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Nicholas Kaldor's Economics: a Review.

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Abstract: Considered one of the leading economists of the 20th century, Nicholas Kaldor contributed to the development of modern economic thought in several fields, from cobweb models to tax issues. Kaldor is recognized worldwide for his work on economic development, the theory of distribution and economic growth. Nicholas Kaldor's concerns were directed at practical problems in economic policy. This work aimed to briefly investigate the contributions of Nicholas Kaldor to economic science. In this paper, we succinctly reviewed Nicholas Kaldor's main works. As Nicholas Kaldor's bibliographic production was quite extensive, some parts had to be highlighted, especially the growth models of theoretical framework I, with full employment, and the economic models of theoretical framework II, without full employment. The article is divided into sections and it has a conclusion.

Keywords: Nicholas Kaldor, Economics, Economic Growth, Theory of Distribution.

JEL Code: B00, B20, B22, B29, B30.

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INTRODUCTION

Nicholas Kaldor was born in Budapest and was one of the leading economists of the 20th century. He began his studies at the University of Berlin in 1925 and, after two years, he moved to the London School of Economics (LSE). In London, he attended the so-called "Robbins circle", whose meetings included personalities such as Friedrich von Hayek, Lionel Robbins, Abba Lerner, John Hicks, George Shackle, Ronald Coase, Roy Allen, among others. In 1939 Kaldor moved to Cambridge. Kaldor's concerns were directed at practical problems in economic policy. He was special adviser to the British Chancellor of the Exchequer during some administrations of the British Labour Party and was also an adviser to international bodies and foreign governments. After World War II, he worked at the Economic Commission for Europe for two years.

According to Dasgupta (1986) "there are" two Kaldors: one from his beginnings as an economist at the London School of Economics, under the influence of Robbins and Hayek, and another from his time at Cambridge. However, the "Kaldor of Cambridge" itself condenses "several" Kaldors because its method of systematizing thought was via the successive publication of articles aimed at perfecting his economic ideas. According to Passinetti (1983) this happened because Nicholas Kaldor was a bit impatient, which prevented him from dedicating himself to writing a book. Here, emphasis will be given to "Kaldor of Cambridge" and in particular his contribution to economic growth and economic development.

The aim of this work is to review Kaldor's contribution to economic science. To this end, Nicholas Kaldor's main contributions are synthetically exposed. The article is divided into sections and it has a conclusion.

SECTION 1 – KALDOR'S NEOCLASSICAL AND KEYNESIAN WORKS

Nicholas Kaldor was one of the great post-Keynesian theorists. His theoretical roots came from great economic thinkers such as John Maynard Keynes, Roy Harrod and Allyn A. Young. From the first two authors (Keynes and Harrod) originated a post-Keynesian school of economic thought. Keynes was notable, among other things, for

the concepts of effective demand and uncertainty. Harrod (Harrod, 1939) sought to reconcile the principle of acceleration and the notion of multiplier. In turn, the post-Keynesian school developed the concept of the monetary economy of production. Post-Keynesian thinking begins to be forged by Harrod (Harrod, 1939) and Evsey Domar (Domar, 1946), who try to extend the analysis developed in Keynes' *The General Theory of Employment, Interest and Money* (Keynes, 1970 [1936]) to the long term. From the first generation of post-Keynesians, Joan Robinson, Nicholas Kaldor and Luigi Pasinetti stand out. Another important aspect of the history of economic thought was the idea of increasing returns to scale advocated by Young (Young, 1928). This idea had a marked influence on the so-called theoretical framework II of Kaldor. According to Harcourt (Harcourt, 1988), among some of the other thinkers who influenced Kaldor's economic outlook during his career were John Hicks, John von Neumann, Piero Sraffa, Joan Robinson, and Richard Kahn.

Although this is the case, Nicholas Kaldor's early contributions are classified within the orthodox neoclassical school of economic theory. They mainly refer to theories of imperfect and monopolistic competition, welfare economics and capital theory. In this first phase of his career as economic thinker, Nicholas Kaldor worked with the trajectory of equilibrium determination (cobweb model) (Kaldor, 1934a), firm theory (Kaldor, 1934b), imperfect competition (Kaldor, 1935) and the theory of capital (Kaldor, 1937). He also contributed to what would be known as the Kaldor-Hicks efficiency criterion (Kaldor, 1939a). These brilliant works left a solid legacy for later generations of economists. However, Nicholas Kaldor, a distinguished economic thinker of the 20th century, did not stay long within the narrow confines of the neoclassical orthodox school of thought

It is noteworthy that the most important concept that signalled Kaldor's break with the neoclassical orthodox school of economics was the concept of increasing returns to scale. This concept was developed by Allyn A. Young in an article published in 1928 (Young, 1928). Allyn A. Young was a professor of Nicholas Kaldor and was an important influence on his intellectual life. According to Wood (1987), Kaldor believed that Young...

“... showed that the main function of markets is to transmit impulses to economic change, and thereby create more

resources through enlarging the scope for specialisation and the division of labour – rather than to secure an optimum allocation of a given quantity of resources. And he also showed that with increasing returns continuing change is self-generated and ‘propagates itself in a cumulative way’. Hence no analysis which describes the forces operating on the economy as tending towards a state of equilibrium can capture the manner in which the development of markets make[s] for perpetual change.” - Wood (1987, p.5).

A second phase of Nicholas Kaldor's career took place after the publication of John Keynes' *The General Theory of Employment, Interest and Money* (Harcourt, 1988). Three articles stand out from this phase: the first (Kaldor, 1939b) dealt with the importance of established norms for achieving stability; the second (Kaldor, 1940) discussed a business cycle model based on nonlinear savings investment functions to produce "limit cycles" (Pasinetti, 1983, p. 336) and the third (Kaldor, 1960, p. 59-74) he sought to deepen the theory of own interest rates (Harcourt, 1988).

Nicholas Kaldor's third phase is what made him most notorious among economists. Here it will be divided into theoretical frameworks I and II. In theoretical framework I, Kaldor worked with the notion of full employment and in theoretical framework II he abandons this idea.

SECTION 2 – KALDOR'S THEORETICAL FRAMEWORK I

In 1956, Nicholas Kaldor publishes *Alternative Theories of Distribution* seeking to bridge the gap in John Maynard Keynes's thinking, which would be his theory of distribution. Nicholas Kaldor intended to use the multiplier mechanism for the purposes of a distribution theory. The multiplier principle could be applied for determining the relationship between prices and wages, if output and employment are taken as given, and for determining employment, if distribution is also taken as given.

The model of 1956 formulated a macroeconomic theory in which business spending on investment generates the share of profits in the value of the output, with the specific function of the profits being to provide savings for the financing of the investment (Kaldor, 1956, p. 97) This model was extended in 1957 by Nicholas Kaldor in his "*A Model of Economic Growth*". In this work, Kaldor highlights the fact that in

developed countries the capital/output ratio, the share of wages in output and the share of profits in output fluctuated little over time, which also implicates the fact that the marginal efficiency of capital remains stable over time (Kaldor, 1957, p. 592). According to Nicholas Kaldor, one of the merits of this model was to be able to show these constants as a consequence of the endogenous forces operating in the economic system. The most important contribution of this model was the introduction of a technical progress function, which, together with the savings function and the investment function, determines a steady growth equilibrium (Kaldor, 1957).

In 1958, Nicholas Kaldor publishes "*Capital Accumulation and Economic Growth*". In this article (Kaldor, 1978 [1958]), Kaldor states that the theorist must investigate the facts through a stylized prism, that is, the investigator must prioritize the general trends of the socioeconomic system and employ the method called "as if", which consists of constructing hypotheses that justify these stylized facts without paying much attention to historical veracity or to details considered irrelevant. From this research method, Nicholas Kaldor formulated six stylized facts that would account for explaining the process of change and development of capitalist societies (Kaldor, 1978 [1958], p. 2 and Jones & Romer, 2010). These facts can be summarized as follows: the growth of labour productivity, the growth of the capital/worker ratio, the real interest rate, the capital/output ratio, the capital and labour shares in the national income, all these variables evolve at a stable rate, and there is a fluctuation of around 2 to 5 percent in the economic growth rate between countries. Later, Nicholas Kaldor presents a model of income distribution and capital accumulation that can explain some of these facts (Kaldor, 1978).

An important commentator of Nicholas Kaldor in the 1960s was Luigi Pasinetti. In his 1962 article, Pasinetti argued that Kaldor's models could receive some reformulations. The so-called Kaldor-Pasinetti model can be considered as the synthesis between Kaldor (Kaldor, 1956) and Pasinetti (Pasinetti, 1962). The main conclusions of this model are (i) Harrod's two problems can be solved by changes in income distribution: if the income distribution is flexible enough to assure equality between a guaranteed growth rate and a natural growth rate then capitalist economies will have a long-term equilibrium growth trajectory with full employment; (ii) the profit rate remains stable over the long term; and (iii) the decisions relevant to a capitalist

economy are the expenditures of entrepreneurs on investment or consumption. This determines the distribution of income. If the capitalists decide to increase the investment rate, the profit share increases and if they decide to consume more, that is, to save a smaller fraction of the income, the profit share in the overall income also increases.

In 1966, the article “*Marginal Productivity and Macro-economic Theories of Distribution: comment on Samuelson and Modigliani*” was published (Kaldor, 1966). This important paper served to contest the idea defended by the orthodox neoclassical school of economic thought that the marginal product of capital determines the share of profits in national income. In this paper, Nicholas Kaldor criticizes the neoclassical concepts of profit maximization, linear and homogeneous production functions, perfect competition, etc. Furthermore, Nicholas Kaldor attempts to explain why capitalists’ propensity to save is greater than workers’ propensity to save. This article is part of the debate about the Cambridge equation, particularly intense in the 1960s (Oreiro, 2005).

In the 1962 paper, “*A New Model of Economic Growth*,” Nicholas Kaldor, with James A. Mirrlees, writes an economic model which embodies technical progress within the economic system through investment so that it becomes “embedded” in the machinery created in each period. The model is elaborated in detail by Kaldor and Mirrlees, showing technical progress - embedded in machines - as the main engine of economic growth, determining not only the productivity growth rate but also the obsolescence rate, the average life span of the equipment, the share of investment and profits in national income and the relationship between investment and potential output (namely the capital/output ratio relative to new capital) (Kaldor, 1978 [1962], p.74).

The conclusions of the model can be summed up by the fact that any policy leading to the replacement of old capital goods can accelerate the rate of increase in output per capita for a temporary period as this will increase the number of available workers for the new machinery and the amount of gross fixed capital investment of the period, reducing the profit-to-output ratio. A more permanent cure for economic problems, however, would require stimulating the technological dynamism of the economy, which is not just a problem of greater scientific education or higher spending on research, but it is a question of better management of businesses that are more likely to pursue technological improvements and which are less reluctant to introduce new techniques (Kaldor, 1978 [1962], p. 78).

SECTION 3 – KALDOR’S THEORETICAL FRAMEWORK II

From 1966 onwards Nicholas Kaldor shed his theoretical framework I where he dealt with models of full employment. These models of theoretical framework I ignored changes in the production structure and had as the main concern the investment function and the issue of distribution. In this new phase of his career, Kaldor started the so-called theoretical framework II, in which he develops demand-led growth models but without the guarantee of full employment. In theoretical framework I, the observed differences between the growth rates of the countries are basically due to the different growth rates of labour productivity. In theoretical framework II, Nicholas Kaldor points out that the economic development process is above all a process of imbalance, making demand the essential force for economic growth and seeking endogenous explanations for stylized facts and searching also for the identification of empirical laws. Within this new theoretical framework, the key to the analysis of economic growth is to identify the mechanisms of transmission in the processes of structural change of capitalist economies, as they give rise to circular causation mechanisms that lead the economy toward a virtuous cycle.

The starting point of this new phase in Nicholas Kaldor’s career is the article "*Causes of the Slow Rate of Economic Growth in the United Kingdom*" (1978 [1966]). Kaldor assumes that accelerated rates of economic growth are associated with rapid growth in the secondary sector of the economy - especially the manufacturing sector - and this is a feature of an economy in transition to “economic maturity”. Throughout his analysis in this article, Nicholas Kaldor points out some generalities found when analyzing economic growth. Some of these generalities have been termed in the economic literature as the “Kaldor Laws”. The first law is about the fact that the manufacturing sector is the driver of economic growth, namely there is a positive relationship between industry growth and output growth (Feijó & Tostes, 2010). The second law is called Kaldor-Verdoorn law and says that there is a positive relationship between productivity growth and output growth. Strictly speaking, the relationship is between the productivity of the manufacturing sector and output growth, since the manufacturing sector is subject to increasing returns (Kaldor (1978 [1966], p. 110).

The third law is the so-called labour migration law (Targetti, 1992). It can be

summarized in four statements: (i) there is always a surplus supply of labour in the industrialized economies; (ii) labour supply to the industrial sector comes from the migration of workers from lower productivity sectors; (iii) the removal of labour from these sectors increases the total productivity of the economy; (iv) there is a mature economy when the labour surplus disappears and wages are the same in all sectors of the economy. And the fourth law, known as the Kaldor-Thirwall law, can be summarized in five propositions (Targetti, 1992): (i) economic growth is demand-led and not limited by the availability of resources; (ii) the output rate of growth in each area or region is mainly due to the external demand for its products; (iii) import fluctuations are governed by changes in real income rather than price changes; (iv) the growth of the exports of a country should be seen as the result of the efforts of the producers to locate potential markets and to adapt its structure of production for this purpose; (v) the main constraint on economic growth is due to its balance of payments.

One source for the demand growth rate comes from the changing structure of foreign trade. The early stages of the process of industrialization are related to low imports of manufactured consumer goods and high imports of machinery and equipment. During this phase, the demand growth rate for domestic manufactures grows faster than total consumption due to the substitution of domestic production by imports. This phase fades as the process of replacing imports of consumer goods is completed. To maintain the pace of development, it is necessary to move to the second phase, in which the country in question is increasingly becoming a net exporter of manufactured consumer goods. This is followed by the third stage, marked by the replacement of imports of capital goods. The fourth and final stage in which "explosive growth" is possible occurs when the country becomes a net exporter of capital goods. Here, a rapid external demand rate of growth for products of the "heavy industry" is combined with the demand-led growth caused by the expansion of demand itself (Kaldor (1978 [1966], p. 114)).

These four stages are known as Nicholas Kaldor's four stages of economic development. It should be noted that the perspective of the analysis has demand as its main axis, but a country's economic development course may be hampered by supply-side constraints. The restrictions on the supply side take two forms: the first is the commodities restriction of which the restriction of the balance of payments is the most

important one (the country's rate of growth generates a imports' rate of growth higher than exports' rate of growth); and the second is a restriction in the availability of labour supply (a workforce shortage). In fact, Nicholas Kaldor was of the opinion that the slow rate of economic growth in the United Kingdom was mainly due to labour shortages because it had already reached "economic maturity" (Parikh, 1978). In response to a criticism by Robert Rowthorn, Kaldor in "*Economic Growth and the Verdoorn Law - A Comment on Mr. Rowthorn's Article*" (1975) maintains his position, but argues that at this time he would place greater emphasis on the exogenous component of demand, and in particular the role of exports in determining the trend in the rate of productivity growth in the United Kingdom relative to other developed countries.

Another relevant article in Nicholas Kaldor's career was "*The Case for Regional Policies*" (1978 [1970]). In it, Kaldor addresses the problem of the existence of regions that grow at a different rate from each other. Kaldor cites the neoclassical explanation that if resource endowments of regions are distinct then this causes unequal development, but soon Nicholas Kaldor stresses that unequal development is largely explained by unequal levels in the development of industrial activities. The most advanced countries are those that have a developed industry. Moreover, the process of circular and cumulative causation must be taken into account, namely the existence of increasing returns in industrial activities (which does not occur either in agriculture or mining activities) causes "success" and "failure" to have self-reinforcing effects. If, as neoclassical economists suppose, constant returns of scale predominated then competition and free trade would benefit all participants in economic activities. But the existence of increasing returns of scale causes free trade to tend to increase differences between regions rather than to decrease them (cumulative circular causation mechanism) (Kaldor, 1978 [1970], p. 146-147).

In the article "*Conflicts in National Economic Objectives*" (1978 [1971]), Nicholas Kaldor argues that in the case of a country like the United Kingdom, the long-term cause of insufficient demand and the consequent high unemployment rate of the labour force and the slow pace of economic growth was due not so much to an excessive propensity to save on investment opportunities but to an excessive propensity to import in relation to the propensity to export. The problem of economic growth and the problem of the high unemployment rate should be seen more as a problem of

international competitiveness and as an exports problem than a problem of internal aggregate demand management. Thus, Nicholas Kaldor criticizes the consumption-led growth model in favour of an export-led growth model. According to Kaldor, a managed floating rate could achieve an envisaged export growth rate.

In 1984 Nicholas Kaldor gave a series of lectures in Italy, which become a posthumous book in 1996. These lectures [*Causes of Growth and Stagnation in the World Economy*] (1996[1984]) presented an integrated set of policies with which to tackle economic problems. In this series of lectures, Nicholas Kaldor commented on the four basic principles for good macroeconomic administration: (i) it is needed a coordinated fiscal action which include a set of targets for a balanced balance of payments and a full employment budget; (ii) the interest rate should be the lowest possible; (iii) it is important to prevent the volatility of international commodity prices (via stocks and via an international currency) (iv) it is necessary to overcome chronic inflation trends under full employment, due to the system of adjusting wages via sectoral collective agreement (Wood, 1987).

SECTION 4 - OTHER THEMES

In addition to discussing economic growth and economic development, Nicholas Kaldor also participated in debates on monetary theory and the epistemology of economics. Kaldor dealt specifically with monetary theory in his works: *Monetary Policy, Economic Stability, and Growth* (1958), *The New Monetarism* (1970), *Fallacies on Monetarism* (1981), *The Scourge of Monetarism* (1982) . To oppose the Quantitative Theory of Money, Kaldor classified money as totally endogenous, that is, instead of a vertical money supply curve what actually exists is a horizontal money supply curve (Mollo, 1997). As for the epistemology of economic science, Kaldor's critique was mainly directed at the notion of equilibrium prevailing in orthodox neoclassical theory. The main articles and books in this area are: *Equilibrium Theory and Growth Theory* (1989b[1979]), *What is Wrong with Economic Theory* (1978[1974]), *The Irrelevance of Equilibrium Economics*, (1978[1972]) and *Economics Without Equilibrium* (1985).

In *The Irrelevance of Equilibrium Economics* (1978[1972]), Nicholas Kaldor criticizes the Walrasian concept of general equilibrium, calling it irrelevant as an

instrument to deal with the way in which economic forces operate. Walrasian economics predicts an equilibrium price vector which is stable, unique and satisfies Pareto conditions and this forms the basis for understanding how markets work. Thus, economic theory should focus on the allocative functions of markets rather than their creative functions. According to Kaldor, the main function of markets is to transmit impulses for economic change, and thereby to create more resources by widening the space for specialization and division of labour, rather than ensuring an optimal allocation of a given amount of resources. Furthermore, one of the basic axioms of the neoclassical school is the absence of increasing returns, which goes against what has been observed regarding production processes: as long as construction problems are resolved, an increase in the size of the firm is bound to bring additional cost reductions as production capacity increases faster than construction cost. In the presence of increasing returns, continuous changes are generated and propagate in a cumulative manner. Therefore, for Kaldor, no analysis based on forces tending to equilibrium can capture the way in which the development of markets is intertwined with perennial changes in the economy.

In "*Inflation and Recession in The World Economy*" (1978 [1976]), Nicholas Kaldor tries to explain the different phases in the inflationary process of industrialized countries in the post-war period. The article shows the importance of the difference in the nature of markets in different sectors of the world economy – demand-driven inflation operates mainly in the primary sector, whereas in the industrial sector there is mainly cost-driven inflation. Industrial prices, unlike primary prices, are not "market clearing" because in general the average producer operates below full capacity. Industry can increase production without incurring higher costs per unit. Therefore, such managed prices are determined by costs, not by the market (they are constructed by applying a mark-up on cost). This situation implies that the burden of any mismatch between the growth of production in the primary sector and the growth of industrial activities is unloaded on the primary sector. And any large fluctuation in commodity prices tends to have a dampening effect on industrial activity (Kaldor 1978 [1976], p. 218).

Nicholas Kaldor also worked on tax issues. In "*An Expenditure Tax*" (Kaldor, 1955), Kaldor developed his idea of a tax on expenditures. His argument was that a tax

system based on personal income is unfair in several respects. People who inherit private fortunes inherit great economic power and purchasing power, without contributing in due proportion to the needs of the community. On the other hand, savers are taxed twice - once on the income they save and once on income derived from accumulated savings. Kaldor proposed a radical change in the tax base so that people are taxed, no longer on their income, but on their actual spending (Pasinetti, 1983).

CONCLUSIONS

Considered one of the leading economists of the 20th century, Nicholas Kaldor contributed to the development of modern economic thought in various fields, with special emphasis on works on the theory of distribution and economic growth.

This work aimed to briefly investigate the contributions of Nicholas Kaldor to economic science. In this paper, we succinctly reviewed Kaldor's main articles. As Kaldor's bibliographic production was quite extensive, some parts had to be highlighted, especially the growth models of theoretical framework I, with full employment, and theoretical framework II, without full employment.

Nicholas Kaldor was honoured with the title of Baron. He enjoyed great prestige among the most diverse political streams. But the same picture was not painted when it came to the academic world. Hahn and Matthews (1994) wrote on the subject:

“But things were rather different in the world of academe. Like Harrod he was not awarded the Nobel Prize, nor indeed did all that many other academic honours come his way. He did feel this; and, like other under-praised innovators in the history of thought, he did sometimes overreact. Too often, in his later years, he seemed impatient to discover the grand general hypothesis that would really hit the jackpot and force universal assent and recognition. He was by no means tolerant of what he regarded as nonsense' which was a good part of what was being published and taught in the sixties and seventies. This sometimes made it hard for some of us. But it never made it so hard as to cloud the self-evident judgment that Kaldor was a great economist.” - Hahn e Matthews (1994, p. 902).

However, few people will dispute that Nicholas Kaldor's legacy for economics is

vast. The critique of the neoclassical school's notion of equilibrium, the importance of economic theory being able to serve the practical implementation of policies, the construction of stylized facts, the discussion of demand-led growth under external constraint, the relevance of the industrial sector, the idea of stages in the process of economic development are themes relevant to the contemporary world. Kaldor's writings influenced many thinkers worldwide. Among them, stand out Robert John Dixon, Anthony P. Thirwall and Ferdinando Targetti. Let us also remember the importance that Nicholas Kaldor had in the formation of Latin American economic thought, because of his intellectual influence on the development of the so-called Structuralist School.

REFERENCES

- Bresser-Pereira, L.C, (1975), "O Modelo de Desenvolvimento de Kaldor." *Revista Brasileira de Economia*, 29(2), abril- junho, 1975, pp. 51-67.
- Carvalho, F. (1989), "Fundamentos da Escola Pós-Keynesiana: A Teoria De Uma Economia Monetária." In: "Ensaio sobre Economia Política Moderna: Teoria e História do Pensamento Econômico." Amadeo, E (Org). São Paulo, Marco Zero.
- Dasgupta, A. (1986), "Lord Kaldor: An Obituary", *Economic and Political Weekly*, Vol. 21, No. 42 (Oct. 18, 1986), p. 1829.
- Domar, Evsey D., (1946) "Capital Expansion, Rate of Growth, and Employment." *Econometrica*, April.
- Feijó, C. & Tostes, M (2010), "Mudança da Estrutura Industrial e Desenvolvimento Econômico: as Lições de Kaldor para a Economia Brasileira", UFF TD 265.
- Freitas, F. (2003) "Uma análise crítica do modelo Kaldoriano de crescimento liderado pelas Exportações", *Anais Eletrônicos do XXXI Encontro Nacional de Economia – Anpec*, Porto Seguro/Ba, Dezembro.
- Hahn, F. & Matthews, R. (1994), "Nicholas Kaldor (Lord Kaldor), 1908-1986", *The Economic Journal*, Vol. 104, No. 425 (Jul., 1994), pp. 901-902.
- Harcourt, G. (1988), "Nicholas Kaldor, 12 May 1908-30 September 1986" - *Economica*, New Series, Vol. 55, No. 218 (May, 1988), pp. 159-170.
- Harcourt, G.C. (1997) 'The Kaldor Legacy: Reviewing Nicholas Kaldor, Causes of Growth and Stagnation in the World Economy (Cambridge: Cambridge University

Press, 1996)", *Journal of International and Comparative Economics*, 5, 341-357.

Harrod, R. (1939), "An essay in dynamic theory." *The Economic Journal*, Mar. 1939.

Jones, C. e Romer, P., (2010), "The New Kaldor Facts: Ideas, Institutions, Population, and Human Capital", *American Economic Journal: Macroeconomics*, 2, issue 1, p. 224-45.

Kaldor, N. (1934a), "A classificatory note on the determinateness of equilibrium." *Review of Economic Studies*, 1, 122-36.

Kaldor, N. (1934b), "The equilibrium of the firm." *Economic Journal*, 44, 60-76.

Kaldor, N. (1935), "Market imperfection and excess capacity." *Economica*, 2, 33-50.

Kaldor, N. (1937), "Annual survey of economic theory: the recent controversy on the theory of capital." *Econometrica*, 5, 201-33.

Kaldor, N. (1939a). "Welfare Propositions in Economics and Interpersonal Comparisons of Utility". *The Economic Journal*, Vol. 49, No. 195.

Kaldor, N. (1939b), "Speculation and economic stability." *Review of Economic Studies*, 7, 1-27.

Kaldor, N. (1940), "A model of the trade cycle." *Economic Journal*, 50, 78-92.

Kaldor, N. (1955), "An Expenditure Tax". London: Allen & Unwin, 1955.

Kaldor, N. (1956). "Alternative theories of distribution," *Review of Economic Studies*, 23: 83-100.

Kaldor, N. (1957). "A Model of Economic Growth", *The Economic Journal*, vol. 67 (268), pg. 591-624.

Kaldor, N. (1958), 'Monetary policy, economic stability and growth: a Memorandum submitted to the Radcliffe Committee on the Working of the Monetary System', June 23, *Principal Memoranda of Evidence, Cmnd 827*, London HMSO (1960).

Kaldor, N. (1960), "Essays on Economic Stability and Growth", *Economic Essays*. London: Duckworth.

Kaldor, N. (1966). "Marginal productivity and macro-economic theories of distribution: comment on Samuelson and Modigliani". *Review of Economic Studies*, Vol. 33, No. 4 (Oct., 1966), pp. 309-319.

Kaldor, N. (1967). "Strategic Factors in Economic Development", N. York: W. F. Humphrey Press.

Kaldor, N. (1970), "The New Monetarism," *Lloyds Bank Review*. July, pp. 1-17.

Kaldor, N. (1975), "Economic Growth and the Verdoorn Law-A Comment on Mr. Rowthorn's Article," *Economic Journal*, Royal Economic Society, vol. 85(340), pages 891-96, December.

Kaldor, N. (1978). "Further Essays on Economic Theory," N. York: Holmes & Meier.

Kaldor, N. (1978). "Introduction", in Kaldor, N., *Further Essays on Economic Theory*, N. York: Holmes & Meier.

Kaldor, N. (1978[1958]). "Capital Accumulation and Economic Growth", in Kaldor, N., *Further Essays on Economic Theory*, N. York: Holmes & Meier.

Kaldor, N. (1978[1962]). "A New Model of Economic Growth", in Kaldor, N., *Further Essays on Economic Theory*, N. York: Holmes & Meier.

Kaldor, N. (1978[1966]). "Causes of the Slow Rate of Economic Growth in the United Kingdom", in Kaldor, N., *Further Essays on Economic Theory*, N. York: Holmes & Meier.

Kaldor, N. (1978[1968]). "Productivity and Growth in Manufacturing Industry: a Reply", in Kaldor, N., *Further Essays on Economic Theory*, N. York: Holmes & Meier.

Kaldor, N. (1978[1970]). "The Case for Regional Policies", in Kaldor, N., *Further Essays on Economic Theory*, N. York: Holmes & Meier.

Kaldor, N. (1978[1971]). "Conflicts in National Economic Objectives", in Kaldor, N., *Further Essays on Economic Theory*, N. York: Holmes & Meier.

Kaldor, N. (1978[1974]). "What is Wrong with Economic Theory", in Kaldor, N., *Further Essays on Economic Theory*, N. York: Holmes & Meier.

Kaldor, N. (1978[1976]). "Inflation and Recession in The World Economy", in Kaldor, N., *Further Essays on Economic Theory*, N. York: Holmes & Meier.

Kaldor, N. (1981), "Fallacies on Monetarism," *Kredit und Kapital*, 14 (4), pp. 451–462.

Kaldor, N. (1982). "The Scourge of Monetarism," Oxford: Oxford University Press.

Kaldor, N. (1985). "Economics Without Equilibrium". Cardiff: University College of Cardiff Press.

Kaldor, N. (1989a[1981]). "The Role of Increasing Returns, Technical Progress and Cumulative Causation in the Theory of International Trade and Economic Growth", in Kaldor, N., *Further Essays on Economic Theory and Policy*, N. York: Holmes & Meier.

Kaldor, N. (1989a[1983a]). "The Role of Effective Demand in the Short Run and the Long Run", in: Kaldor, N., *Further Essays on Economic Theory*, N. York: Holmes &

Meier.

Kaldor, N. (1989a[1986a]). "Limits on Growth", in Kaldor, N., *Further Essays on Economic Theory*, N. York: Holmes & Meier.

Kaldor, N. (1989a[1986b]). "Recollections of an Economist", in Kaldor, N., *Further Essays on Economic Theory*, N. York: Holmes & Meier.

Kaldor, N. (1989b[1977]). "Capitalism and Industrial Development: Some Lessons from Britain's Experience", in Targetti, F. & Thirlwall, A. P. (eds.), *The Essential Kaldor*, N. York: Holmes & Meier.

Kaldor, N. (1989b[1979]). "Equilibrium Theory and Growth Theory", in Targetti, F. & Thirlwall, A. P. (eds.), *The Essential Kaldor*, N. York: Holmes & Meier.

Kaldor, N. (1996[1984]). "Causes of Growth and Stagnation in the World Economy". Cambridge: Cambridge University Press, 1996.

Kaldor, N., (1978), "Further Essays on Applied Economics," Duckworth, London.

Kalecki, M. (1978) "Teoria da dinâmica econômica." São Paulo: Abril.

Keynes, J. M. (1973), *The Collected Writings of John Maynard Keynes*, Londres, MacMillan e Cambridge, Cambridge University Press.

Keynes, J.M., (1970 [1936]), *Teoria Geral do Emprego, do Juro e da Moeda*, Rio De Janeiro, Editora Fundo de Cultura.

Macedo e Silva, A. C., (2008), "Estrutura produtiva e especialização comercial: observações sobre a Ásia em desenvolvimento e a América Latina." *Cadernos do Desenvolvimento*, v. 5, p. 81-127, 2008.

Mollo, M.L.R., (1997), "A Endogeneidade Pós-Keynesiana da Moeda: Traços Ortodoxos e Heterodoxos." *Estudos Econômicos*, v.27, n.3, p. 395-416, set./dez.1997

Oreiro, J. (2005). "Uma Revisão das Controvérsias sobre a Equação de Cambridge". *Nova Economia*, vol. 15, nº 2, pp. 119-149.

Oreiro, José Luís (2006), "Economia Pós-Keynesiana: Origem, Programa de Pesquisa, Questões Resolvidas e Desenvolvimentos Futuros," Working Papers 0034, Universidade Federal do Paraná, Department of Economics.

Parikh, A. (1978), 'Differences in Growth Rates and Kaldor's Laws', *Economica*, 45, 83-91.

Pasinetti, L. (1983). "Nicholas Kaldor: A Few Personal Notes." *Journal of Post Keynesian Economics*, Vol. 5, No. 3 (Spring, 1983), pp. 333-340.

Targetti, F. (1992) “Growth at Different Rates and Kaldor’s Laws” in: Targetti, F. (1992), *Nicholas Kaldor: The Economics and Politics of Capitalism as a Dynamical System*, Oxford University Press, Oxford.

Thirlwall, A. P. (2002). “The nature of economic growth – an alternative framework for understanding the performance of nations.” Cheltenham: Elgar.

Young, A. (1928), “Increasing Returns and Economic Progress”; *Economic Journal*, XXXVIII, dec. 1928.