# The Neglected Contributions of R.G.Hawtrey to Macroeconomics

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#### **Abstract**

In the inter war years (1919-39) macroeconomics was at the forefront of attention of both thinkers as well as policymakers. This paper focuses on Hawtrey, one of the major economists of that period whose contemporary influence on macroeconomic theory as well as policy was significant, but whose contributions, in the aftermath of World War II, have gone largely into oblivion. We begin with a brief exposition of the main strands of Hawtreyan macroeconomics. We then try to demonstrate the significant influence that Hawtrey's ideas had on Keynes' views, highlighting both the areas in which their ideas differed and where their views reinforced each other's. Before concluding, we draw attention to at least five contributions of Hawtrey, which have a strong claim to be considered original but which have received scant professional credit viz. the multiplier, the accelerator, quantitative easing, crowding out and the announcement effect of monetary policy.

Keywords: instability of credit, credit deadlock, quantitative easing, the multiplier, crowding

JEL Code: B22, B31, E12

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#### **Abstract**

In the inter war years (1919-39) macroeconomics was at the forefront of attention of both thinkers as well as policymakers. This paper focuses on Hawtrey, one of the major economists of that period whose contemporary influence on macroeconomic theory as well as policy was significant, but whose contributions, in the aftermath of World War II, have gone largely into oblivion. We begin with a brief exposition of the main strands of Hawtreyan macroeconomics. We then try to demonstrate the significant influence that Hawtrey's ideas had on Keynes' views, highlighting both the areas in which their ideas differed and where their views reinforced each other's. Before concluding, we draw attention to at least five contributions of Hawtrey, which have a strong claim to be considered original but which have received scant professional credit viz. the multiplier, the accelerator, quantitative easing, crowding out and the announcement effect of monetary policy.

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#### 1. Introduction

The eventful and often tumultuous inter-war years (1919-39) may be said to have provided fertile ground for laying the foundations of modern macroeconomics. Among the many thinkers who participated in the evolution of the subject five deserve special mention viz. Hawtrey, Pigou,

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Robertson, Ohlin and Keynes<sup>2</sup>. In the aftermath of the enthusiasm generated by the *General* Theory (1936), several of the macroeconomists who had predominated economic thinking in the two previous decades suffered severe reputational neglect. Chief among these were the trinity of Pigou, Robertson and Hawtrey. For purposes of this article we focus only on Hawtrey, partly because of the impossibility of giving an adequate but fair coverage to all three in the space of an article but also because of two other reasons. Firstly, owing to his being an insider in the British Treasury from 1919-1945, Hawtrey was in a position to observe closely the important contemporary economic events world wide and also the official (British) policy response to the same. Secondly because of his close personal friendship with Keynes, he was thoroughly familiar with Keynes' work and his often incisive criticism must have played some role in influencing Keynes's views. Their extensive correspondence, sometimes bordering on the acrimonious, contains a wealth of detail regarding their respective views and in spite of their differences on matters of economic theory and policy, they seem to have entertained a very high regard for each other's intellectual abilities and honesty of outlook. Before the *Treatise*, their views were similar though not congruent. At a meeting of the Royal Statistical Society in December 1929 Keynes remarked "There are few writers on monetary subjects from whom one receives more stimulus and useful suggestions than from Mr. Hawtrey .. The paradox is that in spite of that, I nearly always disagree in detail with what he says!" (quoted in Black (1978), p. 375). After the General Theory, strong differences emerged in their theoretical views and policy outlooks, though it is not very easy to know how this affected their personal relations. Writing in 1937 (Keynes (1937), p.242), however, had this to say "I regard Mr. Hawtrey as my grandparent and Mr. Robertson as my parent in the paths of errancy, and I have been greatly influenced by them".

The organization of this paper is as follows. We begin by giving a concise outline of the main contours of Hawtrey's macroeconomics, with a special emphasis on his so-called *monetary theory* of the trade cycle (Section 2). The next section discusses Hawtrey's somewhat ambivalent attitude towards the then prevailing orthodoxy of the Quantity Theory (henceforth QT for short)

<sup>&</sup>lt;sup>2</sup> Of course, most of them (if not all) were deeply influenced by many who preceded them chronologically namely Walras, Irving Fisher, Marshall, Wicksell, Cassel etc.

(Section 3). The major differences between Hawtrey and Keynes on economic theory and matters of policy form the subject matter of Section 4, while Section 5 discusses what we regard as the original contributions of Hawtrey to macroeconomics, which by and large, have been denied adequate recognition in the received literature. Conclusions are gathered in the final section (Section 6).

#### 2. Hawtreyan Macroeconomics

#### A. The Monetary Theory of The Trade Cycle

Hawtrey's major ideas span the three decades 1913-39 and are developed in six monographs viz. Hawtrey (1913, 1925, 1928, 1931, 1932 and 1938) as well as a continual flow of journal and magazine articles. Hawtrey is now remembered by the majority of our profession, if not as the originator, certainly as the chief proponent of the *monetary theory of the trade cycle*. But the various details of his analysis seem to have been largely ignored. One such feature is the inherent *instability of credit*. Hawtrey assigned a great deal of importance to the role of *dealers* (by which he meant merchants and wholesalers) in the trade cycle. Dealers are extremely sensitive to changes in the *short-term rate of interest*. This rate varies directly with the demand for commercial loans, the latter in turn reflecting parallel movements in general macroeconomic activity. Hawtrey's *monetary theory of the trade cycle* derives its appellation from the fact that he held monetary shocks to be the prime cause of cycles<sup>3</sup> in the sense that (i) monetary shocks are capable of generating cumulative expansions and contractions and (ii) non-monetary causes can possibly generate a disturbance but it cannot be cumulative unless underwritten by an accommodative monetary policy.<sup>4</sup>

The upswing of the trade cycle (according to Hawtrey) arises if the central bank reduces its discount rate (Bank Rate) or increases its purchase of securities from banks and the public. This is shortly followed by a credit expansion via a reduction of the interest rate on short-term bank loans combined with an easing of terms under which loans are granted. Credit expansion is

<sup>&</sup>lt;sup>3</sup> This view is nowadays associated with Friedman & Schwarz (1963), ignoring its earlier development by Hawtrey (1913) and Currie (1933, 1934).

<sup>&</sup>lt;sup>4</sup> In the absence of a change in money stock, a real shock is not transmitted significantly beyond the industries in which the shock occurs.

associated with a rise in *consumers' outlay* (defined in Hawtrey to include consumption expenditure together with outlays on *new* investment goods). The key agent in the cyclical process is the dealer who (in contrast to the manufacturer) is extremely sensitive to even small movements in the *short-term* interest rate<sup>5</sup>. As consumer outlays increase, dealers raise their inventory levels with additional orders to manufacturers. Manufacturers respond by first increasing the production levels and then, as full capacity is approached, by raising prices. The rising prices further stimulate profits since Hawtrey (along with most contemporary macroeconomists) believed that wages responded with a lag to prices (see Kessel and Alchian (1960)). The process thus becomes cumulative (see Haberler (1964, p.17-24) (originally published (1937)) and Deutscher (1990, p.58-68) for more details). The upswing continues until the credit expansion is reversed with a rise in the Bank Rate or open market sales. It is interesting to note that Hawtrey (see (1928), p. 98) did not believe that the upswing would terminate of its own accord but that it could continue indefinitely were it not for the constraints on monetary expansion due to the *gold bullion standard* prevailing at that time (1925-31) in Britain (see Eichengreen (2019) and Drummond (1987)).

The downswing of the cycle is also cumulative and follows the obverse route of the upswing. As credit contracts, prices fall but wages being inflexible downwards, profits contract rapidly forcing cutbacks in production. This forces inventories to lie idle with dealers, borrowing is reduced further along with consumers' outlay and so on. Reviving the economy from a downswing depends to a large extent on how severe the depression is. If the depression is not too severe, then the liquidation of loans brought about by debtors who fear an increase in their debt burden (due to the actual and expected fall in prices) would restore bank *loans/reserves* ratios to their normal levels, and banks once again become willing lenders trying to allure borrowers with lower interest rates and relaxation of loan conditions. However, this process works reasonably well only if pessimism among the dealers is not too high regarding future evolution of consumers' outlay.

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<sup>&</sup>lt;sup>5</sup> The reason for this is that the dealer is highly leveraged with his loans to own capital ratio being quite high.

However, if the depression is severe, then recovery might present serious problems. This situation Hawtrey famously termed as a *credit deadlock*, which is best described in his own words (Hawtrey (1933), p. 29):

"if the depression is very severe, enterprise will be killed. ...no rate of interest, however low, will tempt dealers to buy goods .., if the borrower anticipated a loss on every conceivable use that he could make of the money".

Additionally, as noted by Bernanke (2003), in a severe depression additional factors may come into play, "Since the early 1990s, borrowers in Japan have repeatedly found themselves squeezed by disinflation or deflation, which has required them to pay their debts in yen of greater value than they had expected. Borrower distress has affected the whole economy, for example by weakening the banking system and depressing investment spending". Bernanke's reasoning is very much Hawtreyan though he makes no explicit mention of Hawtrey.

The instability of credit is enhanced by the pro-cyclicality of the velocity of money. Cash balances are reduced (increased) when credit is expanding (contracting) and prices are rising (falling). This phenomenon accentuates the cyclical movements of consumers' outlay.

#### B.Breaking Through the Credit Deadlock via Quantitative Easing

Hawtrey had given considerable thought to the policy measures that could be adopted to emerge out of the credit deadlock. In Hawtrey (1933, p.141) he had examined the possibility of a reduction in *nominal wages* in line with the price level to restore manufacturers' profit levels. But he quickly rejected this proposal as entailing severe social and political dislocations. A reduction in *real wages* was a more practicable alternative to serve the same purpose. This could be achieved either by inflation or currency depreciation.<sup>6</sup>

In his evidence before the Macmillan Committee (1931, p. 273-277) Hawtrey succinctly outlines his main proposal for emerging out of the deadlock during the Great Depression. When asked about his views on monetary policy, he said that for the short term he would favour further reductions in the short term interest rate (and possibly the cash reserve ratio of banks, though he

<sup>&</sup>lt;sup>6</sup> In a gold standard currency depreciation by increasing the country's export competitiveness increases the gold inflow into the country and helps to raise money supply.

does not mention this latter explicitly) supplemented by open market purchases or in his own words "to carry the process of credit relaxation to its limit". But he clearly realized that this policy cannot continue for too long after the deadlock is broken, for fear of a runaway inflation. In the long run he laid down the objective of stabilizing the price level so as not to disturb debtor-creditor relations and the relative price structure (disturbances to which he recognized as a source of variation in production levels (see Hawtrey (1930), p. 73 and Clarke (1988)). Laidler (2004) calls this double-barreled strategy as the *Purvis Principle*<sup>7</sup>.

Hawtrey emphasized open market operations as the best (or perhaps the only) way to get out of the credit deadlock. "... the purchase of securities by the Central Bank, which is otherwise no more than a useful reinforcement of the Bank rate ...becomes an essential condition of the revival beginning at all."(Hawtrey (1931b).

While Hawtrey assigns a great deal of significance to open market purchases by the *central bank*, he does not draw a clear distinction between traditional open market operations and these special open market purchases, which have now become a standard policy tools under the label Quantitative Easing (QE). As is well-known, the main distinction hinges upon three factors:

- (i) Under an expansionary OMO, the central bank purchases assets (usually long-term securities) from banks and financial institutions, but this is funded through some existing central bank assets such as short-term securities, foreign currency holdings, gold etc., so that banks get hold of relatively more liquid assets while the size of the central bank balance sheet is left unchanged. QE, on the other hand, funds the asset purchases from banks and other financial institutions by increasing the monetary base, in the process expanding the size of the central bank balance sheet.
- (ii) While OMO purchases are confined to government securities, asset purchases under QE can be extended to other financial instruments including corporate bonds, MBS etc.
- (iii) OMOs are typically addressed to maintain the market short-term interest rates around a desired level, while QE is directed at influencing the long-term interest rate.

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<sup>&</sup>lt;sup>7</sup> This is called so after the famous Canadian economist who is said to have described this strategy at a private meeting as "sound money and plenty of it".

So far as the first factor is concerned, even though Hawtrey did not specifically make this distinction, his writings make it clear that what he had in mind was very close to what we now understand by QE. The second factor is subsumed implicitly under Hawtrey's *credit relaxation*. As a matter of fact, Hawtrey (1950, p.75) did not hesitate to suggest that "they (banks) can create credit by themselves buying securities in the investment market", which is a step undertaken with a great deal of caution by most countries embarking upon QE. On the third factor, Hawtrey was clear that the Central Bank can only control the short-term interest rate with very little influence on the long-term rate. (We shall be discussing his views on the long-term rate in a later Section). On balance one may say that the profession today has been less than just in allotting Hawtrey due credit as the originator of QE. Hawtrey's views were, however, quite popular with a section of American economists in the 1920s and 1930s notably Currie (1933, 1934), Young (1924), Simons (1936) etc. (see the discussion in Humphrey (1971), Johnson and Rees ((1962), Sandilands (1990), Laidler (1993, 2004) etc.).

#### 3. Hawtrey and the Quantity Theory (QT)

It is not an exaggeration to say that the QT constituted the focal point of much of the macroeconomic thinking prior to the collapse of the Gold Standard in 1926. The theory itself evolved in several versions since its first statement in Hume (1752) before it was crystallized into a single coherent body of thought, along with several amendments and additions, by Friedman (1956) under the rubric of *monetarism*. Because of its several variants, the QT admits of several competing taxonomies. Of these taxonomies, the most suitable for our purpose seems to be that of Friedman (1987). He considers three versions of the QT (see Hayes (1989))

(i) The *transactions version* of Fisher (1911) usually expressed as MV = PT (where M and V are money supply and its velocity respectively, while T is the total volume of transactions of final as well as intermediate goods and services at an average price level P). The velocity V was assumed constant in the short run (being dependent on technological and institutional factors) and coupled with the assumption of Say's law, the theory implies a direct and proportionate relation between money supply M and price level P.

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 $<sup>^8</sup>$  In India, for example, banks' investment portfolios should be within the framework of RBI Circular No. : BP BC 20/21.04.141/2014-15

- (ii) The *income version* of the QT (usually associated with Tooke (1844), Wicksell (1898), Wieser (1914) etc.) which may be written as Mv = pY (where pY refers only to the expenditure on net value of goods and services Y, v is now the velocity of circulation for transactions in final goods and services only, p refers similarly to the average price level of final goods and services, while M is as before, the total money supply).
- (iii) The *cash balance/Cambridge version* of the QT (see Pigou (1917), Marshall (1923), Robertson (1922), Keynes (1923) etc.), in contrast to the *transactions version* focuses on the store of value function of money rather than its medium of exchange function. In this version money is needed as a *temporary abode* of purchasing power as demand and sales of commodities are often non-synchronous. Money also needs to be stored as a hedge against contingencies. This means that the demand for money balances is some proportion k of nominal income pY i.e. M = kpY. If we assume that the ratio of income to transactions is constant then the k in the *cash balance* version is the reciprocal of v in the *income version* and proportional to the reciprocal of the v of the *transactions approach* (see Pigou (1927)).

In spite of their differences in outlook, all three approaches converge on a set of common premises. The first of these was that the only substitute for money balances was expenditure on goods and services with a virtual exclusion of financial assets —an omission attributable perhaps to the contemporary undeveloped nature of financial markets. This was accompanied by the parallel assumption that all non-money assets are perfect substitutes for each other. Following from this premise, we get that any increase in money supply would spillover into expenditure on commodities which would raise prices rather than quantities (by the assumption of full employment). Secondly, the demand for money (i.e. the k or v, V above) was taken to be stable and this was justified on two grounds viz. that the ratio of income to transactions changed only due to secular factors and hence was constant in the medium term and consequently the demand for money could be considered as a pure transactions demand. Taking these two premises together we find that if the entire increase in money stock solely affected prices and the velocity was constant, then prices would rise proportionately to the money stock increase. It would be too harsh to attribute to the proponents of the QT a naivete that presumed an instantaneous or short

term proportionate response. Most likely, the proportionate response was only assumed to hold in some kind of a long-run equilibrium.

De Long (2000, p.85) points out that the Fisherine version of the QT could not provide a satisfactory theory of the business cycle and also that some of the proponents of what he calls *Old Chicago Monetarism* like Knight and Viner stressed the non-constancy of velocity and its correlation with inflation. Later monetarists by contrast found empirically a remarkable stability of the demand for money function even in extreme hyperinflationary conditions (see e.g. Cagan(1956)).

Hawtrey's attitude to the QT can best be described as lukewarm. He conceded that the theory as a statement of equilibrium was certainly true but that this was unhelpful in understanding the transitions between equilibrium situations (see Hawtrey (1927), p.34-36). Hawtrey's theory of the price level (see Davis (1981), p.211-213, and Deutscher (1990b), p.73) was based on the cash-balance version of the QT in combination with an income approach. Instead of making the quantity of money as the centre-piece in price movements, he shifted the focus to bank loans. Changes in bank lending lead directly to impacts on income. Writing under a gold standard regime, he believed that changes in money supply brought about by gold inflows/outflows disturbed an existing equilibrium, resulting successively in a change of interest rates and thereby in dealers' inventory holdings, a change in manufacturing brought about by changing stocks and finally a change in prices.

Another important difference between Hawtrey's theory and the QT was that while the latter postulated a *direct* impact of money supply changes on the real sector and an *indirect secondary* impact via changes in interest rates, Hawtrey maintained that monetary policy operated directly via short-term interest rates and not through changes in money supply. According to Hawtrey (1938, p.235) the restriction of credit by the Bank of England was "merely a device for making Bank rate effective in the discount market".

Neither was Hawtrey over-impressed by Friedman's (1956) *restatement of the quantity theory*, for in his view it was simply "apt to involve an artificial simplification of the terms employed" (quoted in Deutscher (1990a), p. 39).

# 4. <u>Hawtrey and Keynes – Two Major Agreements and Several</u> <u>Differences</u>

While Hawtrey's reputation, as it survives today, is mainly that of a major Keynesian critic, it is important to bear in mind their agreement on two key aspects of the macro-economy. Firstly, both held that a modern capitalist economy has no self-equilibrating tendency via automatic stabilizers but needs active official policy for stabilization (see Hicks (1977), p. 120). Secondly, as we have seen in Section 2, dealers play a pivotal role in Hawtrey's theory. For, it is through dealers that monetary shocks acting via *short-term interest rates* have their initial impact on inventories and production. Further, prices are determined by dealers based on their assessment of expected consumer outlay and tend to be constant as long as excess capacity in production (possibly carried over from previous slumps) persists. Only when full capacity is approached, do prices start moving upward. In modern terminology, this is a *fix-price quantity-adjustment* theory, the same approach used by Keynes in the *General Theory* nearly a decade later.

There are of course, notable differences between the two key figures in the inter-war macroeconomic debates. The comparison is rendered difficult in view of the fact that while the core of Hawtrey's economic views remained (with some minor modifications) essentially the same or evolved gradually during this period, Keynes's views show distinct shifts over his three landmark publications viz. the *Tract* (1923), the *Treatise* (1930) and the *General Theory* (1936). In the *Tract*, Keynes exhibited very few differences with Hawtrey. One difference was that Keynes tended to emphasize money supply as the principal instrument of monetary policy in contrast to Hawtrey's emphasis on the Bank rate (see Moggridge (1981) ed. *JMK Vol.19*, *P.160-161*)<sup>9</sup>. A second difference arose from their differing positions on the on-going debate about the restoration of the *Gold Specie Standard* in Britain following its suspension at the outbreak of World War I. While Hawtrey, always conscious of the need to balance domestic price stability with exchange rate stability, was a firm adherent of a return to the *Gold Bullion Standard* (a slight variant of the earlier system) contingent upon the implementation of international cooperation (primarily with the US Federal Reserve), Keynes was more concerned with internal

<sup>&</sup>lt;sup>9</sup> We will be using the acronym *JMK* to refer to volumes in *The Collected Writings of John Maynard Keynes (Macmillan, London).* 

price stability than exchange rate stability and feared Britain losing its monetary policy autonomy to the Federal Reserve under a return to the *Gold Bullion Standard*.

The two main issues dividing Keynes position in the *Treatise* and Hawtrey were the issues of price adjustments and long-term vs short-term rates of interest. The dispute on prices "reflected differing views on the information content of price and other signals (such as inventory changes)..." (see Deutscher (1990a), p.95). To Keynes, it was changes in the prices of final products (consumption as well as capital goods) that mattered and changes in the prices of intermediate products were of little significance to the final equilibrium. This in Hawtrey's opinion is tantamount to assuming that prices adjust instantaneously and that stocks were fixed. In Hawtrey's analysis (particularly Hawtrey (1928, 1937)), stock adjustments were central to the transmission of demand changes to final prices. Hence (in Hawtrey's opinion) the fundamental equations in Keynes' *Treatise* are accounting rather than behavioural relations. As summed up succinctly by Deutscher ((1990a), p. 100) to Keynes "disequilibrium meant a misalignment of prices and costs" whereas for Hawtrey unemployment was the essential sign of disequilibrium and could manifest itself even without falling prices.

Hawtrey's analysis of the Bank Rate was the second thrust of Keynes' major criticism of Hawtrey in the *Treatise*. Keynes felt that Hawtrey's analysis over-emphasized the role of monetary factors with its primary focus on investment by dealers in liquid capital. Besides, Keynes felt that the Bank rate may not have the kind of significant influence on the decisions of dealers that Hawtrey seemed to assign to it. Hawtrey's emphasis on the short-term interest rate was justified on several grounds (see Hawtrey (1932), p.379-384 and Hawtrey (1937), p.58-60). Specifically he felt that the authorities exercised little direct control on the long rates, as short-term policy rates (Bank Rate in Hawtrey's days or repo rates today) had only insignificant and delayed impacts on the long-term rates. Besides, the type of investments he considered most crucial for the trade cycle (viz. inventory investment and speculative investment in stocks) were quite sensitive to short-term rates. At the same time banks and financial firms were more than willing to lend short term and acquire long-dated assets. Keynes by contrast (see Moggridge (1973), p.315-324 and Deutscher (1990a), p.93) felt that short-term interest rate movements had a large impact on long-term rates. Low short-term rates in relation to long rates encourage investors to borrow short to hold long-term bonds, pushing up the prices of such bonds and

hence lowering the long term rates. Keynes noted some empirical work carried out by Riefler in the US<sup>10</sup> in support of his position. Keynes also did not assign to inventory investment the central role assigned to it in Hawtrey's works. He (Keynes) (while not disregarding the role of inventories) assigned the central role in economic fluctuations to investment in fixed capital and the long-term rate of interest in the *Treatise* and later in his *General Theory*.

Major differences between Keynes and Hawtrey arise after the publication of the *General Theory*. These are dispersed among the numerous letters exchanged between the two on the successive drafts of the *General Theory* as well as its final version. Later Hawtrey systematically elaborated on his major differences with the *General Theory* in two books (Hawtrey (1937, 1938)). The major differences revolved around five issues (see Deutscher (1990a) Chapter 5 and Deutscher (1990b), p. 78-80 for a fuller discussion).

- (i) The first issue was the old standing difference on the short and long interest rates. Hawtrey reiterated his earlier criticism that Keynes attributed a disproportionate effect of short term rates on long term rates. He continued to emphasize short-term rates since they seemed to have a faster and more widespread impact on investment.
- (ii) Hawtrey took strong exception to Keynes' concept of the *marginal efficiency of capital (MEC)* schedule. As is well known, Keynes defined the MEC as the discount rate which equalizes the discounted stream of returns from an asset to its supply price. Hawtrey felt it incorrect to define the MEC in terms of profit of a single machinery unit, since the term profit applied to the concern as a whole. Hawtrey was careful to distinguish between *widening* and *deepening* of capital. The former refers to an expansion of enterprise without any change in the *capital to output* ratio, while the latter refers to an increase in capital employed per unit of output (see Hawtrey (1937), p.36). According to Hawtrey, whereas *capital widening* depends on the expected profits, *capital deepening* which is likely to be responsive to the rate of interest. More importantly, even this response will be sluggish (due to uncertainty about future costs and demand) (see Hawtrey (1937, p. 40-42 and p.103-106)). Hence, in Hawtrey's opinion Keynes assumption of a high degree of responsiveness of capital outlay to long-term interest rates was misplaced.

<sup>&</sup>lt;sup>10</sup> This was published much later as Riefler (1936).

- (iii) While the Keynesian *liquidity trap* and Hawtrey's *credit deadlock* both refer to a situation of severe depression, it is essential to note that both connote different phenomena. It is well known that Keynes' *liquidity trap* presumes a liquidity preference schedule which becomes highly *elastic* with respect to the *long-term rate* of interest (*consols* in Keynes' *General Theory* ) at the kind of low rates likely to prevail in a prolonged depression. What is less known is that Hawtrey's *credit deadlock* is based on a demand for bank loans' schedule which is highly *inelastic* with respect to the rate of interest (see Laidler (2004) for further discussion of this issue).
- (iv) The other contentious issue related to wage cuts and employment. Keynes' views, elaborated in Chapter 19 of the General Theory posit that even if money wages were flexible, the required fall in real wages (to raise employment) may not necessarily occur. In the Keynesian theory, any fall in the general level of money wages would bring about a rise in employment, if the following three possibilities applied in conjunction. If, however, not all of them were applicable, the outcome would depend on the relative strengths of the possibilities which held true and those which did not. The three possibilities considered were -- a fall in the money wages leading to (i) a rise in the marginal propensity to consume (ii) a fall in the long-term interest rate and (iii) a rise in the marginal efficiency of capital. Keynes (1970)[1936] in chapter 19 considers all three possibilities in detail. Because a fall in money wages may not lead to an equivalent fall in prices, income distribution shares would shift in favour of profits and away from wages. Since the rich entrepreneurs would tend to save more than the poorer workers, the marginal propensity to consume is most likely to fall. Since a fall in money wages would lead to lower mass purchasing power, business expectations of future sales from their product would contract, lowering the marginal efficiency of capital for all items of mass consumption. Finally, while a contraction of incomes would lower the transactions and precautionary demand for money, thereby making more money available to satisfy the speculative motive, this would only lower the rate of interest if the economy was not operating on the horizontal section of the liquidity preference schedule i.e. the economy was not already at a very low rate of interest. Hawtrey, on the other hand was more sympathetic to the classical

- position that money wage cuts lower output prices but not to the same extent as the wage cut, thus reducing *real wages* and stimulating output and employment. It is important to stress, however, that Hawtrey opposed wage cuts on the grounds that they were likely to generate social unrest, while maintaining that the classical position was theoretically correct.
- (v) Contrary to the advocacy of public works programmes by Pigou (1912) and Keynes (1936), Hawtrey (1933) was quite opposed to this method of getting out of a recession. Hawtrey's position is very close to what was then described as the Treasury view, 11 though it is not very clear whether he was the chief architect of this view (in spite of having been closely associated with the Treasury for a very long period). Interestingly, he felt that public expenditure financed by bonds, would simply displace private expenditure (a view widely prevalent at that time, sometimes called the Geddes Axe – see Higgs (1922), and now more familiar as the crowding out effect (Spencer and Yohe (1970)). 12 Hawtrey's position on bond-financed deficits was somewhat nuanced. He recognized, for example, that public expenditure funded by government borrowing out of idle balances could increase the ratio of consumer income to money (see Hawtrey (1925) and Sandilands (2010) ) and thereby stimulate output somewhat. Howver, if the fiscal deficits were financed by deficit financing (creation of new money) they would have a more substantive role to in ending the credit deadlock. But then it was the associated money creation, rather than the direct fiscal expenditure which was the key element in the revival (see Laidler and Sandilands (2002), p. 524).

## 5. Hawtrey's Main Contributions

There are at least four notable contributions of Hawtrey that deserve to be remembered viz. the multiplier concept, the accelerator, the possibility of unemployment equilibrium and quantitative easing.

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<sup>&</sup>lt;sup>11</sup> This was explicitly stated by Winston Churchill, Chancellor of the Exchequer on 15 April 1929 (see Peden (1984), p. 167, Fn.1).

Several authors (most prominently Davis (1980, p.721), Cain (1982), Deutscher (1990a, p.102-103)) have presented evidence to show that Hawtrey in his writings, by positing two key features of the *multiplier* viz. that quantity adjustments preceded price adjustments and that savings depend mainly on income, had already erected the skeletal framework of *multiplier analysis* a few years prior to the appearance of Kahn's (1931) famous article on the *multiplier*.

Hawtrey had also employed an *accelerator* type argument to explain the severity of fluctuations in capital goods industries (as compared to final goods industries) as early as 1913 (see Hawtrey (1913), p.207). Much later he stated explicitly that "The excess of capital outlay over replacements in any industry thus tends to be proportional to the *rate of increase* of demand for the product of the industry" (see Hawtrey (1938), p. 182) —which is precisely the standard definition of the *accelerator*.

But as we have already mentioned above in Section 4, perhaps Hawtrey's key contribution was that (along with Keynes) he was aware that a market economy did not possess an automatic equilibrium restoring mechanism – that deviations from a position of full employment could be cumulative in either direction and the restoration of equilibrium could not be left to market forces but needed active policy interventions (see Hicks (1977), p.120 and Deutscher (1990b, p.74).

In Section 2B above, we have already seen that the now popular idea of QE (quantitative easing) not only dates back to Hawtrey but that he made contributions to the development of it as a policy tool (during the Great Depression of the 1930s) owing to his long association with the British Treasury (1919-1944). Sadly, in spite of its popularity in recent years, there is virtually no recognition in the contemporary literature of the fact that the basic idea originates with Hawtrey.

Apart from these, there are also two relatively minor contributions that need to be noted. So far as *crowding out* theory is concerned, Hawtrey while not the originator of the concept, must be credited with a very detailed description of how the process actually works through the stock market in a modern capitalist economy. He first shows that the investment market capacity is limited since "An excess of new issues is felt through dealers<sup>13</sup> being overloaded with securities ... Under such conditions not only do the prices of securities fall but the terms attached to new

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<sup>&</sup>lt;sup>13</sup> By this term Hawtrey is meaning *underwriters*.

securities become more onerous .. and some new issues are refused altogether". Thus, if the government "draws upon the investment market's resources, there will be so much less left for other purposes" (Hawtrey (1933), p.442).

Hicks (1977) makes an important distinction between the treatment of expectations in Keynes and in Hawtrey, and goes on further to say that "in this respect Hawtrey is distinctly superior" (Hicks *op.cit.*, p.127). While in Keynes, expectations are given as data and beyond the ambit of policy, Hawtrey postulated that the announcement of policy changes could shift agents' expectations significantly. This is the so-called *announcement or signaling* effect of policy. For Hawtrey the Central Bank's *decisiveness* in setting the Bank Rate has an important influence on the degree and direction in which market expectations are guided. In modern terminology, Hawtrey is referring to the Central Bank's credibility and its communication strategy. This prompts Hicks (*op.cit.*, p.130) to observe that "What I learn from Hawtrey's analysis is that the 'classical' Bank Rate system was strong, or could be strong in its announcement effects. Fiscal policy...gets from this point of view much worse marks".

### 6. Conclusions

As is usual in such assessments, opinions vary widely about Hawtrey's contributions to modern macroeconomics. On the one hand, Mrs. Robinson dismissed the Treasury view (strongly associated in the public mind with Hawtrey) as "laughable" (see Robinson (1962), p.73), while Marget in his *magnum opus* (1938, p.354-356) termed Hawtrey's contributions as going "far beyond those of any other single writer... he can hardly be said to have a serious rival in the field" (see also Deutscher (1990a), p.237-238). Townshend's (1937) review of Hawtrey's *Capital and Employment* (1937) had two major criticisms. Firstly, that Hawtrey had missed Keynes' "central idea that expectations exert a *direct* causal influence on *all* prices" (Townshend op.cit. p.324). Secondly, that Hawtrey misses the essential difference between Keynes and the classicals that whereas the latter subscribe to a concept of equilibrium in which all producers make right decisions, the former denies the existence of such an equilibrium altogether. However the review is not totally negative –it recognizes that on points of detail Hawtrey's criticism is invaluable and that the profession is privileged to profit by the debate between Keynes and Hawtrey.

Hawtrey's emphasis on the causal role of monetary factors in the trade cycle has not received much sympathy in the literature. In spite of his generally sympathetic assessment of Hawtrey (see preceding paragraph), we find Hicks (1978, p. 136)[1950] stating categorically "'it has been one of the main objects of this work to show that the main features of the cycle can be explained in real terms". Current mainstream economics under the influence of *real business cycle* theory has relegated monetary factors to an insignificant position and accorded a "not so fond farewell" to the LM curve (see Friedman (2003)). In such an environment, it is hardly any surprise that Hawtrey's contributions are rarely recalled.

In this age of self-publicity through social media, it may be difficult for a modern reader to understand why with so many achievements to his credit, modern mainstream economics rarely refers to Hawtrey or his works. Of the several explanations advanced to explain this neglect, I find the following most convincing "The self-effacing Hawtrey may.. deserve a more prominent place in the literature on the coming of the multiplier –but notably as the man who, having stumbled upon it, painstakingly suppressed news of its discovery in his subsequent publications."(Clarke (1988), p.242-243—quoted in Deutscher (1990a), p.254).

Hawtrey's several contributions may then be said to belong to Whitehead's category of "everything of importance .. being said before by someone who did not discover it" (Whitehead (1917, p.127).

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