

HIGH WAGES AND ECONOMIC GROWTH IN A KALDORIAN THEORETICAL FRAMEWORK

by **Guglielmo Forges Davanzati***

This paper aims at providing a reconstruction of Kaldor's theory of the functioning of the labour market. In particular, it will be shown that Kaldor maintained that a high wage policy stimulates increases in labour productivity. This occurs both on the micro and on the macroeconomic plane. In the first case, he stresses that, in an economy populated by big firms operating in the manufacturing sector, high union density is associated with social conflict, which, in turn, generates wage increases and, via better labour relations, increases in labour productivity. On the macroeconomic plane, the same result applies via the operation of the 'accelerator' effect.

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1 – Introduction

Nicholas Kaldor is often associated to a long list of authors classified as Post-Keynesians, meaning that their contributions expand the basic Keynesian theory as formulated in the *General Theory* (cf. Harcourt, 2006). However, many important sections of Kaldor's theory depart from the Keynesian tradition. In particular, unlike Keynes's *General Theory*, Kaldor supported an endogenous money theory, departed from the assumption of perfect competition¹, emphasizing the importance of firm size and imperfect competition, and stressed the importance of the territorial dimension of economic processes (Targetti, 1992; Thirwall, 1987). Moreover, Kaldor also departed from the standard Keynesian picture of the functioning of the labour market, mainly because he focused on the effects of variations of aggregate demand not only on employment but mainly on labour productivity. As will be shown, Kaldor's theory of the labour market can also account for the fact that wage increases can generate increased labour productivity on both the micro and macroeconomic plane. Accordingly, Kaldor's contribution can be conceived as a variant of the so-called high wage theory (cf. Forges Davanzati, 1999; Lavoie 1992)².

Historians of economic thought have devoted little attention to these topics, even though the issue is also highly relevant to the current macroeconomic debate. It is well known that the dominant view supports the idea that policies designed to deregulate the labour market are necessary in order to reduce the unemployment rate and are also effective in improving firms' competitiveness in external trade. Evidence suggests that these outcomes are not always in operation (cf. European Commission, 2014)³, and the Post-Keynesian reaction mainly focuses on the necessity to replace the wage moderation policy

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¹ Kaldor was fully convinced that Keynes, in the *General Theory*, assumed that markets are perfectly competitive. However, this is a very controversial question (see, among others, Chick, 1983; Kregel 1987; Davidson, 2000).

² Lavoie (1992) defines the high wage theory as the “Webb effect”, insofar as the Webbs also elaborated a positive relation between wages and productivity

³ Especially for firms operating in the peripheral areas of the Eurozone.

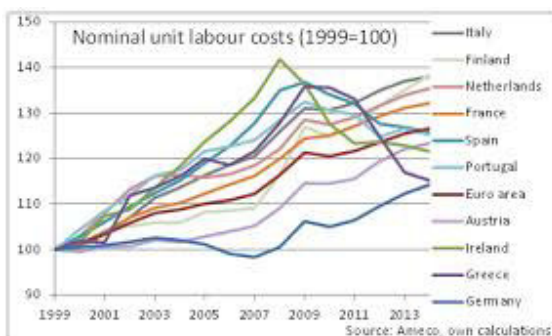
with expansionary fiscal policies. In a standard Keynesian model, these policies are supposed to increase the level of employment via the increase in aggregate demand. A rereading of Kaldor's theory of the links between wages and productivity may also be useful in enriching the current Post-Keynesian policy suggestions, insofar as economic policies which redistribute income to the benefit of workers also have a positive effect on the dynamics of labour productivity, thus generating a process of systematic interaction between aggregate demand and aggregate supply⁴, with endogenous money, where the outcome of this interaction crucially depends on the dynamics of credit supply. Accordingly, the exercise provided here is based on the methodological conviction that most economic categories elaborated by economists of the past can be generalized, i.e. they can be regarded as largely independent of the specific historical and institutional context where they were formulated.

The aim of this paper is to provide a reconstruction of Kaldor's theory of the functioning of the labour market. In particular, special attention will be paid to i] Kaldor's view that wage increases stimulate increases of the rate of growth of labour productivity on the microeconomic plane; ii] Kaldor's view that this effect can also be generated on the macroeconomic plane. As regards this second point, an extension of Kaldor's theory will be proposed, where the link between wages and productivity basically depends on banking policy, assuming that credit supply is endogenous. In so doing, a "continuist reading" of Kaldor will be put forward.: Kaldor's theory of growth, elaborated in 1950's-1960's, can be integrated with his theory of endogenous money, elaborated in 1970's-1980's.

The exposition is organized as follows. Section 2 provides a reconstruction of Kaldor's view that wage increases incentive the increase of labour productivity on the microeconomic plane. Section 3 provides a re-reading of Kaldor's thesis that, on the macroeconomic plane, policies designed to increase wages generate economic growth, via the accelerator effect. Section 4 concludes.

2 – The microeconomics of high wages

The relevance of Kaldor's contribution to the links existing between wages and productivity is particularly evident in the current crisis, and in particular in interpreting the crisis of the European Monetary Union. Evidence suggests that in the countries where wages are higher, labour productivity is also higher. More specifically, it is empirically shown that the unit labour costs are higher in the Southern countries (i.e. Portugal, Italy, Spain and Greece), that is in countries where wages are lower (see Figure 1 – source AMECO). As will be shown, this result can be interpreted in the light of Kaldor's high wage theory.



⁴ In line with Kaldor's view that "In a monetary economy ... aggregate demand can be a *function* of aggregate supply (both measured in money terms) without being *equal* to it" (Kaldor, 1989, pp.49-50).

Figure 1: unit labour costs in the Eurozone (source: AMECO 2014)

The idea that wage increases stimulate increases in labour productivity and in profits has a long tradition in the history of economic thought (cf. Petridis, 1996; Forges Davanzati, 1999), and it is re-considered in some recent developments of Post-Keynesian economics (cf, among others, Lavoie, 1992). From Adam Smith to Alfred Marshall, most economists considered that wages increases can foster an increase in labour productivity. Francesco Saverio Nitti, an Italian economist of the beginning of the 20th century, can be considered one of the most important referents for this approach (cf. Nitti, 1894; Forges Davanzati and Patalano, 2015).

First of all it must be stressed that the high wage theory profoundly differs from the contemporary efficiency wage, for two main reasons. First, the efficiency wage approach is based on the idea that, since workers' effort (and thus labour productivity) increases as wages increase, it is *profitable* for the individual firm to set a level of wages higher than the 'equilibrium wage' (i.e. the market clearing wage) in order to maximize profits. This theory aims at providing an explanation of involuntary unemployment derived from wage rigidities, within a Neo-Keynesian theoretical framework where the Neoclassical inverse relation between wages and employment is supposed to occur. By contrast, the high wage theory is not based on the supposed Neoclassical inverse relation between wages and employment. A wage increase does not determine an increase in unemployment, but only raises the rate of economic growth via higher labour productivity. Second, the efficiency wage approach is based on the conviction that the sole determinant of labour productivity is individual effort. By contrast, as it will be shown, Kaldor focuses on two different determinants of labour productivity: technical progress and the quality of the workforce. Kaldor maintains that a deregulated market economy tends to spontaneously generate low wages and that low wages are associated to a tendency of labour productivity to decline over time. His view is therefore not confined to a purely microeconomic approach, such as that of the efficiency wage theory.

The author deals with the links between wages and productivity on two distinct planes.

On the microeconomic plane, Kaldor motivates the positive relation between wages and productivity assuming that the high wage effect *i)* mainly operates in the manufacturing sector; *ii)* is more intense in big firms. The rationale for the high wage effect to be in operation lies in the following logical steps:

- In the manufacturing sector (and in big firms) union density is higher than in other sectors and in small firms. "Union negotiators", Kaldor (in Targetti and Trirlwall, 1989) observes, are "the leading group" in this sector. They are "in a particularly favourable bargaining position: it may, for example, be in an industry in which productivity growth has been exceptionally rapid; similarly, it may be in an industry or firm where profits have increased significantly; or it may be a group of skilled workers the demand for whose services has risen sharply" (p. 122). Wage claims are designed to preserve (or to increase) *relative wages*: "the key group continue to press for what they regard as their justified claim for higher *relative wages*" (p.122);

- big firms have higher internal financing than small firms and, as a result, they *can* pay higher wages to their employees: "the leading sector will feel entitled to higher wages, and their employers will probably go far in meeting the union wage demand" (p.122);

- under the pressure of *social conflict*, being in the position to pay high wages, big firms in the manufacturing sector may find it profitable to increase wages to the benefit of their employees. The increase in wages reflects the increase in productivity and, in turn, pushes a further increase of labour productivity:

“[Big firms] are keen to pay their workers more than they can obtain elsewhere and to raise their wages in line with the increase in the value of output. Indeed, they are anxious that everyone should share in the prosperity of the enterprise and they reap the reward in terms of good *labour relations* ... Under conditions of a high degree of unionization, the wage increases granted by successful oligopolies will set the standard to which the average enterprise will be under pressure to conform” (Kaldor, in Targetti and Trirlwall 1989, p.123, italics added).

- Finally, high wages imply high productivity via the improvement of labour relations.

Therefore, to Kaldor, *social conflict drives wage increases and wage increases drive increases in labour productivity*. As shown above, the basic preconditions for this sequence to hold is that firms have high internal funds, which mainly applies to what Kaldor calls “successful oligopolies” (i.e. big firms) operating in the manufacturing sector, and that a high degree of union density exists. One can expand this argument by observing that, in contrast, in economies populated by small firms operating in non-manufacturing sectors, both because of low union density and low internal funds, the rate of growth of labour productivity is at its minimum level.

It must be pointed out that in Kaldor’s microeconomic approach, variations of labour productivity ultimately depend on factors related to *motivation* and the *quality of the workforce*, i.e. workers’ propensity to vary their intensity of labour as a response of firms’ wages policies. In his macroeconomics of high wages – as shown in the next section – Kaldor maintains that the path of labour productivity mainly depends on factors related to *technology* and capital accumulation.

3 – The macroeconomics of high wages: Kaldor's Second Law revised

This section is devoted to reconstructing Kaldor’s macroeconomics of high wages. This exercise aims at providing a variant of Kaldor’s basic schema of economic growth, where the independent variable which drives the growth of labour productivity is the wage share and not, as in Kaldor, the growth rate of output. In line with the so-called Neo-Kaldorian view, the basic idea is that a productivity regime is wage-led (cf. Boyer 1988; Setterfield and Cornwall, 2002). Kaldor did not explicitly deal with this issue, although it can be consistently inserted into his macroeconomic model of economic growth. He did not consider this effect because he maintained that money wage increases are translated by firms into price rises. Kaldor (in Targetti and Trirlwall, 1989, p.123) stresses that: “The rise in money wages invariably tends to exceed the average rise in the productivity of labour, though it is likely to be less than the increase in the productivity of labour in most ‘dynamic’ firms or industries”. In other words, it is the claims for preserving *relative* wages, independently of the path of labour productivity in different industries, which is the ultimate cause of inflation.

However, one can maintain that this effect reflects specific historical conditions, where unions had strong bargaining power, and inflation (not deflation) was the problem. Moreover, Kaldor saw that inflationary pressures in the European countries in the 1970s derived from “the changed distribution of power between Capital and Labour, under full employment” (Kaldor, in Targetti and Trirlwall 1989, p.97), which is, of course, a very specific condition in the dynamics of a capitalist reproduction. A generalization of Kaldor’s model should also consider the cases (as in the present context) where the opposite conditions occur: low workers’ bargaining power and deflation. At a higher level of abstraction, Kaldor’s theory of the determinants of labour productivity can be generalized assuming that wages *can also* affect them. As Faejio and Lamonica (2013, p.117) point out, the high wage theory is fully consistent with Kaldor’s view on the links between the path of wages and that of labour productivity: “When wages grow faster than productivity, profits will decrease and entrepreneurs will be stimulated to invest in new machinery in order to increase productivity and the share of profits”.

Based on Kaldor, they show that less productive machines are replaced (thus giving rise to technical advancement and structural change) as a result of wage rises: “The entrepreneur must replace the machine to recover its profitability, as the investment in new and ... more advanced machinery will increase labour productivity above the average wage” (ibid., p.112). Implicitly, this effect can increase firms’ profits on condition that the elasticity of productivity with respect to wages is higher than one.

The revision of the Kaldor effect proposed here is based on his view that the effects of wage increases depend on the distribution of political power between Labour and Capital. Kaldor wrote in a period where wages were relatively high as was union density. In this context, wage increases produced inflationary pressures which “exerted a strong deflationary influence (in terms of *real* demand)” (Kaldor, 1989, p.97). A change in the distribution of political power between Labour and Capital modifies this effect, insofar as the decline of wages contributes to generate disinflation and lower the rate of growth of labour productivity. Accordingly, the possibility that wage increases produce inflation is to be excluded in the case where the political power of Capital is significantly higher than that of Labour: otherwise, (moderate) inflation may be desirable for the sake of stimulating investment. More importantly, the possibility of wage increases requires a redistribution of political power to the benefit of workers and, following the Kaldor effect, proves to be an efficacious instrument in order to achieve higher rates of economic growth.

Starting from this consideration, a revised Kaldorian schema of the macroeconomics of high wages will be proposed, taking Kaldor’s contribution in the field of monetary economy into consideration, on the conviction that this contribution cannot be isolated from his theory of economic growth (cf. Forges Davanzati, 2015a). As we know, Kaldor supported the view that money supply is endogenous and demand-driven (cf. Bertocco, 2000)⁵. In this respect, this view is at the basis of the contemporary monetary theory of production (MTP)⁶. The MTP basic schema involves three macro-agents: banks, firms and workers. The banking sector creates money *ex nihilo* (in accordance with the idea that loans make deposits); firms buy inputs and produce commodities; workers supply labour power. The circular process of the monetary economy starts with bargaining in the money market between banks and firms. Banks supply firms with initial finance; firms need money in order to buy labour power and to start production. Firms use bank finance to purchase labour power, paying workers the previously negotiated money wages. After the production process has taken place, firms fix the price level, so that real wages are known *ex-post* (Graziani, 2003).

Kaldor refers to the positive relation between the rate of growth of output and labour productivity in the manufacturing industry, with causality running from the former to the latter, due to the accelerator effect and the operation of increasing returns⁷. In other words, he develops his theory of economic growth based on the ‘accelerator’ effect. Following Perri and Lampa (2014), this relation can be reformulated, substituting the rate of growth of output with the rate of growth of aggregate demand. Kaldor named this effect “the Verdoorn Law” in his Cambridge Inaugural Lecture in 1966. It is also known as the Kaldor-Verdoorn Law or Kaldor’s Second Law:

⁵ Bertocco (2000) emphasises that Kaldor maintains that banks tend, as a norm, to restrict credit supply (which is a relevant argument for the discussion below). In a similar vein. Musella and Panico (in Musella and Panico, eds, 1995, p.56) argue that “the content of Kaldor’s later writings makes it difficult to argue that for him the supply of loans is a *non-discretionary* variable for the individual bank”. This is because of his reference to “variations in the creditworthiness of potential borrowers”, which led him – according to the authors – to conclude that “The reserve ratios ... tend to vary over the trade cycle and to be unstable with respect to the interest rate”. Musella and Panico (eds. 1995, p.57) maintain that “a horizontal money supply represents ... the simplest (and probably the most convenient) hypothesis”.

⁶ See Forges Davanzati (2015a).

⁷ In this respect, Kaldor criticizes the Neoclassical view that as output increases this implies an increase of the *number* of firms. As markets are not perfectly competitive, the *existing firms* react to the increase in output by increasing their size in order to increase their market shares. Kaldor also criticizes Marx’s view that it is competition which stimulates innovations, arguing that, as a norm, they are produced in oligopolistic market structures.

“... the growth of real incomes was not determined by the growth of ‘factor supplies’ because, on account of increasing returns, higher rates of production growth were invariably associated with higher rates of growth of productivity” (Kaldor, in Targetti and Trirlwall 1989, p.87).

And:

“the growth of productivity will be greater the more technological change is ‘activated’ through new investment” (Kaldor, in Targetti and Trirlwall 1989, p.28).

This is what the author calls the “technical production function”⁸.

In approaching the link between wages and productivity on the macroeconomic plane, one can assume, in line with Kaldor, that *i*) workers' propensity to consume is higher than that of capitalists (cf. Kaldor, 1955); *ii*) the path of labour productivity depends on that of investment; *iii*) the dynamics of investment depend on that of aggregate demand, due to the accelerator effect.

Based on these assumption, the following effects derive, assuming, for the sake of simplicity, a closed economy. A policy of income redistribution to the benefit of workers expands aggregate demand, for two reasons. First, an increase in money wages increases the demand for consumption goods. Second, this effect is amplified by the high propensity to consume on the part of low income households (cf. Pressman and Holt, 2008). In view of assumption *iii*), firms react by increasing investment, and this, in turn, generates an increase in the rate of growth of labour productivity. This dynamics can be formalized as follows.

In simple formal terms, the effects of wages on labour productivity can be derived as follows. Although Kaldor maintained that the most important component of demand is the growth of exports, it is legitimate to isolate the effects of the increase of workers’ consumption on the growth of aggregate demand.

One can write:

$$I_t = \beta(D_{t-1}), \text{ where } D_{t-1} = cW_{t-1}, \beta \geq 0 \quad [1]$$

Equation 1) establishes that the dynamics of investment (I) depends on that of demand (D), involving a time lag which is required in order to produce more capital goods, where β is a coefficient of acceleration. For the sake of simplicity, D equals workers’ consumption, given by their propensity to consume (c) and the wage bill (W).

Moreover, the investment decision is affected by the availability of internal financing (S_k) and by the degree of bank accomodation (θ), i.e.:

$$I_t = (g, S_k), f'_\theta > 0, f'_{sk} > 0 \quad [2]$$

where $0 < \theta \leq 1$ is the degree of bank accomodation (excluding the non realistic case where banks do not finance investment at all, i.e. $\theta = 0$). Hence the productivity function becomes:

$$\pi_t = f[\beta(D_{t-1}), S_k, g] = f[\beta(cW_{t-1}), S_k, g], f'_\beta > 0, f'_D > 0, f'_{sk} > 0, f'_\theta > 0 \quad [3].$$

⁸ Kaldor’s theory of increasing returns reflects both the heritage of Allyn Young and that of Gunnar Myrdal. It is interesting to observe that Kaldor considered Young his “first real teacher in economics” (Kaldor, in Targetti and Trirlwall, 1989, p.14).

Equation 3) establishes that the rate of growth of labour productivity grows is higher, *i)* the higher the wages; *ii)* the higher the propensity to consume; *iii)* the higher the banks' degree of accommodation; *iv)* the higher β . Note also that the rate of growth of labour productivity grows as firms' internal funds grow, which establishes that economies populated by small firms, with high dependence on the banking system, tend to experience lower productivity growth than economies populated by bigger firms.

A similar result has been recently reached by Storm and Naastepad (2012, p.1), in a working paper of the International Labour Office, who find that "Higher real wages provide *macroeconomic benefits* in terms of increased demand (if the economy is wage-led) and higher labour productivity growth and more rapid technological progress". Moreover, the higher the firm's propensity to invest (and/or the degree of unused capacity), the more labour productivity grows, which captures the Kaldorian accelerator effect.

Note that it is a widespread conviction that the accelerator effect can be in operation only in a context of full employment. Although this is true in its basic formulation, one can maintain that this condition does not necessarily hold. If involuntary unemployment exists, firms can react to the increase in the demand for consumer goods by increasing their demand for labour (cf. Thirwall, 1987). The consequent increase in employment generates further wage rises, due to the increase in workers' bargaining power, pushing firms to stay competitive (i.e. avoiding the price increase) via the increase of labour productivity. This latter effect may not be in operation if one considers the standard Kaldorian view that, on the assumption of full employment, firms react to the increase in money wages by increasing prices, with the consequent reduction of real wages. However, since Kaldor considers that it is social conflict which drives wage increases, this effect may be counterbalanced by successful union claims, which are even more probable in a condition of full employment. Moreover, for the operation of the Second Kaldor Law, this leads to the increase in the rate of growth of labour productivity. As a result, *the higher the employment rate, the higher the rate of growth of labour productivity*⁹.

3.1 – On the determinants of the propensity to consume and the degree of bank accomodation

The following arguments can be used to find the determinants of workers' propensity to consume and the degree of bank accomodation, which in the previous discussion are treated as exogenous variables.

a) On the microeconomic plane, an increase in wages implies an increase in the firm's indebtedness towards banks and/or an increase in the share of internal funds used to pay wages, since $F + S_k = W$, where F is the external finance and S_k is the internal finance. However, on the macroeconomic plane and in a long-run perspective, the possible increase in profits deriving from the higher productivity allows firms to expand their internal funds and, at the same time, due to their higher degree of solvency, to improve their creditworthiness in relation to the banking sector.

a) Equation [3] establishes that the dynamics of labour productivity crucially depend on workers' propensity to consume. Workers' propensity to consume, in turn, can be treated as an endogenous variable depending on the degree of labour market deregulation. The rationale for this is based on the assumptions that *i)* workers aim at maintaining their consumption constant over time; *ii)* flexible labour contract are expected to increase workers' effort (the so-called discipline effect); *iii)* flexible labour

⁹ Note that this result is in contrasts with the 'discipline effect', which predicts that labour productivity will increase, via the increased in effort, as the unemployment rate grows (see Shapiro and Stiglitz, 1984). This difference can be imputed to the different views on the determinants of labour productivity with Neoclassical scholars emphasizing the role of individual effort and PostKeynesians emphasizing the crucial role of capital accumulation.

contracts increase workers' uncertainty¹⁰. On these bases, a lack of composition effect occurs. On the microeconomic plane, the individual firm finds it profitable to hire with flexible labour contracts, insofar as, due to the 'discipline effect', it expects that workers will increase their effort, with the consequent increase in labour productivity and profits. By contrast, on the macroeconomic plane, flexible labour contracts, insofar as they increase workers' uncertainty, push workers to increase their precautionary savings. Accordingly, the advantage of being first is in operation, insofar as the first firm which hires with flexible labour contracts takes market shares from its competitors. This effect is reinforced considering the links existing between flexible labour contracts and investment on the macroeconomic plane. An increase in labour market deregulation, in fact, insofar as it reduces workers' propensity to consume, reduces aggregate money profits. A reduction of firms' internal funds follows. Banks are expected to react to the decrease of firms' solvency by increasing the interest rate or reducing credit supply. Thus, investment declines with the consequent reduction of employment and labour productivity. Labour productivity is likely to be negatively affected by flexible labour contracts also because they encourage *competition among workers*, which tends to reduce the productivity of the team. Moreover, flexible labour contracts also reduce workers' bargaining power, generating a decline of wages and, as a result, a reduction of consumption and, via the accelerator effect, the reduction of the rate of growth of labour productivity. Therefore, *a high degree of labour market flexibility reduces the rate of growth of labour productivity*.

c) A further factor which affects the path of labour productivity is the degree to which banks are accommodating. As shown, among others, by Forges Davanzati (2015b), the degree of banks' accommodation is *endogenous* and dependent on the path of aggregate demand. This occurs on the assumption that the increase in aggregate demand (mainly via expansionary fiscal policies) increases firms' monetary profits (cf. Parguez, 2011). As a result, firms' solvency increases and banks find it profitable to grant credit. By contrast, a reduction of net public expenditure entails a reduction of current profits and the consequent reduction of firms' solvency. For a given interest rate, this generates a decline in the credit supply and, in view of equation [3], a decline of the rate of growth of labour productivity. Moreover, insofar as wage increases stimulate the increase in labour productivity and profits, this should lead banks to expand their credit supply, as a result of the higher solvability of firms. This result establishes that *a policy of high wages proves to increase credit supply* (and or to decrease the nominal interest rate)¹¹.

Moreover, a cumulative process is in operation following the initial increase in wages. The increase of productivity, in fact, causes an increase in the rate of growth and, as a result, an increase in employment. This, in turn, reinforces workers' bargaining power and fosters further wage claims. In other words, *wage increases are both the cause and the effect of increases in workers' bargaining power*. When the level of employment rises, entrepreneurs are forced to increase labour productivity to stay competitive (cf. Dutt, 2012). It should be pointed out that, in line with Kaldor, this effect crucially depends on the market structure where firms operate, insofar as they can react to the increase in wages by increasing prices. However, in Kaldor's logic, inflationary pressures may push unions to claim a higher money wage and, furthermore, they can stimulate investment.

The following remark is in order. An increase in money wages pushes firms to increase their indebtedness to the banking sector and/or to use increasing shares of their internal funds to pay wages. In the theoretical framework of the endogenous money theory which Kaldor supported, the interest rate

¹⁰ As Stockammer and Ramskogler (2007) point out *i*) in a capitalist economy, uncertainty is not evenly distributed among social classes and *ii*) workers, in particular, suffer from higher levels of uncertainty, due to job insecurity.

¹¹ Equation [3] also suggests that wage increases can increase firms' competitiveness in external trade via the reduction of the unit labour costs.

is fixed on the basis of the relative bargaining power of firms and banks in the credit market, and firms' bargaining power in the credit market crucially depends on their accumulated profits. This occurs because, for a given planned investment, the degree of dependence of firms towards the banking sector is reduced as their internal funds grow: in other words, firms need less bank credit when they are in the position to self-finance investment. An increase in money wages stimulates an increase in the production of consumer goods and a consequent increase in the demand for investment goods. Due to the intensification of the technical division of labour, and technical progress, this gives rise to an increase of the rate of growth of labour productivity, with the consequent possible increase in profits. This result is reinforced by expansionary fiscal policies, insofar as they further contribute to increasing aggregate demand, with positive effects on firms' aggregate money profits. The 'degree of dependence' of firms on banks is reduced, and banks are likely to react by reducing the interest rate. It follows that *money wage increases may reduce the interest rate (or increase the credit supply)*.

It may be pointed out that a State intervention aimed at regulating the labour market is needed to reach this result (unlike the efficiency wage theory). This occurs for two reasons. First, the increase in productivity resulting from the wage increase requires time, while the individual firm is forced by competition to obtain profits in a short-term perspective (cf. Forges Davanzati and Pacella, 2013). Time is required because the increase in productivity derives from investment in new machines and workers need time to learn to use them. Second, firms will never find it convenient to raise wages if this entails a short-term decline of profits. Moreover, insofar as wages are (partially) paid via indebtedness to the banking sector, an increase in wages would be associated with increasing financial costs, which rise as the money interest rate goes up, thus amplifying the reduction of short-term profits.

4 – Concluding remarks

This paper dealt with Kaldor's view on the links existing between wages and labour productivity, both on the micro and on the macroeconomic plane. It has been shown that Kaldor maintained that a high wage policy stimulates increases in labour productivity. On the microeconomic plane, he stresses that, in an economy populated by big firms operating in the manufacturing sector, high union density is associated with social conflict, which, in turn, generates wage increases and, via better labour relations, increases in labour productivity. On the macroeconomic plane, the same results apply via the operation of the 'accelerator' effect.

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