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Nicholas Kaldor after thirty years

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Nicholas Kaldor was born in Budapest on 12 May 1908. He studied in Germany, where he also worked as a financial journalist, before coming to the London School of Economics in 1927. He remained there for 20 years, first as an undergraduate and then as a research student and lecturer. After a brief post-war spell at the United Nations in Geneva, he moved to Cambridge in 1949 as a Fellow of King's College, and spent the rest of his life there; he was belatedly promoted to Professor in 1966**.** Active as a writer and controversialist until the very end of his life, he died in Cambridge on 30 September 1986.

Kaldor made many important contributions to economic theory. In the 1930s, he wrote on capital theory and on the theory of the firm under imperfect competition. Kaldor developed a penetrating critique of equilibrium theorising, the full significance of which only became apparent decades later; produced the first published statement of the compensation principle in welfare economics; made a detailed analysis of the way in which speculative markets operate; and formulated an ambitious early Keynesian model of the business cycle. From the latter, he drew some pessimistic conclusions concerning the ability of macroeconomic policy to mitigate the degree of cyclical instability:

> "the chances of 'evening out' fluctuations by 'anti-cyclical' public investment appear to be remote. For if the policy is successful in preventing the downward cumulative movement, it will also succeed in keeping the level of private investment high; and for this very reason the forces making for a down-turn will continue to accumulate, thus making the need for continued public investment greater" (Kaldor, 1940, p. 88).

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Kaldor was critical of Michał Kalecki's work on the trade cycle, but there is a strong hint here of Kalecki's reference to 'the tragedy of investment', namely "that it causes crisis because it is useful" (Kalecki, 1939, p. 318).

In the 1950s and early 1960s Kaldor published a series of formal models of economic growth, which combined severe criticism of neoclassical theory with a distinctively Keynesian approach to the distribution of income. His extremely influential 1956 *Review of Economic Studies* paper on "alternative theories of distribution" set out a distinctive demand-driven macroeconomic theory of relative shares, emphasizing the roles of the ratio of investment to income and of the class propensities of workers and capitalists to save out of wages and profits. He was attacked by neoclassical theorists like James Tobin, Franco Modigliani and Paul Samuelson for exaggerating the importance of these class differences, but he was unrepentant:

> "a capitalist system can only function so long as the receipts of entrepreneurs exceed their outlays; in a closed system, and ignoring Government loan expenditure, this will only be the case if entrepreneurial expenditure exceeds workers' savings. Unless one treats the consumption expenditure of entrepreneurs as an exogenous variable, given independently of profits, it is only the 'Kaldor-Pasinetti inequality' (i.e. the excess of business investment over non-business savings) which can ensure the existence of profits" (Kaldor, 1978a, p. xvi).

Kaldor's neoclassical critics, however, never seemed able to grasp this rather elementary truth.

Subsequently, Kaldor produced some much less formal but equally provocative and original ideas on economic growth, which focussed upon dynamic increasing returns to scale and the critical role of manufacturing in the process of economic growth, and anticipated subsequent mainstream thinking on endogenous growth. He rediscovered the Verdoorn Law, formulated by his former United Nations colleague, the Dutch economist P.J. Verdoorn, as early as 1949: productivity growth is a function of output growth. This, he argued, explained the poor growth performance of the British economy after 1945:

> "Britain having started the process of industrialisation earlier than any other country, has reached 'maturity' much earlier – in the sense that it has attained a distribution of the labour force between the primary, secondary and tertiary sectors at which industry can no longer attract the labour it needs by drawing on the labour reserves of other sectors" (Kaldor, 1966, p. 31).

Since Verdoorn's Law applied only to manufacturing and not to services, Kaldor maintained that a case could be made for taxing employment in the tertiary sector and using the proceeds to subsidise employment in secondary production, especially in the depressed regions of Britain's north and west. These ideas were (briefly) influential in the late 1960s, when the Labour government introduced a short-lived Selective Employment Tax and a Regional Employment Premium (King, 2009).

Kaldor also applied his ideas on economic growth to the problems of economic development in a North-South model of the global economy, in which poor countries that relied heavily on exports of primary products were systematically disadvantaged in their trade with the rich industrialised countries. He became a strong critic of both neoclassical trade theory and more generally of equilibrium theorising in economics, which he believed to neglect the path-dependence of many important macroeconomic variables. Path-dependence was central to Kaldor's mature thinking on how to construct a non-equilibrium macroeconomics:

> "we must begin by constructing a different kind of abstract model, one that recognizes from the beginning that time is a continuing and irreversible process; that it is impossible to assume the constancy of anything *over* time, such as the supply of labour or capital, the psychological preferences for commodities, or technical knowledge. All these things are in a continuous process of change but the forces that make for change are endogenous not exogenous to the system. The only truly exogenous factor is *whatever exists at a given moment of time*, as a heritage of the past" (Kaldor, 1985, p. 61, original italics).

He was sometimes given credit by later pioneers of mainstream endogenous growth theory for having recognised the significance of this crucial principle.

Although he never wrote a single comprehensive treatise or graduate text, Kaldor published a great deal in the 54 years of his academic career. There are nine volumes of his selected economic essays (Kaldor, 1960-1989), supplemented by the posthumously-published 1984 *Mattioli lectures* (Kaldor, 1996).[1] Just before his death, Kaldor's own reminiscences appeared in an earlier issue of this *Review* (Kaldor, 1986a). There are also three book-length intellectual biographies (Thirlwall, 1986; Targetti, 1992; King, 2009).

In the remainder of this paper I focus less on Kaldor's theory and methodology than on his ideas on economic policy. He took a lifelong interest in policy issues, contributing a technical appendix to the Beveridge Report on *Full Employment in a Free Society* in 1944, serving on the Royal Commission on the Taxation of Profits and Income in the early 1950s, and acting as economic adviser to several Labour governments between 1964 and 1976. After his elevation to the House of Lords in 1974 Kaldor spoke frequently and forcefully in Parliamentary debates, becoming a vehement critic of Margaret Thatcher's Conservative regime (see Kaldor, 1983). He had strong and cogent views on monetary policy, fiscal policy, the control of cost inflation, and the stabilisation of commodity prices. In the following sections I deal in turn with his treatment of each of these questions, before concluding with some more speculative ideas on how Kaldor would have reacted to the most important economic policy questions that still face Britain, and the broader European Union, thirty years after his death.

1. The war on monetarism

Kaldor's important contribution to the war on monetarism was widely recognised in the years immediately following his death (Desai, 1989, p. 178; Hewitson, 1993, pp. 150-151; Moore, 1988, p. 4 f. 2). He first became interested in economics through his personal experience

[1] See also Targetti, Thirlwall, 1989.

of a major monetary event. In 1923, aged 15, he was on a family holiday in the Bavarian Alps during the great German hyperinflation. The young tourist watched with fascination as prices were increased several times each day, at an accelerating pace:

> "at the same time I noted that translated into dollars, or other stable currencies, the prices of things, despite their constant revision, were extraordinarily low. There was a yawning and widening gap between the prices of goods in terms of local currency and their prices in foreign currency, which were very much lower. These extraordinary phenomena aroused all my curiosity" (Kaldor, 1986a, pp. 3-4).

There is no reason to doubt his memories of this youthful adventure, but Kaldor's theoretical recollections have proved to be more contentious. At the end of his life, he claimed to have anticipated, in the 1930s, the post-1970 literature on endogenous money to which he made such an important contribution (Kaldor, 1982, p. 22). This claim has been supported by one of his biographers (Targetti, 1992, pp. 254-255), but it has also been challenged (Rochon, 2000).

In the beginning of his academic career, Kaldor had been a student and disciple of Friedrich von Hayek, and he was therefore also an adherent to the quantity theory of money in its Austrian (or neo-Wicksellian) form. But he soon broke with Hayek to become a convinced, if always rather idiosyncratic, Keynesian. In 1936, he concluded an article on wage subsidies as a remedy for unemployment with a sceptical account of the views that he had until very recently himself accepted.

> "The present writer is not one of those who believe that the maintenance of a lower level of interest rates necessarily involves a process of 'cumulative inflation'. [… On the contrary,] the cumulative effects of an 'inflationary' monetary policy need not come into operation so long as there is unemployed labour to draw upon at a given level of wages" (Kaldor, 1936, p. 741).

Already we can here see Kaldor criticizing (if only implicitly) the notion that money causes inflation. He was not yet, however, an endogenist. Defending wage subsidies as a more effective means of increasing employment than monetary policy is likely to be, he attacked

"the methods at present available to central banking technique, which is confined to a regulation of the quantity of money either by rationing or by changing the short-term rate of interest (either through the policy of the discount rate or through open-market operations)" (*ibid*., p. 742).

The distinction between exogenous and endogenous money was not, to say the very least, drawn clearly in this early article, where Kaldor's principal reservations concerning the effectiveness of monetary policy centred on its inability to influence the long rate of interest, which he believed to be the crucial variable affecting the level of business investment.

The same ambivalence was evident in his critique of Pigou, published in the following year. In a footnote Kaldor drew a Hicksian IS-LL diagram, with an upward-sloping LL curve that shifts to the right when money wage rates are reduced. His argument is worth quoting in full:

"a reduction in money wages cannot affect the position of the IS curve, but it will shift the LL curve to the right; for, by reducing the size of 'working balances' at a given level of real income, it enhances the size of 'idle balances', and thus reduces the interest rate consistent with that level of output. Its effect therefore is exactly the same as that of an increase in the quantity of money or a reduction in liquidity preference. It is, in fact, nothing more than an alternative way of increasing the quantity of money in terms of wage-units" (Kaldor, 1937, p. 752 f. 2).

Just when it seems that Kaldor is indeed following Keynes in postulating an exogenous money supply, he opens up a quite different possibility. The passage quoted above continues as follows: "if the banking system follows a policy aiming to keep the rate of interest constant, the LL curve will be horizontal and the effect on employment will be nil" (*ibid*.). Kaldor the horizontalist, in 1937!

His second macroeconomic diagram has been more intensely studied, if only because the money supply curve now looks to be almost horizontal. It comes in the justly-famous article on "Speculation and Economic Stability", once again in a footnote (Kaldor, 1939a).This, it must be noted, is a money market diagram (not IS-LM), with the quantity of cash measured along the horizontal axis. The money demand curve (DD) becomes highly elastic in the region of the

minimum acceptable interest rate. All that Kaldor has to say about the money supply curve (SS) is given in one bracketed sentence at the end of the footnote:

> "the elasticity of the supply of money in a modern banking system is ensured partly by the open market operations of the central bank, partly by the commercial banks not holding to a strict reserve ratio in the face of fluctuation in the demand for loans, and partly it is a consequence of the fact that under present banking practices a switch-over from current deposits to savings deposits automatically reduces the amount of deposit money in existence, and vice versa" (Kaldor, 1939a, p. 14 f. 1, original parentheses deleted).

All this is again open to conflicting interpretations (compare Rochon, 2000, with Minsky, 1991, pp. 211-212, and Musella, Panico, 1993, pp. 40-45).

A year later Keynes, as editor of *The Economic Journal*, published Kaldor's review of *The Theory of Prices* by Arthur Marget. The purpose of Marget's book was "to defend the old-fashioned quantity equations (of the *MV = PT* type) against the criticisms of Mr. Keynes in Volume I of the *Treatise on Money*" (Kaldor, 1939b, p. 496). Thus Marget's book did not deal with the *General Theory*, on which a second volume was promised.[2] He criticized Keynes for confusing the quantity *equations* with the quantity *theory*. According to Marget, Kaldor noted:

> "the quantity equations, by themselves, do not carry any such implication as that 'if the quantity of money were to double prices will double', this would only be true if in addition, *M*, *V* and *T* were assumed to be independent variables […]. To the charge that the equations thus interpreted are mere 'identities' or 'truisms', he replies that though they are identities, they are not thereby rendered useless. They 'represent a summary of the slow growth, over a period of centuries, of our knowledge with respect to the forces determining prices'" (*ibid*., p. 496, citing Marget, 1938, p. 90).

"With the formal position thus adopted", Kaldor concedes, "it is not easy to quarrel":

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[2] The second volume was published in 1942; there is no evidence that Kaldor took any interest in it.

> "it is obviously possible to give an interpretation to the expression *MV = PT* which is proof against any conceivable objection or exception. But most readers will continue to associate the quantity equations with the quantity theory, and thus be guilty of the same confusion as Mr. Keynes. Under the assumptions of the quantity theory, where the volume of goods sold per unit of time, the quantity of money, and the real value of cash balances, are determined by forces mutually independent of one another, the equation *MV = PT* does exhibit the forces determining the price-level in an illuminating manner. In the absence of those assumptions it is difficult to see what purpose it serves" (Kaldor, 1939b, pp. 496-497).

But Kaldor goes much further than this:

> "in fact, continued use of the *MV = PT* type of equation (or of the *m = pk* type), even when it is shorn of its wings, as in Professor Marget's interpretation, is positively harmful rather than helpful. It engenders habits of mind which make one oblivious to some of the most fundamental *modi operandi* of economic forces. For people who are used to thinking in terms of these quantity equations it is extraordinarily difficult to bear in mind such propositions as that a change in the quantity of money has (normally) no direct, but only an indirect, effect on the flow of money payments (the effect depending on a consequential change in the rate of interest and on the effect of this change on the scale of investments), or that the effect of a change in the flow of money payments is predominantly on the volume of goods sold, and not on prices, or that the level of prices is determined by the scale of money remunerations of the factors of production, and not by the flow of money payments. All these things are concealed, not exhibited, by the quantity equations. That Professor Marget himself is not entirely free from these habits of mind is shown by his choice of 'The Theory of Prices' as a title" (*ibid.*, pp. 497-498).

I have quoted at some length from this rather obscure review of a rather obscure book because Kaldor's attitude towards the quantity theory is set out here more clearly than in any of his other (pre-1970) writings. Money influences the economy only indirectly, through changes in the rate of interest. Changes in the money stock affect output and employment, not prices. The price level depends on the money wage rate, not on the stock of money. These are Kaldor's

principal objections to monetarism as an economic theory. Endogeneity is not the most important issue.

Assessing "the lessons of the British experiment" in 1955, Kaldor acknowledged that against the immense benefits of continuous full employment must be set "the steadily creeping monetary inflation which successive post-War governments have been unable to prevent" (Kaldor, 1955, pp. 99-100). But this was not demand inflation. It was cost inflation:

> "the main cause of this creeping inflation has not been an excessive money supply or an excessive demand for goods of all kinds, but an excessive rate of increase in the general level of money wages. The inflation thus had its origins in money costs rather than in a generally excessive demand for goods over supply in real terms" (*ibid.*).

Three years later, in his written evidence to the Radcliffe Committee (dated 23 June 1958), Kaldor started off almost exactly where he had left off in 1939:

> "it cannot be emphasised too strongly that there is no direct relationship in a modern community between the amount of money in circulation (whatever definition of 'money supply' is adopted in this connection) and the amount of money spent on goods and services per unit of time. To proceed from the one to the other it is necessary to postulate that changes in the supply of money leave the frequency with which money changes hands (the so-called 'velocity of circulation of money') unaffected [...]. There are no valid grounds however for any such supposition" (Kaldor, 1958a, p. 146).

IMF data indicated that velocity not only varied substantially across countries at any point in time but also, and crucially, that it was far from constant over time.

> "Thus in the U.K. there has been a spectacular rise in the velocity of circulation, particularly since 1955 which fully compensated for the failure of the money supply to expand *pari passu* with the rise in prices and in money incomes" (*ibid.*).

Indeed, the increase in velocity was the result of restrictive monetary policy:

> "it could not be seriously maintained that this change in the velocity of circulation was in any sense an *independent* phenomenon which happened to coincide in time with the change in monetary policy. It was simply a reflection of this policy: if the supply of money had not been restricted, the increase in the velocity of circulation would not have taken place and it is a matter of doubt, to say the least, whether the course of prices and incomes would have been any different" (*ibid*., original italics).

This seems to imply exogenous rather than endogenous money.3 Once again, for Kaldor this is not the critical issue. This paragraph of his evidence concluded thus: "at any rate the *impact* effect of any change in the money supply is not on the level of payments at all, but on the velocity of circulation" (*ibid*., original italics).

As in 1939, Kaldor insisted that money did not have a direct effect on output: "it is through the consequential changes in interest rates that we must look for the effects of changes in the money supply on the demand for goods and services" (*ibid*., p. 147). The impact on the price level was even more tenuous. He stated so in his verbal evidence to Radcliffe, in October 1958:

> "my own feeling is one of considerable scepticism about the effect of interest rates on the pace of inflation, or even on what one may call inflationary pressure: the pressure upon resources at any one time. I do not believe that the cheap money policy of the Dalton era made inflationary pressure in the years 1947 and 1948 much worse than it would have been in any case, and I do not believe that the rise in gilt-edged rates had a great deal to do with the undoubted easing of pressure on resources which occurred in later years" (Kaldor, 1960a, p. 714).

What, then, was responsible for the post-war inflation? In his surprisingly hostile review of the Committee's final *Report*, Kaldor reiterated the central themes of his 1939 analysis. First, there is a "chronic tendency of money incomes (both wages and profits) to increase at a faster rate than production, thus causing a continued

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[3] There was, however, a hint of endogeneity in Kaldor's later discussion of inventory investment: "a sudden re-stocking boom such as that which followed the outbreak of war in Korea, is invariably associated with a sudden increase in the demand for bank overdrafts" (Kaldor, 1958a, p. 151). But this does not form an important part of his argument.

upward drift in money costs and prices" (Kaldor, 1960b, p. 18). Second, there is "volatility in expectations concerning short-period trends in commodity prices" (*ibid.*), which also contributes to the dangerous instability of inventory investment. Kaldor criticized Radcliffe for neglecting both phenomena and also for pulling its punches on the quantity theory, which "is still the most commonly accepted hypothesis on the relationship between money and prices among the great majority of the world's bankers and a disconcerting number of its economists" (*ibid.*). Again he stressed the variability of the velocity of circulation:

> "the basis of the quantity theory, and of the whole 'monetary' approach to economic policy which follows from it, is the belief that there is some 'normal' velocity, firmly grounded in long-standing habits and conventions, which brings it about that changes in the *quantity* of money in circulation enforce corresponding variations in the *flow* of monetary expenditure" (*ibid.*, p. 19; original italics).

But this is "a mirage", since "velocity can be speeded up or slowed down to an almost indefinite extent without any alteration in the habitual frequency of various types of money payment" (*ibid.*). This, he concludes, should have been made clear in the *Report*.

In the 1960s, Kaldor wrote little on monetary matters. All this changed with Milton Friedman's December 1967 Presidential Address to the American Economic Association, which announced the arrival of Chicago monetarism in the mainstream of USA – and, very quickly, also world – macroeconomics (Friedman, 1968). Kaldor's initial response to Friedman[4] included his first clear, explicit and very forceful statement of monetary endogeneity: "it is the fluctuation in the economy that causes the fluctuations in the money supply (and not the other way round)" (Kaldor, 1970, p. 19). He was not yet, however, a horizontalist: "if one postulates […] that the elasticity in the supply of money (in response to changes in demand) is less than infinite, then,

[4] He later claimed to have been studying Friedman's empirical results since the early 1950s (Kaldor, 1982, p. 22), but there seems to be no reference to the Chicago economist in anything that Kaldor wrote for publication prior to 1970.

the greater the change in demand, the more *both* the supply of money and the 'velocity' will rise in consequence" (*ibid.* original italics).

Kaldor's horizontal money supply curve came, quite late in the day, in the famous diagram presented in his second Radcliffe lecture in 1981, and it was now linked to a very clear recognition that an economy dominated by credit money must be analysed quite differently from one in which commodity money rules:

> "now, in the case of credit money the proper representation should be a *horizontal* "supply curve" of money not a vertical one. Monetary policy is represented *not* by a given quantity of money stock but by a *given rate of interest*; and the amount of money in existence will be demand-determined" (Kaldor, 1982, p. 24, original italics).

The rate of interest becomes an independent variable, set by the monetary authorities.

This is all familiar ground, and there is no need to duplicate the detailed accounts of Kaldor's arguments that can be found in the existing secondary literature.[5] It should, however, be noted that in his Radcliffe lecture Kaldor returned to the most important theme of his 1939 review of Marget:

> "any effect [of money on the real economy] is thus an indirect one via the influence of changes in the interest rate on investment and hence on the level of incomes generated by a Keynesian multiplier-accelerator process. It is an influence on the demand for money exerted through changes in the level of production and incomes, and not a *direct* effect on the desire to hold money" (Kaldor, 1982, pp. 24-25, original italics).

This, even more than endogeneity, was the really important theoretical point.

[5] A partial bibliography would include Bertocco, 2001; Desai, 1989; Hewitson, 1993; King, 2009, chapter 7; Lavoie, 1991; Minsky, 1991; Moore, 1991; Musella, Panico, 1993; Pollin, 1991; Rochon, 2000; Targetti, 1992, chapter 11; and Thirlwall, 1986, chapter 12.

2. Implications for monetary policy

What, then, was to be expected from monetary policy? The short but consistent answer that Kaldor gave to this question from the late 1930s to the late 1970s was: not much. As we have seen, monetary policy works only indirectly, via the rate of interest, and then affects only investment spending (Kaldor seems never to have been very interested in the possibility that consumer spending might be sensitive to interest rates). There are two reasons for doubting the strength of this influence. First, it is the short rate that is "determined by the demand for cash and banking policy", while the long rate – which is much more important for business investment – depends on "the existing state of expectations" (Kaldor, 1941, p. 467). Second, investment is essentially a matter of expected profitability, and is rather inelastic with respect to changes in interest rates, short or long. "More powerful measures" would thus be needed to restrain investment in wartime – either restrictive fiscal policy or direct controls (Kaldor, 1939c, p. 153). It is not surprising that Kaldor's 58-page Appendix to the Beveridge report on *Full Employment in a Free Society* was devoted almost entirely to fiscal policy and had nothing to say about monetary policy; the continuation of the wartime policy of cheap money is assumed, but more for its beneficial effects on income distribution than for its contribution to good macroeconomic management (Kaldor, 1944, p. 399).

The post-war Labour government in the UK did emphasise fiscal policy, Kaldor later acknowledged. "Since 1951", however, "the policies adopted by the Conservative Government have meant that more reliance has been placed on instruments of monetary control and less reliance on fiscal policy than before" (Kaldor, 1955, p. 103). It was not clear whether "the revival of monetary control through the Bank Rate mechanism" had in fact restored balance of payments equilibrium, as supporters of the government were claiming:

> "the experiments with monetary policy in the first half of 1955 thus rather tend to suggest that when the pressure on the economy results from excessive demand, the ordinary weapons of monetary policy may

> be ineffective in counteracting the trend, or can only be made effective with considerable delay" (*ibid*., p. 105).

And there was another, more insidious, problem:

> "but the rehabilitation of monetary policy has led to another danger from a long-run point of view. The experience of recent years tends to show that once Governments become accustomed to think of controlling the economy through the instruments of credit policy, the pressure for tax relief may force their hands and cause them to rely more and more on monetary policy and less and less on fiscal policy" (*ibid*., p. 106).

Kaldor concluded that, while monetary policy should be used alongside fiscal policy to control the economy, it would be "futile to place the main reliance on monetary policy without deliberately using fiscal policy to regulate effective demand" (*ibid*., p. 108).

He was considerably more sceptical than this in his evidence to Radcliffe. Here he repeated his 1941 objections: the long rate is not easily controlled by policy, and investment spending is relatively interest-inelastic (Kaldor, 1958a, p. 147; cf. Kaldor, 1960a, p. 715 and, even more emphatically, Kaldor, Mirlees, 1962, p. 189). Only "much more drastic" changes in interest rates than those hitherto applied in the UK would allow "money and credit policy [...] to be relied on as the principal instrument of control" (Kaldor, 1958a, p. 147). But this would generate a high degree of instability in bond prices, making the capital markets "far more speculative" and hence much less efficient as an instrument for allocating savings (*ibid*., p. 148). Kaldor concluded that

> "monetary and credit policy represents, at best, a crude and blunt instrument for controlling inflationary and deflationary tendencies in the economy which should be employed only in circumstances in which, and to the extent to which, no superior instrument of control are [*sic*] available" (*ibid*., p. 149).

In his review of Radcliffe, he attributed a similar opinion to the Committee itself: "This last conclusion – that monetary policy should play a purely passive role in the (short-term) regulation of the economy – is nowhere explicitly put, though the *Report* contains plenty of passages indicating that something like this was at the back of the

Committee's mind" (Kaldor, 1960b, p. 17). Once again, there is little or no connection with the question of endogenous money.

Kaldor would, of course, eventually be forced to reconsider his view that monetary policy was "relatively harmless" (Kaldor, 1955, p. 108). In 1964, criticizing the monetarist views of Friedrich Lutz at a conference on inflation and growth in Latin America, he commented sardonically that another professor of political economy, the Portuguese dictator Salazar, had introduced a "monetary stabilisation [that] was followed by 30 years of hard currency, stable prices, and a completely stagnating economy" (Kaldor, 1964a, p. 500). However, he seems not to have seen this as a serious danger for advanced industrialized countries. Even after he became an unequivocal endogeneist, Kaldor still placed relatively little emphasis on monetary policy:

> "what, if anything, follows from all this? I have certainly no objection to Friedman's prescription that the best thing to do is to secure a steady expansion of *x* per cent per year in the money supply. But I doubt if this objective is attainable by the instruments of monetary policy in the U.S., let alone in the U.K." (Kaldor, 1970, p. 21).

If Friedman's monetary goal was to be attained, it would be as the result of a successful fiscal policy that tames the stop-go cycle, together with an incomes policy that held money wages growth in check.

Kaldor soon became quite openly contemptuous of the Chicago economist:

> "since my paper [Kaldor, 1970] was published, Friedman has gained further influential adherents – politicians of the Right, ranging from General Pinochet in Chile to Sir Keith Joseph in England, numerous important stockbrokers, financial journalists and distinguished editors like Mr. Rees-Mogg of *The Times* and, last but not least, the five economists of the Nobel Prize Committee of the Swedish Academy of Science, who awarded last year's Economic Nobel Prize to Friedman. This last event evoked much the same reaction among the majority of the world's professional economists who have not been converted to the new creed (or not yet) as would have occurred among biologists if

> Lysenko had been given the Nobel Prize in Physiology and Medicine" (Kaldor, 1978b, pp. vii-viii).

In the 1980s, the damage that could be done by restrictive monetary policy was all too evident. Kaldor now revised his opinion on the deflationary consequences of very high interest rates, which had devastated British manufacturing industry both directly and indirectly, through the induced appreciation of sterling. This was how "the scourge of monetarism" had been applied (Kaldor, 1982). While he mercilessly attacked the economic consequences of Mrs. Thatcher (Kaldor, 1983), he was never persuaded that a more sensible monetary policy would bring important positive benefits. He devoted only one brief paragraph to the issue in his 1984 *Mattioli Lectures*, arguing that it was "essential that interest rates should be brought down as rapidly as possible, and by as much as possible", and calling for the European countries to adopt an interest equalisation tax if the United States refused to follow suit (Kaldor, 1996, p. 87). He was always a cheap-money man.

3. Alternatives to monetary policy

"If monetary measures are not to be relied upon to maintain economic and financial stability, what is?" (Kaldor, 1960b, p. 17). Kaldor's answer to this question was remarkably consistent, from the late 1930s onwards: fiscal policy should be used to manage output and employment, while wages policy and commodity price stabilisation offer the best means of controlling inflation.

As early as August 1939 he was arguing for active fiscal policy as the core of macroeconomic management in the forthcoming war. As it had in the First World War, the government should employ "a combination of three types of financing: borrowing, increases in the rates of ordinary taxation and the imposition of special taxation on increased incomes" (Kaldor, 1939c, p. 156). In everything but name Kaldor sets out the balanced budget multiplier theorem, according to which an equal (say, one million dollar) increase in government

spending and in lump-sum taxation will increase equilibrium national income by one million dollars (*ibid.*, p. 150).[6] This was two months before Keynes's celebrated newspaper articles, soon reprinted as the best-selling pamphlet on *How to Pay for the War* (Keynes, 1940).

Kaldor contributed a lengthy technical appendix to William Beveridge's report on *Full Employment in a Free Society*, which was almost exclusively devoted to fiscal policy. He distinguished several different "paths to full employment", using the recently published official estimates of national income and expenditure to explore different combinations of tax cuts and spending increases that would have made possible the attainment of full employment in 1938 (Kaldor, 1944, pp. 349-366). Turning to the prospects for full employment after the war, Kaldor suggested that while large budget surpluses would be needed for a few years in peacetime, deficit finance would probably be required in the medium to longer term (*ibid.*, pp. 367-401). Monetary policy is almost entirely disregarded, Kaldor simply assuming a continuation of the existing 'cheap money' (low nominal interest rate) policy.

By 1955, as we saw in the previous section, Kaldor was slightly less confident of the ability of fiscal policy to achieve full employment without demand inflation. The experience of the next decade and a half led him to argue, in his 1971 Presidential Address to Section F of the British Association for the Advancement of Science, that for the British economy encouraging consumption-led growth rather than the export-led growth that the country really needed had been a second-best policy. This had kept both investment and the share of manufacturing in total output lower than they might have been, restricting the overall rate of growth:

> "but in saying this I do not wish to imply that the post-war attempt at 'managing the economy' was a failure in the sense that we could have been better off without it. On the contrary, I am convinced that in

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[6] The theorem was first published in Danish in 1941, by J. Gelting; its first English appearance was in a 1945 paper by T. Haavelmo, with "an important early contribution" having been made in the previous year by H. Wallich (Peston, 1987).

> comparison to the restoration of the pre-war system of non-management – which would have meant operating under a system of fixed exchange rates combined with a 'neutral' fiscal policy – we have achieved higher employment and also more stability of employment; a higher level of investment, a faster rate of economic growth and also a faster trend rate of growth of exports" (Kaldor, 1971a, pp. 14-15).

It was simply a question of insufficient attention being paid to external competitiveness. As in the 1920s, Kaldor believed, the exchange rate had been kept too high. With a suitable depreciation, however, fiscal policy could have restored full employment in 1925, even under Winston Churchill's stewardship of the British Treasury (*ibid*., pp. 6-7).

Kaldor continued to insist on the importance of fiscal policy. The first point in his "constructive programme of recovery" from the world stagflationary crisis of the early 1980s was an international agreement on "coordinated fiscal action including a set of consistent balance of payments targets and 'full employment' budgets" (Kaldor, 1996, pp. 86-87). Existing budget deficits, he maintained, were

> "largely the consequence of the low level of activity. On a 'full employment' basis they would show a highly restrictive picture – they would show surpluses and not deficits. Contrary to appearances, the requirement of stability is for expansionary budgets – with lower taxes and higher expenditure, and not further fiscal restriction (as is advocated, for example, by M. de Larosiere of the International Monetary Fund)" (*ibid*., p. 87 f. 1).

International coordination was critical to the success of this strategy. Trade liberalisation was not consistent with full employment: "under conditions of unrestricted free trade the actual *volume* of production and trade may in fact be considerably less than under some system of regulated trade" (*ibid*., p. 87). Kaldor had taken a very similar position on this question in the immediate post-war years (Kaldor, 1951).

His views on anti-inflation policy were also broadly consistent over several decades. He set them out very clearly in a wartime pamphlet:

> "there is a great danger […] that with the present system of sectional wage-bargaining, in a state of full employment, a tug of war will ensue between the workers of different industries for larger slices of the national cake, in the course of which wages and prices will continually rise […]. A policy of full employment will require, therefore, that the present system of wage-bargaining by trade unions and employers' federations in *individual industries* should be replaced by a system of wage determination on a national basis" (Joseph, Kaldor, 1942, p. 18, original italics).

He was always convinced that incomes policy should work with the market rather than against it, and took a pragmatic approach to policy design. In a 1950 memorandum to the Labour government in Britain, published only in 1964, he argued that wages policy should ensure that productivity benefits were passed on to the consumer through lower prices, unless they were the result of special effort on the part of the workforce in the industry concerned; changes in wage differentials were not crucial to secure the efficient allocation of the labour force. Dividends policy, however, should operate so as to reward success and penalise failure. Shareholders ought to accept this principle, since the whole point of holding equities was to reap big rewards in the event of success; otherwise they might as well hold bonds (Kaldor, 1950).

The need for an incomes policy was a consistent theme in Kaldor's policy writings. In 1958, he identified wage inflation as "the most important internal economic problem facing the United States (and other Western countries)", and argued that incomes policy was the only way of obtaining price stability without "economic stagnation or regression" (Kaldor, 1958b, p. 35). To have any chance of success, such a "national policy of restraint on the growth of personal incomes […] must embrace all classes of the country" (*ibid.*). The examples of Sweden and the Netherlands demonstrated that broad national agreement on incomes policy was a practical possibility. While on a visit to Australia six years later, he adapted this perspective to a system of compulsory arbitration in a small open economy where sudden changes in the terms of trade were a common occurrence (Kaldor, 1964b).

Kaldor reaffirmed his support for incomes policy in his 1971 Presidential Address, citing Jan Tinbergen on the need for at least as many policy instruments as there were policy targets:

> "if demand management (through fiscal policy) is used to secure the target level of employment, another instrument – which can only be thought of in terms of an incomes policy – is needed to secure the target rate of wage increases; and yet a further instrument – a flexible exchange rate – to secure the target balance of payments" (Kaldor, 1971a, p. 3).

Successive British governments, both Labour and Conservative, struggled with incomes policies between 1945 and 1979, with only limited success (Clegg, 1971). By the mid-1980s, Kaldor was understandably much less sanguine about the prospects for a social consensus on the rate of growth of money incomes, but he continued to insist on its necessity. The experience of Thatcherism made Kaldor even more confident that wage restraint was the preferable – indeed, the only – alternative. He believed monetarism to be a form of incomes policy in disguise: "it is a policy of cutting off your nose to spite your face – of progressively ruining private enterprise for the sake of weakening the bargaining power of labour" (Kaldor, 1982, p. 58). The money supply was "really no more than a fig-leaf (or at best a smokescreen)" (*ibid*., pp. 57-58).

In the House of Lords he denounced "the façade of monetarism" (Kaldor, 1983, p. 62). The true purpose of Thatcher government's economic strategy was

> "to weaken the trade unions through the intensification of unemployment and through the loss of jobs, through factory closures and bankruptcies, and thereby to succeed in bringing wage settlements well below the rate of inflation; that is to say, to reduce real wages" (*ibid.*).

A genuine incomes policy would involve

> "a system of continuous consultation between the social partners – workers, management and the Government – in order to arrive at a social consensus concerning the distribution of the national income that is considered fair and which is consistent with the maintenance of

economic growth, reasonably full employment and monetary stability" (Kaldor, 1996, p. 90).

The post-war experience of Austria and Germany, with their powerful central union organisations and a consequent avoidance of inflationary sectional wage bargaining, demonstrated that it was indeed possible "to make substantial progress on such lines" (*ibid*., p. 91).

The other principal source of cost inflation were higher commodity prices. In the 1940s there was widespread support for commodity price stabilisation schemes, relying on international buffer stocks to smooth out price fluctuations. This, it was generally believed, would yield benefits to both producers and consumers. Kaldor's work at the United Nations Economic Commission for Europe in 1947-1949 convinced him of the merits of these proposals, and in 1952 he wrote a report for the UN's Food and Agriculture Organisation proposing a new "International Wheat Agreement" that would operate in this way (Kaldor, 1952). He returned to this theme in many of his later writings on macroeconomic policy, including his evidence to the Radcliffe Committee (Kaldor, 1958a, pp. 149-150, 152).

In 1964, Kaldor joined Jan Tinbergen and A.G. Hart in proposing a new international currency, backed not by gold but by stocks of primary commodities like oil, wheat, tin and copper. This would provide much-needed elasticity in the supply of international liquidity, and would also enable commodity prices to be stabilized through timely increases or decreases in stock levels (Hart et al., 1964; Ussher, 2009).

The stagflationary crises of the 1970s and early 1980s reinforced Kaldor's belief in the need for commodity prices stabilisation, which he advocated at every opportunity: in 1975 he endorsed L. St. Clare Grondona's plan for a new international currency backed by buffer stocks of basic commodities (Kaldor, 1975).[7] He subsequently cited Keynes's authority for his conviction that international buffer stock schemes offered the best route out of the international economic

[7] The Grondona plan was also endorsed by Robert Hall and Roy Harrod, who (like Kaldor) contributed prefaces to his book.

quagmire. They would eliminate speculative fluctuations in commodity prices, encourage increased investment in primary production capacity, and thus allow global economic growth to be resumed without the danger of commodity price inflation (Kaldor, 1986b).

Finally, there was always the option of direct controls. Kaldor had too much faith in the market to ever be a supporter of central planning at the microeconomic level, even in the 1940s, when this was a position widely supported within the British Labour Party. But he never went to the opposite extreme of rejecting quantitative controls on principle. Countries whose growth was constrained by balance of payments problems might find macroeconomic measures alone to be inadequate, he told the Radcliffe Committee:

> "and the remedy may have to be sought in selective controls of various kinds (as e.g. control over the allocation of investments; the forced expansion of investment in the critical sectors, or food rationing when the driving force behind the inflation is the inadequacy of food supplies, etc.) by means of which the tendencies to disproportionate development can be counteracted or compensated for" (Kaldor, 1958a, p. 150).

Britain might well be numbered among the countries requiring such direct controls, he suggested. As Britain's economic performance deteriorated over the next two decades, and Kaldor's scepticism concerning the effectiveness of currency depreciation grew, he came to advocate protection instead of free trade, arguing that it would have contributed to faster growth and lower unemployment (Kaldor, 1977).

4. Conclusion: Nicholas Kaldor after thirty years

Kaldor died before the 'new consensus' in macroeconomic theory and policy was firmly established.[8] But he had seen the future, and he

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[8] The 'new consensus' was firmly established by 1996, ten years after Kaldor's death, when the American Economic Association conference included a high-profile symposium on the question, "Is There a Core of Practical Macroeconomics We Should

did not expect it to work. He denounced the "complete paralysis of policy-making at the international level" that had been induced by the triumph of monetarism (Kaldor, 1996, p. 85). Kaldor rejected the return to 'sound finance', with its insistence on balanced budgets and abandonment of any form of active fiscal policy targeting full employment. As we have seen, he continued to advocate incomes policy and commodity prices stabilisation as effective remedies for cost inflation. He regretted the way in which the former had been discarded and the latter neglected by Western governments under the influence of neoliberal and monetarist ideas, but he would have felt vindicated by the reliance, in the 'new consensus', on interest rate movements as the only practicable monetary instrument, and the *de facto* rejection of the money stock as a policy variable. But this was little consolation. Monetarism, he believed, was "a terrible curse, a visitation of evil spirits", whose conquest of the world was comparable in some ways to the triumph of Nazism in the Europe of the 1930s (Kaldor, 1981, p. 3). The cost had been "horrendous", and the battle between Keynesians and monetarists was a confrontation between "angels and devils, between the purveyors of good advice and the purveyors of bad advice" (*ibid.*). Kaldor was always on the side of the angels.

Thirty years after his death, we can be sure that he would have had strong views on the weighty policy issues that continue to divide opinion in Britain and in the wider European Union. He would most certainly have opposed the constitution of the Eurozone and the obligation imposed on the European Central Bank to only have regard to the effects of monetary policy on inflation, without reference to the consequences for employment. Kaldor would also have been a stern critic of fiscal austerity. He would have seen the renewed speculative instability in commodity markets in the new century as confirmation of the need for an international agreement to stabilise primary product prices.

All Believe?". See Blinder, 1997, and papers from the same symposium, and in very similar vein, by Olivier Blanchard, Robert Solow and John Taylor.

On other pressing policy issues his attitude can only be guessed at. Kaldor did not envisage the possibility of a world without strong unions, where wage-push inflation was no longer a problem. I suspect that he might well have supported those on the social democratic left who argue for an *anti-deflationary* wages policy, with money wages following what in Australia is known as the Kaldor-Russell-Salter rule that requires wages to rise at a rate at least equal to the sum of productivity growth and the acceptable minimum rate of price inflation (King, 2013).

Finally, the great unknown: what would Kaldor have thought about Brexit? He was a prominent opponent of Britain's entry into the then Common Market in the 1970s, not on the basis of any emotive English nationalism but rather because he believed that the British economy would be damaged by an exposure to unlimited competition from more successful European industries (Kaldor, 1971b). Perhaps he would have argued that, by 2016, the damage has already been done, and that Britain should now remain in the Union to continue the fight for more sensible macroeconomic policies. Possibly he would have concluded that it was too late for this, and that Britain would be better able to exert some global influence for good outside the EU. He would certainly have been very pleased that his adoptive country had refused to join the Eurozone.

REFERENCES

Bertocco G. (2001), "Is Kaldor's Theory of Money Supply Endogeneity Still Relevant?", *Metroeconomica*, vol. 52, n. 1, pp. 95-120.

Blinder A.S. (1997), "Is There a Core of Practical Macroeconomics That We Should All Believe?", *American Economic Review*, vol. 87, n. 2, pp. 240–243.

Clegg H. (1971), *How to Run an Incomes Policy, and Why We Made Such a Mess of the Last One*, London: Heinemann.

Desai M. (1989), "The Scourge of the Monetarists: Kaldor on Monetarism and on Money", *Cambridge Journal of Economics*, vol. 13, n. 1, pp. 171–182.

Friedman M. (1968), "The Role of Monetary Policy", *American Economic Review*, vol. 58, n. 1, pp. 1–17.

Hart A.G., Kaldor N., Tinbergen J. (1964), "The Case for an International Commodity Reserve Currency", Geneva: U.N. Conference on Trade and Development.

Hewitson G. (1993), “An Intellectual History of Monetary Endogeneity Theory”, *History of Economics Review*, n. 20, pp. 140–160.
Joseph M.F.W., Kaldor N. (1942), *Economic Reconstruction after the War*, London: English University Press for the Association for Education in Citizenship.
Kaldor N. (1936), “Wage Subsidies as a Remedy for Unemployment”, *Journal of Political Economy*, vol. 44, n. 6, pp. 745–753.
Kaldor N. (1937), “Prof. Pigou on Money Wages in Relation to Unemployment”, *Economic Journal*, vol. 47, n. 188, pp. 745–753.
Kaldor N. (1939a), “Speculation and Economic Stability”, *Review of Economic Studies*, vol. 7, n. 1, pp. 1–27.
Kaldor N. (1939b), “Review of A.W. Marget, The Theory of Prices”, *Economic Journal*, vol. 49, n. 195, pp. 495–498.
Kaldor N. (1939c), “Principles of Emergency Finance”, *The Banker,* n. 163, pp. 149–156.
Kaldor N. (1940), “A Model of the Trade Cycle”, *Economic Journal*, vol. 50, n. 197, pp. 78–92.
Kaldor N. (1941), “Review of A.C. Pigou, Employment and Equilibrium – A Theoretical Discussion”, *Economic Journal*, vol. 51, n. 204, pp. 458–473.
Kaldor N. (1944), “Appendix C. The Quantitative Aspects of the Full Employment Problem in Britain”, in W.H. Beveridge (ed.), *Full Employment in a Free Society: A Report*, London: Allen & Unwin, pp. 344–401.
Kaldor N. (1950), “A Positive Policy for Wages and Dividends”, in N. Kaldor (ed.), *Essays on Economic Policy*, pp. 111–127, vol. I, London: Duckworth.
Kaldor N. (1951), “Employment Policies and the Problem of International Balance”, *Review of Economic Studies*, vol. 19, n. 1, pp. 42–49.
Kaldor N. (1952), “A Reconsideration of the Economics of the International Wheat Agreement”, in N. Kaldor (ed.), *Essays on Economic Policy*, vol. II, London: Duckworth.
Kaldor N. (1955), “The Lessons of the British Experiment since the War: Full Employment and the Welfare State”, in N. Kaldor (ed.), *Essays on Economic Policy*, vol. I, London: Duckworth, pp. 96–108.
Kaldor N. (1958a), “Memorandum of Evidence Submitted by Mr. Nicholas Kaldor”, in Committee on the Working of the Monetary System (Radcliffe Committee) (ed.), *Principal Memoranda of Evidence, Vol. 3*, London: HMSO, pp. 146–153.
Kaldor N. (1958b), “The Growing Gulf Between Rich and Poor Countries”, in *Problems of United States Economic Development*, vol. 1, New York: Committee for Economic Development, pp. 34–36.
Kaldor N. (1960a), “Oral Examination”, in Committee on the Working of the Monetary System (Radcliffe Committee) (ed.), *Minutes of Evidence*, London: HMSO, pp. 712–718.
Kaldor N. (1960b), “The Radcliffe Report”, *Review of Economics and Statistics*, vol. 42, n. 1, pp. 15–19.
Kaldor N. (1964a), “Contribution to ‘Panel: Fiscal and Financial Policies’”, in I. Bear, W. Kerstenetsky (eds.), *Inflation and Growth in Latin America*, Homewood (IL): Iriwn, pp. 499–501.
Kaldor N. (1964b), “Prospects of a Wages Policy for Australia”, *Economic Record*, vol. 40, n. 90, pp. 145–155.
Kaldor N. (1966), *Causes of the Slow Rate of Economic Growth of the United Kingdom:*

An Inaugural Lecture, Cambridge: Cambridge University Press.
Kaldor N. (1970), *Further Essays in Applied Economics*, London: Duckworth.
Kaldor N. (1971a), "Conflicts in National Economic Objectives", *Economic Journal*, vol. 81, n. 321, pp. 1–16.
Kaldor N. (1971b), "The Dynamic Effects of the Common Market", *New Statesman*, 12 March. Reprinted in N. Kaldor (1978), *Collected Economic Essays*, vol. 6, London: Duckworth, pp. 187–220.
Kaldor N. (1975), "Preface", in L. St. Clare Grondona (ed.), *Economic Stability is Attainable*, London: Hutchinson Benham, pp. 15–17.
Kaldor N. (1977), "The Nemesis of Free Trade'", in N. Kaldor (ed.), *Further Essays in Applied Economics*, London: Duckworth, pp. 234–241.
Kaldor N. (1978a), "Introduction", in N. Kaldor (ed.), *Further Essays on Economic Theory. Vol. I*, London: Duckworth, pp. vii–xxix.
Kaldor N. (1978b), "Introduction", in N. Kaldor (ed.), *Further Essays in Applied Economics*, London: Duckworth, pp. vii–xxix.
Kaldor N. (1981), *Origins of the New Monetarism*, Cardiff: University College Cardiff Press.
Kaldor N. (1982), *The Scourge of Monetarism*, Oxford: Oxford University Press.
Kaldor N. (1983), *The Economic Consequences of Mrs. Thatcher*, London: Duckworth.
Kaldor N. (1985), *Economics Without Equilibrium*, Cardiff: University College of Cardiff Press.
Kaldor N. (1986a), "Recollections of an Economist", *BNL Quarterly Review*, vol. 39, n. 156, pp. 3–26.
Kaldor N. (1986b), "The Role of Commodity Prices in Economic Recovery", *World Development*, vol. 15, n. 5, pp. 551–558.
Kaldor N. (1996), *Causes of Growth and Stagnation in the World Economy*, Cambridge: Cambridge University Press.
Kaldor N., Mirlees J. (1962), "A New Model of Economic Growth", *Review of Economic Studies*, vol. 29, n. 3, pp. 174–192.
Kalecki M. (1939), *Essays in the Theory of Economic Fluctuations*, ed. 1990, J. Osiatýnski (ed.), Oxford: Clarendon Press.
Keynes J.M. (1940), *How to Pay for the War. A Radical Plan for the Chancellor of the Exchequer*, London: Macmillan.
King J.E. (2009), *Nicholas Kaldor*, Basingstoke: Palgrave Macmillan.
King J.E. (2013), "Wages Policy'", in G.C. Harcourt, P. Kriesler (eds.), New York: Oxford University Press, pp. 510–522.
Lavoie M. (1991), "Change, Continuity and Originality in Kaldor's Monetary Theory", in E.J. Nell, W. Semmler (eds.), *Nicholas Kaldor and Mainstream Economics*, London: Macmillan, pp. 259–278.
Marget A.W. (1938), *The Theory of Prices: An Examination of the Central Problems of Monetary Policy*, New York: Prentice-Hall.
Minsky H.P. (1991), "The Endogeneity of Money", in E.J. Nell, W. Semmler (eds.), *Nicholas Kaldor and Mainstream Economics*, London: Macmillan, pp. 207–224.
Moore B.J. (1988), *Horizontalists and Verticalists: The Macroeconomics of Endogenous Money*, Cambridge: Cambridge: Cambridge University Press.
Moore B.J. (1991), "Marx, Keynes, Kalecki and Kaldor on the Rate of Interest as a Monetary Phenomenon", in E.J. Nell, W. Semmler (eds.), *Nicholas Kaldor and*

Mainstream Economics, London: Macmillan, pp. 225–242.
Musella M., Panico C. (1993), "Kaldor on Endogenous Money and Interest Rates", in G. Mongiovi, C. Ruhl (eds.), *Macroeconomic Theory: Diversity and Convergence*, Brookfield (VT): Edward Elgar, pp. 37–64.
Peston M.H. (1987), "Balanced Budget Multiplier", in J. Eatwell, M. Milgate, P. Newman (eds.), *The New Palgrave: A Dictionary of Economics*, Basingstoke: Macmillan, pp. 177–178.
Pollin R. (1991), "Two Theories of Money Supply Endogeneity: Some Empirical Evidence", *Journal of Post Keynesian Economics*, vol. 13, n. 3, pp. 366–395.
Rochon L.-P. (2000), "1939-1958: Was Kaldor an Endogenist?", *Metroeconomica*, vol. 51, n. 2, pp. 191–220.
Targetti F. (1992), *Nicholas Kaldor: the Economics and Politics of Capitalism as a Dynamic System*, Oxford: Clarendon Press.
Targetti F., Thirlwall A.P. (1989), *The Essential Kaldor*, London: Duckworth.
Thirlwall A.P. (1986), *Nicholas Kaldor*, Brighton: Wheatsheaf.
Ussher L.J. (2009), "Global Imbalances and the Key Currency Regime: The Case for a Commodity Reserve Currency", *Review of Political Economy*, vol. 21, n. 3, pp. 403–421.