in his paper 'The General Theory of Employment'. The socialisation of investment was essential because, in the course of the 1930s, Keynes had come to doubt that it was possible to maintain adequate levels of investment by fixing the conjuncture in the financial markets. This was because of the nature of the investment decision in the face of ignorance of the future, that is, uncertainty.[29]

Thus the *General Theory* was not only Keynes's considered view on how the economy worked as a whole, and hence the book may be viewed as a cross-section of the ideas which he had in his mind in the mid-1930s. It was also a critique of the way in which long-term securities markets finance companies. But, above all, it is argued here, the *General Theory* is a response to the failure of monetary policy to influence those markets in such a way as to allow them to do more effectively what the conventional wisdom of his time and ours tells us that they do superlatively, namely finance investment. Although 'Keynesian' policy is now universally associated with aggregate

demand management through fiscal policy, in his book Keynes only mentioned fiscal policy in passing as an influence on the marginal propensity to consume.[30] His preferred fiscal stimulus was through public works. His essential message, which he later declared to be his original contribution in the *General Theory* was the introduction of uncertainty and expectations as factors preventing the long-term rate of interest from falling to stimulate investment up to its full employment level.[31]

In his 'Notes on the Trade Cycle', chapter 22 of the *General Theory*, Keynes appeared to turn away from a financial explanation of economic disturbance:

we have been accustomed in explaining the 'crisis' to lay stress on the rising tendency of the rate of interest under the influence of the increased demand for money both for trade and speculative purposes. At times this factor may certainly play an aggravating and, occasionally perhaps, an initiating part. But I suggest that a more typical, and often the predominant, explanation of the crisis is, not primarily a rise in the rate of interest, but a sudden collapse in the marginal efficiency of capital ... Liquidity-preference, except those manifestations of it which are associated with increasing trade and speculation, does not increase until *after* the collapse in the marginal efficiency of capital.[32]

Keynes went on to argue that movements in the stock market had a more pronounced 'wealth' effect on consumption:

Unfortunately a serious fall in the marginal efficiency of capital also tends to affect adversely the propensity to consume ... With a 'stock-minded' public, as in the United States today, a rising stock market may be an almost essential condition of a satisfactory propensity to consume; and this circumstance, generally overlooked until lately, obviously serves to aggravate still further the depressing effect of a decline in the marginal efficiency of capital.[33]

Keynes then concluded by arguing that the financial markets tend to concentrate, rather than disperse, volatile expectations of returns from investments with a longer time horizon than the markets have. This is aggravated by the effect of changes in stock market values on consumption:

Thus, with markets organised and influenced as they are at present, the market estimation of the marginal efficiency of capital may suffer such enormously wide fluctuations that it cannot be sufficiently off-set by corresponding fluctuations in the rate of interest. Moreover, the corresponding movements in the stock market may, as we have seen above, depress the propensity to consume just when it is most needed. In conditions of *laissez-faire* the avoidance of wide fluctuations in employment may, therefore, prove impossible without a far-reaching change in the psychology of investment market such as there is no reason to expect. I conclude that the duty of ordering the current volume of investment cannot safely be left in private hands.[34]

In the *General Theory* and beyond, Keynes made use of two explanations of under-investment. One was a financial theory of under-investment, due to excessive long-term interest rates. This fits in neatly with his consistent advocacy, from the *Treatise* onwards, of open market operations to bring down the long-term rate of interest in order to stimulate investment.[35] The other lay in the nature of investment, which requires the capitalist entrepreneur to take a view on an uncertain future. When the experience of the 1930s revealed the difficulties of guiding investment through monetary policy, Keynes put forward uncertainty in the process of investment decision making as an additional explanatory variable. As Susan Howson and Donald Winch put it:

> [In 1936], Keynes's major policy goal was still the stability of the economy at a high level of employment; but the perspective on the instruments and the difficulties of achieving this goal reflected five years of thought plus the experience of the slump. Given that investment was the motive force of the system, employment policy had to regulate investment. An appropriate monetary policy directed at long-term interest rates, as in the *Treatise*, would provide the right long-term environment. In contrast to the *Treatise*, however, where monetary policy was expected to do *all* the work, it might not, given the state of entrepreneurial expectations, provide the solution to short-term instabilities. For that, fiscal regulation might be necessary, particularly if the monetary authorities found it inexpedient to operate in long-term securities markets rather than relying on Bank rate. Open market purchases of Treasury bills or other short-term securities could only affect long rates indirectly, and it was long-term rates – very much subject to 'the state of news' – that affected the bulk of investment.[36]

3. LIMITS OF INTEREST RATE POLICY

Until he died, Keynes held to the view that the rate of interest was crucial for investment, but that its influence was modified at low levels. As late as 1945, in his Notes for the National Debt Enquiry, Keynes wrote:

> The rate of interest ... is one of the influences affecting the inducement to invest. Experience shows, however, that whilst a high rate of interest is capable of having a dominating influence on inducement to invest, it becomes relatively unimportant at low levels, compared with the expectations affecting the inducement.[37]

As part of a fiscal regime to maintain a high level of investment, Keynes recommended keeping down the long-term rate of interest by open market operations with a permanent tap issue.[38]

Keynes's profound insights, as well as his inconsistencies, ensured that subsequent discussion of the relationship of finance to the real economy took place in the shadow of his analysis. There is no inconsistency between

a strictly financial theory of under-investment, and a more essentialist uncertainty theory of under-investment. But Keynes's more philosophical followers, notably George Shackle, have tended to emphasise the principles of uncertainty in his theory. Keynes's more financially rooted followers and critics, the remnants of the Swedish School and Minsky, have tended to emphasise the limits imposed on investment by the financial markets.

Minsky in particular criticised Keynes for his failure to include 'the price of capital assets in his statement of the liquidity-preference function' and hence stating his argument solely in terms of the rate of interest.[39] This was to be remedied by Keynes's perhaps most thoughtful colleague and advocate, Joan Robinson. In *The Accumulation of Capital* she postulates that, with bonds assumed to be irredeemable to remove the effects of different terms to maturity, their yield is differentiated according to the perceived risk of default of the issuer. When confidence is high, the spread around the current money market rate of interest is reduced:

> The yield of a bond at any moment reflects both the general level of interest rates and the particular credit of the particular concerns (those most respected and reliable enjoying the lowest yields). We may select the very best concerns about whose ability to honour their obligations there is the least possible doubt, as a marker, and call the yield of their bonds *the* bond rate of interest. Others have higher yields in varying degrees. The relative yields fan out in times of insecurity and lie close together in periods of general prosperity when profits are easy to earn and fears of default are far from everyone's thoughts.[40]

The implied yield curve is flat during an economic boom and acquires a positive slope during a recession. However, there is a notable absence of any influence of Keynesian 'liquidity preference' which would lead one to suppose that longer-term stocks would pay a margin over the short-term rate of interest as a 'liquidity premium' against the possibility of illiquidity.

Further on, Robinson attributes high bond rates to active interest rate policy by the monetary authorities:

> Generally speaking, the wider and less predictable are fluctuations in the level of interest rates, the higher, on the average, the level will tend to be, for it is uncertainty about future interest rates which gives rise to a reluctance to hold bonds and keeps up their yields ... Thus we must add to the list of causes of stagnation to which capitalist economies are subject, stagnation due to a chronic tendency for interest rates to rule too high, relatively to the rate of profit, to permit accumulation to go on.

At this point a footnote is added 'This is one of the main contentions of Keynes's *General Theory*.'[41]

Eprime Eshag's pioneering research at the end of the 1950s, reiterated recently by David Laidler, confirms that 'there was nothing of great

significance which could be regarded as wholly original in Keynes's formal analysis of the rate of interest. What he did, in effect, was to develop and elucidate the ideas known at Cambridge prior to the appearance of the *General Theory* in 1936.'[42] In particular:

> the excessive importance attached by Keynes to changes in the quantity of money and in the rate of interest in determining the volume of investment has been distinctly harmful in practice. The general impression given by Keynes's work on the rate of interest is that changes in the rate of interest, which in practice range from a fraction of 1 per cent to 1 or 2 per cent at a time, can produce a very significant *direct* impact on the volume of investment and on the level of economic activity. The prevalence of the notion that the level of investment and income can be significantly influenced by changes in the rate of interest within the range mentioned above, accompanied by corresponding variations in the quantity of money, which is found not only among the orthodox economists and bankers, but also among some leading Keynesian economists, can be traced, in the case of the latter group, partly at least, to the influence of Keynes ... In this respect, Keynes was still operating under the influence of the classical economists and Marshall.[43]

Eshag here revealed the influence on him of Kalecki. In fact there was more to Keynes's analysis of capitalism than just the theory of money and an almost classical theory of investment. Keynes's analysis of money and investment in the context of a capitalist economy dominated by finance produced a financial theory of under-investment to explain the decline into economic depression at the start of the 1930s. For a while he believed this to be amenable to treatment by expansionary monetary policy. With the failure of this policy in the 1930s, he shifted the grounds of his critique to the way in which finance makes investment depend on uncertainty and expectations, as well as on the rate of interest. Whereas Marx looked forward to a capitalism that had 'subordinated' finance, it was Keynes's signal achievement to reveal in certain essentials a capitalism that has yet to emancipate itself from usury.

PART III

Critical Theories of Finance in the Twentieth Century: In the Shadow of Keynes

> Wartime financing in Britain and the United States resulted in a large increase in the holdings of government and bank liabilities by households, firms, and non-bank financial institutions. As a result, the financial system of the 1930s was replaced by a robust financial system in the first postwar decade. The economic problems ... were not of the type contemplated by Keynes in *The General Theory* ... As the sixties progressed, eminent economists – especially those associated with government policy formulation – who in their own minds were disciples of Keynes, were announcing that endogenous business cycles and domestic financial crises were a thing of the past, now that the secrets of economic policy had been unlocked.
>
> (H.P. Minsky, *John Maynard Keynes*, p. 15)