



A bar chart with the x-axis labeled 'Age' and the y-axis labeled 'Number of people'. The x-axis has four categories: 18-24, 25-34, 35-44, and 45-54. The y-axis has a scale from 0 to 100 in increments of 20. The bars represent the following values: 18-24 is 20, 25-34 is 40, 35-44 is 30, and 45-54 is 50.

Age	Number of people
18-24	20
25-34	40
35-44	30
45-54	50



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Monetary policy and the distribution of income: evidence for the United States and the United Kingdom

The shift in the emphasis of macroeconomic policy during the late 1970s and early 1980s toward combating inflation rather than maintaining full employment and the associated tight monetary policies fostered by the majority of the advanced industrialized countries, caused interest rates to increase to unprecedented heights. Income distribution and unemployment are among the economic variables that may have been mostly affected by the new, restrictive menu of macroeconomic policy. Yet, little attention has been paid to the potentially profound effects of monetary policy and high interest rates on the functional distribution of income.¹

In this paper we set out to illuminate the issues surrounding the effects of monetary policy on changes in the income shares of industrial capital, financial capital, and labor in the nonfinancial corporate sector, in the United States and the United Kingdom.² The second section develops a post-Keynesian–Kaleckian perspective of income distribution and a mechanism to show the way in which monetary policy might affect the distribution of income between the three aforementioned income groups.

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¹ The issue has received some, not extensive, attention, particularly over the effects that the implemented high interest rate policies have had on the personal distribution of income (Moore, 1989; Niggle, 1989; Michl, 1991; Arestis and Howells, 1994). The distributional effects of monetary policy on the functional distribution of income have been neglected. A possible exception is the work by Pollin (1986–1987), that investigates the effects of changes in interest rates on corporate interest payments in the United States.

² We focus on the nonfinancial corporate sector because of its link to the production side of the economy and, consequently, importance for economic performance, see Nordhaus (1974); Weisskopf (1979, 1988); Pollin (1986–1987); Bowles et al. (1986, 1990); Michie and Smith (1996).

The third section elaborates on interest payment dynamics and the restrictive monetary policy adopted by both the United States and the United Kingdom. Descriptive statistics enable us to visualize the movements of income shares of the three groups in the nonfinancial corporate sector in the United States and in the United Kingdom in the post-Bretton–Woods period.³ The fourth section attempts to econometrically assess variations in the industrial profit share that result from intracapital distributional conflicts and that between capital and labor, using annual data for the period 1965–1997. Finally, we summarize and conclude this paper.

Monetary policy, intracapital, and interclass income distribution

The distinction between industrial capital and money capital was originally used by Marx to examine the intracapitalist distribution of surplus-value. Within Marx's framework, the introduction of money capital in the process of reproduction raises questions about the role of the interest rate in income distribution. Marx's focus was on the effects of the interest rate on the distribution of profits between industrial profits and interest. Although he considered the role of money capital in the process of production, he did not pay attention to the potential role the interest rate can play in the determination of production costs and prices. Such an effect could result in the interest rate affecting the interclass income distribution as well.

The Marxian focus on inter- and intraclass functional distribution of income has been taken-up and elaborated upon by the post-Keynesian–Kaleckian tradition. Kaldor (1960), for example, has used functional income categories in his saving functions. More recently, the potentially conflicting interests between industrial and financial capital have been recognized by the work of Post Keynesians on the role of the City of London. According to this, the City's desire to keep the British pound strong has stifled industrial capital's investment by leading to high interest rates (see Pitelis, 1991 for a critical survey).⁴

³ The selection of these two countries is based on the fact that they are both advanced countries with conflictual interclass and intracapitalist relationships, see Katzenstein (1978); Zysman (1983); Coakley and Harris (1983); Rybczynski (1984); Fine and Harris (1985); Hall (1986a, 1986b); Epstein and Schor (1986); and Henning (1994).

⁴ We refer to the nominal lending interest rate, which determines the cost of the interest-bearing capital and not the bank's margin, which defines the profits and profitability of the banking sector. We consider financial profits to be equal to the interest paid by industrial capital for their outstanding debt. Thus, the terms interest and financial profits will be used interchangeably.

Seen in this context, the effect of the interest rate on income distribution depends on the way industrial capitalists consider the interest they have to pay on their debts. If they perceive interest paid as being a part of the production cost, then changes in the interest rate may cause changes in the cost of production. Many scholars (e.g., Nordhaus, 1974; Kaldor, 1980, 1982; Pivetti, 1985; Panico, 1988; Moore, 1989) argue that interest is a cost—like labor cost, depreciation, rent, and other overhead charges—and thus may be passed on to prices. Empirical studies (e.g., Nordhaus, 1974; Moore, 1989; Sen and Vaidya, 1995) provide evidence in support of the view that changes in the interest rate lead to changes in production costs and in prices.

Following on the Post Keynesian tradition, we assume that industrial capitalists tend to set prices (p) as a markup (v) on unit output average cost (c), so that $p = (1 + v)c$.⁵ The price setting after the incorporation of the markup hypothesis, the cost of labor, and the cost of the accumulated industrial debt, is given by the equation:⁶

$$p = (1 + v)\{wL/Q + rD/Q\}, \quad (1)$$

where, Q , r , D , w , and L stand for industrial output, the interest rate, the industrial debt, the money wage rate, and employment, respectively.

According to Equation 1, prices are equal to the average cost per unit of output plus a markup. The incorporation of interest as a component of the production cost, brings the interest rate within the set of factors that determine the cost of production, and hence, variations in prices. The price formulation, as given by Equation 1, extends the conventional relationship between pricing, income distribution, and profits, by allowing for the role of changes in the interest rate.

⁵ The nature of our industrial price formation falls within the post-Keynesian–Kaleckian tradition and thus, assumes imperfect markets and oligopolistic competition. Industrial firms are able to charge a markup on production cost. Following this body of literature, we assume a variable markup, which, as we argue in the text, depends on the market and bargaining power of industrial capital. In addition, we include the interest cost in production in line with the works of Nordhaus (1974); Kaldor (1980, 1982); Pivetti (1985); Panico (1988); and Moore (1989).

⁶ This is not a full cost-pricing specification. We exclude other determinants of production cost, and particularly the cost of raw materials and overhead costs. Yet, because our interest focuses on the functional distribution of income, we consider profits before providing for depreciation and stock appreciation, and before taxes. Consequently, depreciation and indirect taxes do not appear in total cost or in the formation of prices. Besides this, all relevant variables are assumed to be aggregated in terms of the whole nonfinancial corporate sector.

Moore (1989) argues that the responsiveness of the price level to variations in interest rates depends on the magnitude and the expected permanence of such variations. When variations are expected to be temporary, it is more likely that they will not be passed on to prices. Industrial firms can absorb changes in the interest cost of their production conditional on the existing conditions of competition in the market and their ability to rationalize their process of production. More durable changes in interest rates can affect production costs on a longer-term basis, and are more likely to be passed on to prices (Pivetti, 1985; Panico, 1988; Moore, 1989).

In this manner, the distributional effects of the interest rate in the distributive shares of industrial capital, financial capital, and labor will depend on the way that changes in interest rates and in interest as a part of the production cost will finally affect the level of prices. Durable variations in the interest rate, *ceteris paribus*, may affect both the intra-capitalist distribution of non-wage income between industrial profits and interest and the interclass income distribution between wage and non-wage income. More specifically, our perspective assumes that an increase in the interest rate, *ceteris paribus*, would cause an increase in the cost of production, resulting in a transfer of non-wage income from industrial to financial capital and results in a decline of the share of industrial profits to non-wage income.

The above effect may trigger a process of adjustment in prices and in money wages, that may indirectly affect the interclass distribution of income. To compensate for the reduction in industrial profits, industrial capitalists may attempt, if the existing conditions of competition in the product market allow them, to pass the higher production cost onto prices. Any such increase in prices, *ceteris paribus*, will affect the interclass income distribution between wage and non-wage income at the expense of workers. The non-wage income as a share of total income will rise. The opposite may occur when there are durable decreases in the interest rate. If industrial capitalists are unable to compensate for the higher interest cost by increasing prices, then they may try to reduce labor costs or any other production costs. In any case, a likely response of industrial capitalists is to attempt to offset the fall in industrial profits by redistributing wage income through an increase in prices or a reduction in money wages.

The degree to which industrial capitalists will be successful largely depends on the ability of workers to resist a fall in their real income by demanding higher money wages. This process of adjustment may stimulate a distributional conflict between industrial capital and labor over

the formation of the money wage. The degree to which workers will succeed in obtaining higher money wages may affect the interclass income distribution and the industrial profit share as well.⁷ The relative change in interest rates, in prices and in money wages will finally define the way that income is distributed between industrial capital, financial capital, and workers, which in this case, have been stimulated by an initial rise in the interest rate and in the interest component of the cost of production.

The relative strength of each group in question is assumed to be a critical determinant of their ability to change their distributive variables and their income share. Expectations may also play an important role in the way each social group behaves and the accuracy with which they respond when changes in the distributive variables take place. In this view, changes in the interest rate increase the share of financial profits in non-wage income, at the expense of the industrial profit share or the share of wage income. This can happen if industrial capitalists and workers do not anticipate changes in the interest rate, the price level and the money wage, or are unable to resist a fall in their income share. It is impossible to say *a priori* how the distributive shares in question will change as a result of a prior change in the interest rate. The specific economic, social, and political conditions prevailing at the time, and, most importantly, the distribution of power between industrial capital, financial capital, and labor, will finally determine the distribution of income.

The aforementioned theoretical perspective, which links monetary policy, the interest rate, and the interclass and intracapitalist income distribution, can also be shown by making use of some "income accounting." The following identities relate to the income produced by the nonfinancial corporate sector.

$$Y = NW + W, \quad (2)$$

where Y = total income, NW = non-wage income, W = wage income.

From Equation 1

$$NW = Y - W, \quad (3)$$

and expressing these as shares,

$$NW/Y = 1 - W/Y. \quad (4)$$

⁷ Changes in prices and money wages, which do not result from prior changes in the interest rate, will cause similar effects on the interclass distribution of income and on the industrial profit share.

From Equation 4 we can see that the share of capitalist profits in income is inversely related to the share of wage income.

However,

$$NW = IP + FP, \quad (5)$$

where IP = industrial profits, FP = financial profits.

If we solve with respect to IP and substitute NW from Equation 3 we have:

$$IP = (Y - W) - FP. \quad (6)$$

Expressing this in the form of shares:

$$IP/(Y - W) = 1 - FP/(Y - W). \quad (7)$$

The latter reveals the common economic interests of both capitalist groups, vis-à-vis labor, since their share in non-wage income is inversely related to the wage share in income. Moreover, it illustrates a basis for their distributional conflicts due to the inverse relation between the shares of industrial and financial profits in non-wage income. As

$$FP = rD \text{ and } W = wL, \quad (8)$$

if we substitute Equation 8 into Equation 7 we have:

$$IP/(Y - wL) = 1 - rD/(Y - wL). \quad (9)$$

According to Equation 9, the industrial profit share in non-wage income is affected, *ceteris paribus*, by changes in the interest rate and the money wage rate.

In this perspective, the share of industrial capital takes the form of the residual in the intracapital and the interclass income distribution. The industrial profit share can be forced downward as a result of a redistribution of non-wage income in favor of financial profits, or through a non-wage income contraction, resulting from a redistribution toward wages, and *vice versa*. A decline in industrial profits can arise in either case, reflecting the monetary and political dynamics in income distribution. Changes in monetary policy and the interest rate, in conjunction with workers' ability to resist a fall in their real income by demanding higher money wages, are the main channels through which intracapital and interclass conflicts act in determining the distribution of income. The share of industrial profits in non-wage income is the economic variable, which reflects the final outcome of the distributional conflicts between industrial capital and financial capital, and between capital and labor.

Changes in the income shares of industrial capital, financial capital, and labor in the post-Bretton Woods era

High interest rates have dominated the economies of both the United States and the United Kingdom since the 1970s and until recently. Table 1 shows how such a pattern unfolds after 1962. More specifically, the entire period after 1973 and up 1992 has been characterized by unprecedented high levels of interest rates.

Figures 1 through 4 exhibit rather dramatically the way changes in data patterns have occurred concerning nominal and real interest payments by nonfinancial corporations in the United States and the United Kingdom, between 1963 and 1997. In Figure 1, we observe an upward trend of nominal interest payments in the United States since the beginning of the 1970s, which became very sharp during the 1980s. Figure 2 shows a trendless movement of nominal interest payments in the United Kingdom up until the late 1960s, and a sustained ascent thereafter. Since 1979, it is clear that nominal interest payments have followed a sharp upward trend. However, after 1992 nominal interest payments in both countries show a downward movement probably following the fall in interest rates.

Figures 3 and 4 give a better picture of the pattern the trend for interest payments has followed. More specifically, an upward trend is observed in the U.S.'s case, whereas an upward trend with some cyclical changes during the 1970s unfolds for the United Kingdom.

As regards the summary data in Table 2 concerning the intracapital distribution of non-wage income we observe that in the United States the industrial profit share has been squeezed during the period 1979 to 1992, while, after 1993, it increases in line with the fall in interest rates.⁸

This development reveals a significant contraction of industrial profit share. The share of financial profits instead has risen enormously since 1973. Between 1979 and 1992, the share of financial profits was almost half of the total capitalist profits in the nonfinancial corporate sector. It has experienced a significant fall post-1992. A similar situation, albeit less severe, exists in the United Kingdom, where the share of industrial profits in total profits followed a downward movement during the period 1973 to 1992.

⁸ The problem of using Official Statistics to test post-Keynesian–Kaleckian categories is well unknown. Here we use data taken by Official Statistics, which, however, has been reconstructed according to the economic categories that are themselves products of our conceptual framework. For sources and definitions of variables, see Appendix 2.

Table 1
Selected interest rates in the United States and the United Kingdom

Years	USA		UK	
	LIR	LTIR	LIR	LTIR
1963–1972	5.8	5.4	6.8	7.8
1973–1978	8.2	7.6	9.2	13.2
1979–1992	11.1	9.9	12.1	11.0
1973–1992	10.2	9.2	11.1	11.7
1993–1997	7.7	6.4	6.1	7.9

Source: See Appendix 2.

Figure 1 Nominal interest payments/nonfinancial corporate sector in the United States

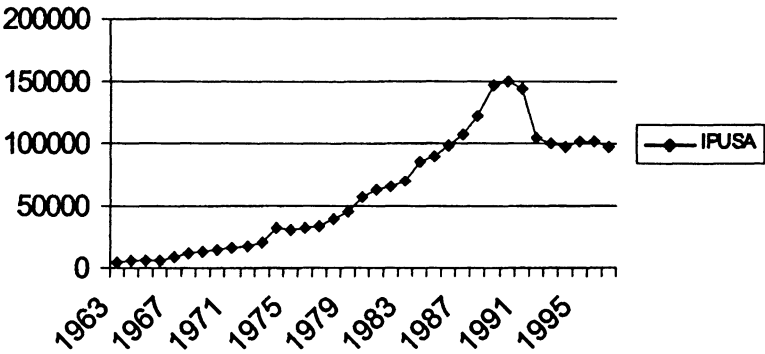


Figure 2 Nominal interest payments/nonfinancial corporate sector in the United Kingdom

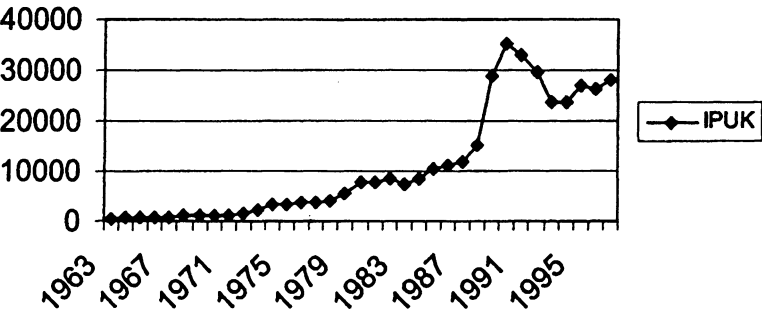
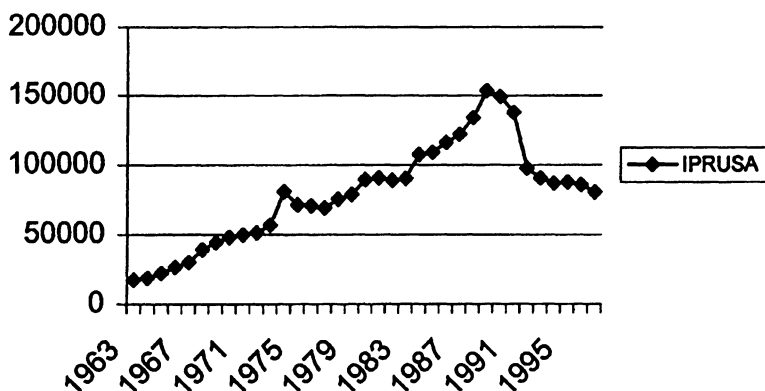
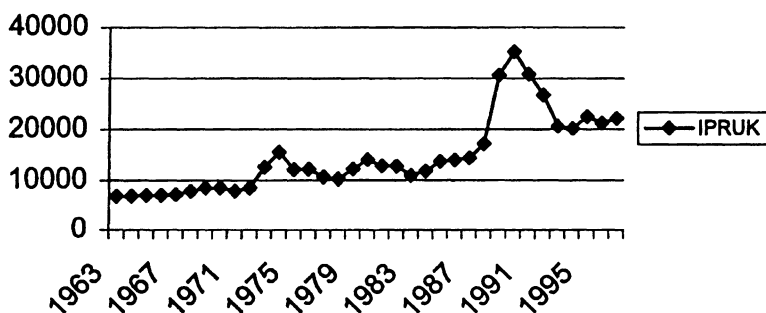


Figure 3 Real interest payments/nonfinancial corporate sector in the United States**Figure 4** Real interest payments/nonfinancial corporate sector in the United Kingdom

It would appear that the restrictive monetary policy that has been implemented in both countries have contributed to the redistribution of non-wage income toward financial capital particularly in the 1980s. This distributional effect of monetary policy on intracapitalist income distribution is likely to have also caused changes in interclass income distribution. It seems reasonable to argue that since the 1970s industrial expectations about economic policy has had to be formed on the basis of governments' objectives to implement credible deflationary macroeconomic management. The combination of persistently high interest rates, demand deficiencies, falling prices, and negative expectations over future industrial profit and profitability, may have caused industrial capital to favor more "flexible" labor markets. Labor market flexibility can re-

Table 2**The shares of industrial and financial profit to total capitalist profit, 1963–1997: average annual percent**

Years	USA		UK	
	IP/CP	FP/CP	IP/CP	FP/CP
1963–1972	83.1	16.9	82.5	17.5
1973–1978	64.8	35.2	78.3	21.7
1979–1992	53.1	46.9	78.0	22.0
1973–1992	56.9	43.1	78.1	21.9
1993–1997	76.3	23.7	82.5	17.5

Source: See Appendix 2.

duce the real cost of labor and could reflect policy preferences of industrial capital designed in part to deal with high interest rate policies.

The summary data in Table 3 provide evidence that a process of adjustment in real labor cost has taken place in both countries in question since 1970s, which has been accompanied by a redistribution of power between capital and labor, in favor of capital.

The decline in both the money and the real wage growth seems to be a factor that can explain the decrease in the real cost of labor. In addition, a dramatic rise in unemployment must have significantly weakened labor's bargaining position, explaining, to an extent, the inability of labor to resist a fall in their real wages. Table 3 conveys information regarding the trends of some very common measures of interclass distribution of power. Considering the number of strikes and the number of workers involved in strikes, we observe a considerable decline in labor's strength and militancy in the United States and the United Kingdom in the 1980s and in the 1990s.

Table 4 provides summary data about the interclass income distribution. We see that the interclass distribution of income in the United States and the United Kingdom displays different patterns. In particular, between 1973 and 1992 capital in the United States experienced a fall of its share in total business income. In the 1980s, the decline in the profit share was smaller, while the downward trend has been reversed in the 1990s. On the other hand, labor saw their income share to increase until 1992. Considering both the intracapital and interclass income distribution in the United States between 1973 and 1992, we conclude that financial capital have considerably increased their share in non-wage income improving their relative position in distribution. On the other hand, industrial capital has experienced a remarkable

Table 3
Labor cost and the militancy of labor in the United States and the United Kingdom

Years	USA						UK					
	GW	INFL	GRW	UR	NC	WI	GW	INFL	GRW	UR	NC	WI
1963-1972	7.4	3.2	4.2	4.4	313	1557	8.2	4.8	3	1.9	2512	1226
1973-1978	12.2	7.3	4.9	6.6	287	1315	16.7	14.8	1.9	3.7	2544	1139
1979-1992	7.1	5.3	1.8	7	84	516	9.5	7.3	2.2	8.6	1001	1116
1993-1997	4.4	2.3	2.1	5.8	35	261	4.4	2.6	1.8	8.8	222	232

Source: See Appendix 2.

Table 4
The shares of wages and capitalist profits to income, 1963–1997:
average annual percent

Years	USA		UK	
	W/Y	CP/Y	W/Y	CP/Y
1963–1972	80.7	19.3	72.2	27.8
1973–1978	85.1	14.9	70.5	29.5
1979–1992	86.4	13.6	66.5	33.5
1973–1992	86.0	14.0	67.7	32.3
1993–1997	82.7	17.3	61.1	38.9

Source: See Appendix 2.

fall in their profit share, resulting from profit redistribution toward financial capital, as well as income redistribution in favor of labor. However, since 1979 there has been a slowdown in the redistribution of income toward labor. A collapse of the industrial profit share, since 1973, is manifest in the nonfinancial corporate sector in the United States. After 1992, there has been income redistribution from financial capital and labor toward industrial capital.

The picture that the relevant figures in Table 4 conveys for the United Kingdom, differs substantially. The share of capitalist profits in income has had an upward tendency since the 1970s, while the share of wages in income has experienced a downward movement, which was more severe in the 1990s. Considering both the intracapital and interclass income distribution, we conclude that financial capital have increased their income share at the expense of industrial profits especially in the 1980s, while industrial capital have redistributed income away from labor. Consequently, the wage share in income was not a source of either a capitalist profit contraction, or of an industrial profit collapse. It was the intracapital redistribution of non-wage income, in favor of financial capital, that operated as a major source of contraction of the industrial profit share. In the 1990s the industrial profit share has increased because of a fall in both wage income and financial profits.

The industrial profit share in the United States and in the United Kingdom: econometric evidence

Equation 10 formalizes the hypotheses presented in the second section of this paper.

$$\text{IPS} = f(\text{IR}, \text{MW}, \text{ICDP}) \quad (10)$$

IPS, the dependent variable, is the industrial profit share; IR, the main explanatory variable, is the nominal lending interest rate. We use the nominal interest rate because in our analysis is the nominal not the real rate that affects the intracapitalist distribution of non-wage income.⁹ Yet, it is the nominal interest rate that is influenced by changes in monetary policy. We test econometrically the effects of changes in the stance of monetary policy on the intracapital distribution of non-wage income by estimating the hypothesized inverse relation between the nominal interest rate and the industrial profit share. We assume that the type of monetary policy may reflect, to some extent, the intracapital distribution of power and the ability of each capitalist group to exert pressures on the politics of the Central Bank. Hence, a restrictive monetary policy reflects the relatively more powerful financial capital and vice versa. Obviously, changes in the stance of monetary policy and in the interest rate, independent of the intracapitalist distributional conflicts, will cause similar effects on the distribution of non-wage income between industrial profits and interest.

The nominal lending interest rate defines the magnitude of the interest that industrial capitalists must pay to financial capitalists for their accumulated debt. In order to assess the intracapitalist distributional conflicts, we do not consider any possible effect that the accumulated debt of the nonfinancial corporate sector may have on the distribution of non-wage income. In our argument, it is the nominal interest rate that permeates the distributional conflicts between industrial and financial capital. If the nominal interest rate increases, *ceteris paribus*, industrial capitalists may not be willing to borrow money to finance new investment. However, they have to pay more interest for their accumulated debt. Moreover, the decision of undertaking new debt lies in the hands of the industrial capitalists.

From the other variables, MW, the money wage rate is a principal variable that captures the effect of the interclass conflicts over the distribution of income between wage and non-wage income, and indirectly on the industrial profit as a share in non-wage income. A negative effect of

⁹ From the neoclassical point of view, it could be argued that another process of influence of the interest rate on the industrial profit share is also possible. A higher interest rate is likely to affect investment, which, in its turn, may change the ratio of capital to labor in the long run and their income shares, as discussed in Robinson (1964). This argument is drawn upon the hypothesis that changes in the interest rate and the cost of capital affect investment decisions. Many empirical studies provide no evidence in favor of this hypothesis (see the review article of Jorgenson, 1971; and a more recent study by Fazzari, 1993).

the money wage on the industrial profit share is hypothesized as reflecting workers' demand for higher real income by increasing money wages.

ICDP stands for the interclass distribution of power. Relevant literature has relied upon some conventional variables as proxies for class power. In our econometric work, we use two measures, the unemployment rate (UR) and strike intensity (NC), reflecting the number of realized conflicts between capital and labor. This is in line with most other empirical studies in this field (e.g., Weisskopf, 1979; Hahnel and Sherman, 1982; Bowles et al., 1986, 1990; Henley and Tsakalotos, 1991; Sherman, 1991). Concerning UR the hypothesis is that a rise in the unemployment rate might alter the balance of political-economic power between labor and industrial capital, rendering labor unable to resist the demands from management, and consequently, to bargain less effectively for higher money wages. Thus, an increase in the unemployment rate is expected to be positively related to the industrial profit share. The strike intensity, might capture, to an extent, the relative bargaining strength of labor. A hypothesized increase in the number of conflicts might reflect a more powerful labor movement, which would probably affect industrial profits negatively, due to a redistribution of income toward workers.

Assuming a linear function and a stochastic relationship, Equation 10 including the two proxies of interclass distribution of power and the error term results in the following specification of our estimating equation (with signs over the variables depicting the predicted relationship)

$$IPS = a_t + b\bar{I}R_t + c\bar{M}W_t + m\bar{U}^+R_t \text{ (or } m\bar{N}C_t) + u_t. \quad (11)$$

Regression analysis

Equation 11 was tested using Ordinary Least Squares (OLS) on 33 observations.¹⁰ Applying a dynamic general-to-specific modeling approach, the equation was estimated independently for the United States and the United Kingdom. We began with a general distributed lag formulation where we investigated the significance of the lag polynomials for both

¹⁰ Initially we examine the statistical properties of each time series. All selected variables are I(1) processes according to the standard Dickey-Fuller and augmented Dickey-Fuller tests reported in Table A.1. In addition, we employ the Johansen procedure to test for the order of cointegration for our variables in levels (Tables A.2 and A.3). The two tests, the maximal eigenvalue and the trace of the statistic matrix, which are based on maximum likelihood estimates, and described by Johansen (1988) and Johansen and Juselius (1990), at a five percent level of significance provide

Table 5
OLS-regression results

Country	Estimated OLS-Regressions				
USA 1965–1997	$IPS = 0.69 + 0.49IPS(-1) - 0.009IR - 0.0029MW - 0.0043NC$ (3.83) (3.19) (-2.24) (-2.56) (-2.12)				
	$R = 0.86$	$DW = 1.8$	$S.E.R. = 0.062$		
UK 1965–1997	$IPS = 0.33 + 0.62IPS(-1) - 0.006IR - 0.0028MW - 0.0068NC$ (4.2) (6.39) (-4.4) (-2.5) (4.1)				
	$R = 0.77$	$DW = 1.6$	$S.E.R. = 0.021$		

Note: t-ratios in parentheses.

Note: t-ratios in parentheses.

the dependent and the explanatory variables.¹¹ Such a specification allows for a consideration of the dynamic path of the relationship between the industrial profit share and the independent variables, compared to the static one presented in Equation 11. Table 5 summarizes the OLS estimates of the preferred (by the data) equations for the United States and the United Kingdom.

After the application of a full range of misspecification tests in all estimated regressions, which are reported in Table A.4, we fail to reject the null hypothesis. Therefore, there is no evidence of serial correlation, or of a rejection of the linearity, normality, homoskedasticity assumptions at the 5 percent level of significance by the standard Lagrange Multiplier test.¹² Moreover, the CUSUM and CUSUMSQ tests provide no evidence of structural instability in any of the reported regressions.

The OLS estimates reveal that in both cases, the first lagged dependent variable has a positive and significant influence on the current value of the industrial profit share. The value of the coefficients of the first lagged dependent variables, in both equations, indicates that the speed of adjustment is not very slow. The statistical significance of the lagged dependent variable shows the autoregressive nature of the industrial profit share.

evidence of at least one cointegrating vector. Following Pesaran and Shin (1995) we proceed to the traditional Autoregressive Distributed Lag Modelling.

¹¹ We started with a general ARDL (2,2,2,2) model from both countries and by applying the Schwartz Bayesian Criterion and the Akaike Information Criterion, we finally selected an ARDL (1,0,0,0) model in both the United States and the United Kingdom.

¹² In the case of homoskedasticity we fail to reject the null at 1 percent level of significance, in the United States.

The money lending interest rate appeared to be the most important determinant of the industrial profit share. The results show that it is both negative and statistically significant at the 5 percent level. Monetary policy emerges, therefore, as a channel through which intracapitalist distributional conflicts directly affects the distribution of non-wage income between industrial and financial capital. The implementation of a restrictive monetary policy that results, either after a shift in the intracapital distribution of power in favor of financial capital, or as a result of the influence of other factors, will redistribute non-wage income in favor of the financial capital. Durable changes in the interest rate and the implementation of a restrictive monetary policy act as a potent source of a non-wage income redistribution toward financial capital. The opposite distributional effects will occur if monetary policy is expansionary.

Turning to the other explanatory variables, we see that the coefficients have the expected signs and are statistically significant. The money wage has a negative and significant impact on the industrial profit share.¹³ The ability of workers to generate sustained increases in their money wages emerges as a source of a decline in the industrial profit share. The empirical results lend support to our hypothesis that an industrial profit squeeze can result from a redistribution of income toward wage income, or a redistribution of non-wage income toward financial profits.

The coefficients of the two proxy variables of class power have the expected positive and negative signs, respectively, and are statistically significant. Both variables, to the extent that they capture class power, reveal that shifts in the interclass distribution of power are a significant determinant of the distribution of income between capital and labor, and of the industrial profit share. Considering financial profits as given, a rise in the share of non-wage income will increase industrial profits, and the share of industrial profits in non-wage income. A higher unemployment rate may act in favor of industrial capital in a case where intracapitalist distributional conflicts take place. Thus, if the interest rate is high and non-wage income is redistributed toward financial capital, a rise in unemployment is a way for industrial capital to redistribute wage income in their favor. This study provides evidence that this mechanism has operated in the case of the United Kingdom. In the United States, despite the fact that it had the expected positive sign, the unemployment rate was statistically insignificant. Here, labor militancy, and particu-

¹³ The small coefficients of the regressions in both countries may be the result of the indirect effect of the money wage on the industrial profit share.

larly, increasing strike activity, appears to have a negative and significant effect on the industrial profit share. Interclass conflicts appear to have been more important determinants of the interclass distribution of income in the nonfinancial corporate sector in the United States.

The coefficient of determination, R , which is 0.86 in the United States and 0.77 in the United Kingdom, indicates a good fitness of our estimated regressions. Our selected set of independent variables explains a significant part of the variation in the industrial profit share.¹⁴ This is particularly the case considering that this is a hitherto untested relationship.

Conclusions and policy implications

The preceding economic analysis in conjunction with the empirical evidence obtained, reinforce the notion that economic policies intended to drive the interest rate up—especially in the 1970s and 1980s—has been a source of distributional changes in the nonfinancial corporate sector of the United States and the United Kingdom in favor of financial capital. Industrial capital, especially in the United Kingdom, saw their share in profits fall. Similarly, in the United States, industrial capital experiences a reduction in their share to total profits. A decline in the share of industrial profit to total profit can signal negative expectations over future industrial profits and profitability, as well as an increasing opportunity cost of undertaking industrial investments.

Lower interest rates can have positive effects on the industrial profit share, as well as important cost-reducing effects, with positive impacts on inflation and industrial competitiveness. Furthermore, they can stimulate aggregate demand, which, in conjunction with expectations for higher industrial profits, may create a macroeconomic environment that can promote industrial investment, productivity, and growth, with positive feedback on economic performance and social welfare. In this context, the restrictive monetary policies of the 1980s and 1990s are likely to have had a negative influence on economic performance, suggesting the need for a less restrictive policy regime.

¹⁴ We test for the endogeneity of the interest rate and the money wage. Because of the exclusion of industrial debt as an independent variable in our regression equation, the interest rate might be contemporaneously correlated with the error term, and therefore, cannot be treated as an exogenous variable. The endogeneity of the money wage might arise from the role of the industrial profit in wage bargaining. The Wu-Hausman test provides no evidence of endogeneity, thus justifying the choice of the order of the ARDL model for both countries.

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Appendix 1

Table A.1
Unit root tests (1964–1997)

Variable	DIPS	DIR	DMW	DUR	DNC
USA	DF -5.7 (-3.5)	ADF -4.8* (-2.9)	ADF -4.7 (-3.5)		DF -6.09 (-3.56)
UK	ADF -4.6 (-3.5)	ADF -4.4* (-2.9)	DF -5.6 (-3.5)	ADF -4.0 (-3.5)	

Notes:

DF is the Dickey–Fuller statistic and ADF is the Augmented Dickey–Fuller statistic obtained as the t-ratio on the estimated value of b in the following regressions:

$$DX_t = a + zt + bX_{t-1} + e_t \text{ and } DX_t = a + zt + bX_{t-1} + mDX_{t-1} + \dots + mDX_{t-k} + e_t$$

where t is a time trend. The degree of augmentation (k) is determined by the statistical significance of the m coefficients.

We test the null hypothesis that $b = 0$ ($z = 0$) against the alternative $b < 0$ ($z \neq 0$).

All cases with * imply that $z = 0$.

Critical values at 5% level of significance in parentheses.

Table A.2
Johansen test for cointegration in the United States

Maximum lag in VAR=1				
TEST		MAXIMAL EIGENVALUE		
Null	Alternative	Statistic	5% Critical Value	10% Critical Value
$r=0$	$r=1$	59.91	27.06	24.73
$r \leq 1$	$r=2$	13.70	20.96	18.59
$r \leq 2$	$r=3$	8.05	14.06	12.07
$r \leq 3$	$r=4$	0.63	3.76	2.68
TEST		TRACE STATISTIC		
Null	Alternative	Statistic	5% Critical Value	10% Critical Value
$r=0$	$r \geq 1$	82.31	47.21	43.94
$r \leq 1$	$r \geq 2$	22.39	29.68	26.78
$r \leq 2$	$r \geq 3$	8.69	15.41	13.32
$r \leq 3$	$r=4$	0.63	3.76	2.68

Notes:

Variables, IPS, IR, NC, NW.

r = the number of cointegrating vectors.

Table A.3
Johansen test for cointegration in the United Kingdom

Maximum lag in VAR=1				
TEST		MAXIMAL EIGENVALUE		
Null	Alternative	Statistic	5% Critical Value	10% Critical Value
$r=0$	$r=1$	33.15	27.06	24.73
$r \leq 1$	$r=2$	24.96	20.96	18.59
$r \leq 2$	$r=3$	5.95	14.06	12.07
$r \leq 3$	$r=4$	4.01	3.76	2.68
TEST		TRACE STATISTIC		
Null	Alternative	Statistic	5% Critical Value	10% Critical Value
$r=0$	$r \geq 1$	68.08	47.21	43.94
$r \leq 1$	$r \geq 2$	34.93	29.68	26.78
$r \leq 2$	$r \geq 3$	9.96	15.41	13.32
$r \leq 3$	$r=4$	4.01	3.76	2.68

Notes:

Variables, IPS, IR, NW, UR.

r = the number of cointegrating vectors.

Table A.4
OLS diagnostic tests

Test Statistic	LM Version	
	United States	United Kingdom
Serial Correlation	CHI-SQ(1) = 0.034	CHI-SQ(1) = 1.45
Functional form	CHI-SQ(1) = 0.075	CHI-SQ(1) = 1.72
Normality	CHI-SQ(2) = 0.074	CHI-SQ(2) = 1.22
Heteroscedasticity	CHI-SQ(1) = 4.8	CHI-SQ(1) = 0.078

Notes:

Null hypothesis is that there is no failure of serial correlation, linearity, normality, and homoskedasticity.

Critical values for CHI-SQ (1) and CHI-SQ (2) at 5% and CHI-SQ (1) at 1% level of significance are 3.84, 5.99, and 6.63, respectively.

Appendix 2. Data: Definitions and Sources

CP = NWI = Gross Trading Profits of the nonfinancial corporate sector before providing for depreciation and stock appreciation, and before taxes, CSO Blue Book, UK National Accounts and Survey of Current Business, US Department of Commerce

FP = Financial Profits = Interest Payments paid by the nonfinancial corporate sector, same sources as above

IP = Industrial Profits = CP – FP

W = Wages and Salaries, same sources as above.

Y = CP + W

IPS = Industrial Profit Share = IP/CP

LTIR = Treasury Bill Yield, Long Term, LIR = Lending Interest Rate, International Financial Statistics, IMF

UR = Unemployment Rate, Labour Force Statistics

INFL = Inflation Rate, International Financial Statistics, IMF

NC = Number of Strikes and Lockouts (USA), Yearbook of Labour Statistics

WI = Workers (thousands) involved in strikes

MW = Money Wages: average monthly earnings, International Financial Statistics, IMF (UK); and hourly earnings, International Financial Statistics, IMF (USA)

GW and GRW = Growth Rate of Money and Real Wages and Salaries