Labour's Shares and Profitability Crisis in the United States : Recent Experience and Post-War Trends

Andrew Henley

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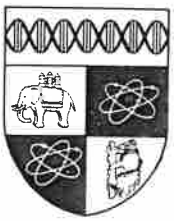

DEPARTMENT OF ECONOMICS

UNIVERSITY OF WARWICK
COVENTRY

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1. INTRODUCTION

As an attempt at linking together profitability, income distribution and economic crisis the work of Weisskopf (1979) represents a very important seminal contribution to the literature. In a cunningly simple model Weisskopf assesses the importance of the three major Marxist explanations of economic crisis in explaining the behaviour of the rate of profit in the non-financial corporate business sector of the United States economy since World War Two. This paper extends Weisskopf's study in two ways. Firstly we reassemble his database and extend his analysis from 1975 to 1982, incorporating two new complete business cycles in order to assess whether or not his conclusions about profitability crisis in the post-war period still hold. Secondly we break down his measure of labour share into wages, salaries and supplemental benefit contributions (pension schemes, health care schemes, and unemployment insurance schemes contributions) in order to assess the importance of the degree of monopoly theory in explaining what has been observed in terms of profit rate crisis. So in section 2 of the paper an extensive review of Weisskopf's methodology and results is presented. Section 3 extends his analysis to incorporate the new data for two additional business cycles spanning the period 1975 to 1982. Section 4 explains the methodology behind the decomposition of Weisskopf's aggregated measure of labour share and section 5 presents the empirical analysis for this breakdown. In section 6 we assess how the degree of monopoly theory can explain the trend of wage share observed in section 5 and some final conclusions are drawn in section 7.

2. A REVIEW OF WEISSKOPF'S METHODOLOGY AND RESULTS

Weisskopf's stated objective is to analyse the behaviour of the rate of profit in the post-war United States economy. By using a definitional decomposition of the rate of profit he seeks to evaluate the importance of three Marxian theories of capitalist economic crisis. Initially he decomposes the rate of profit (rate of return on capital, ρ) into three components: the share of profits in net income (σ_{Π}), the rate of capacity utilisation, or actual income or output divided by potential income or output, (Ψ), and the ratio of potential output to capital stock (ξ). So:

$$\rho = \sigma_{\Pi}{}^{\Psi}\xi \qquad (1)$$

Clearly the pattern of income distribution (expressed here as the share of profits) is of central importance in this explanation of the rate of profit, and hence of economic crisis since the rate of profit is seen by radical and orthodox economists alike as being of critical importance in affecting levels of production and investment (1). As Weisskopf goes on to point out these three components of the rate of profit can be viewed as focusing on three different potential <u>initial</u> sources of profit rate decline. Firstly crises of technological change and rising organic composition of capital (ROC) point to a decline in the capacity/capital ratio as the source of initial profit rate decline. Differential rates of growth of labour supply and capital supply lead to a falling relative price of capital inducing change towards more capital intensive production techniques. More capital is

required for a given potential level of output. With a given level of capacity utilisation and profit share the rate of profit must fall (2).

The second crisis variant he considers points to a declining profit share as the initial source of profit rate decline. The explanation for a falling profit share, Weisskopf suggests, is to be found in a changing balance of power in the political struggle between capital and labour over the distribution of income. Specifically this might be explained in terms of a declining reserve army of labour thesis (Marx, 1976, Ch.25) or in terms of growing trade union power and militancy (Glyn & Sutcliffe 1972). This form of crisis was also discussed in more general socio-political terms by Kalecki (1971 Ch.12) and analysed with respect to the cyclical behaviour of the U.S. economy by Boddy & Crotty (1972). Weisskopf denotes this as rising labour strength crisis (RSL).

Thirdly a profit rate decline may be precipated by a fall in the rate of capacity utilisation - realisation failure (RF). The problem here is that demand conditions prevent commodities being sold at profitable prices. Inadequate demand may be the result of a cyclically or secularly declining share of wages in national income, since it may be presumed that the propensity to consume out of wage income is higher than that out of profit income. Investment opportunities will hence decline adding to the decline in effective demand. As Weisskopf points

outs, in his schema realisation failure may be indicative of a rising share of profits but for a crisis to result it must be presumed that any rise in profit share is more than outweighed by the fall in capacity utilisation. Falling capacity utilisation is the source of the profit rate crisis since profit share may rise but no realisation problem will occur if "external markets" are available to capitalists (Baran and Sweezy, 1966). The explanation for a rise in profit share is often attributed to a growing degree of monopoly power. A direct link between declining capacity utilisation and growing monopoly power is developed by Steindl (1952). Capitalist response to an initial fall in capacity utilisation, which leads to a fall in the rate of profit, perhaps the result of the creation of planned entry forestalling excess capacity construction (Spence, 1977) is to further monopolise markets. Weisskopf discusses the potential under-investment tendencies of monopolistic firms who might be worried about spoiling their own markets. In addition he also discusses the potential source of realisation failure to be found in problems of sectoral disproportionality, the result of differing sectoral growth rates within an economy.

In order to present initial empirical results Weisskopf translates equation 1 into a growth accounting identity:

$$\dot{\rho} = \dot{\sigma}_{\Pi} + \dot{\Psi} + \dot{\xi} \qquad (2)$$

where the dot superscript denotes exponential rate of change.

Accordingly rates of growth of the rate of profit can be decomposed into the sum of the rates of growth of the three constituent variables, with each one tentatively assigned as an initial explanation for the three crisis variants. Weisskopf's data refers to the non-financial corporate business (NFCB) sector of the U.S. economy and sources etc. are extensively detailed in the appendix to his paper (see also the appendix at the end of this paper). He divides the post-war period into five cycles from 1949 quarter 4 to 1975 quarter 1, and each cycle into three phases. Phase A tracks the period from real output trough to profit rate peak, phase B from profit rate peak to real output peak and phase C from real output peak to real output trough again. Tables 2 to 5 of his paper present results on both cyclical variability and trend of the variables for this initial analysis, and Tables 2 to 7 of the present paper incorporate these results. Over the full twenty five year period the rate of profit declined on average at 1.2% oer annum and this decline was attributable almost entirely to a decline in the share of profits in income. The two other variables show no significant trend. Examining cycle to cycles averages this trend is reinforced, since in three out of four cycle to cycle changes a fall in the share of profits accounts for two-thirds of the fall in the rate of profit. Only in the 1960's when the rate of profit showed an upward trend is the contribution of the growth of profit share less important. During this period a rising degree of capacity utilisation contributes most to the rising rate of profit. The intra-cycle analysis goes on to show that it is

critically in phase B of each cycle that the profit rate makes a downturn because the share of profits starts to drop, although capacity utilisation is still rising. So Weisskopf poses the question of why does the share of profits start to fall before the peak of each cycle, producing an important contribution to the downward trend in the rate of profit? He tentatively suggests, at this stage, that the RSL variant offers the best explanation for profit rate crisis in the U.S. economy.

Weisskopf goes on to extend his analysis and decompose his profit rate accounting identity further for two reasons. Firstly he wants to consider the contributions of different sub-variants of the three forms of crisis theory. Essentially this boils down to differentiating in the case of the RSL and ROC variants betwen real (constant price) changes in the levels of labour and capital inputs and changes in the value measures of inputs brought about by changes in relative input prices. The second extension concerns a problem involved in uniquely attributing profit share changes to changes in labour strength. If capacity utilisation falls then, because a proportion of the labour input is of an overhead nature and remains invariant to changes in the level of output, profit share will fall. This observed profi share fall cannot be attributed to a rising strength of labour and so it is important to extract this "utilisation effect" from observed changes in profit share and attribute it instead to a worsening of realisation conditions. In order to do this Weisskopf introduces the concept of a "truly-required" share wage (σ_w^*) - the wage share that would

occur if overhead labour were used efficiently and adjusted to the appropriate level of capacity utilisation. The formula for truly-required wage share is:

$$\sigma_w^* = (w_d L_d + W_O L_O^*)/Y \qquad (3)$$

where $L_O^* = (\Psi/\hat{\Psi})L_O$

w is the average hourly wage rate

L is labour hours

d denotes direct labour input

O denotes overhead labour input

* denotes truly-required (adjusted for the utilisation effect)

$\hat{\Psi}$ is the optimal level of capacity utilisation

Weisskopf sets $\hat{\Psi}$ arbitrarily equal to 90%, though it is unimportant from the point of view of examining growth rates what value is chosen (Weisskopf, 1981). The suggestion here is that firms in the NFCB sector carry 10% planned excess capacity for such purposes as strategic entry deterence. It should also be noted that as far as Weisskopf's data is concerned wage share and profit share sum to unity.

He goes on to decompose truly-required wage share into

real and price components:

$$\sigma^* = P_w/P_y \cdot \bar{w}^*/\bar{y}^* \qquad (4)$$

where $\bar{w}^* = \bar{W}^*/L^*$ - real truly-required wage bill divided by truly required labour hours

$\bar{y}^* = \bar{Y}/L^*$ - real truly-required average hourly labour productivity

Pw is the price index of wage goods (consumer price index)

Py is the price index of output (implicit output deflator)

So truly-required wage share can rise because the truly-required real wage rises faster than the truly-required average productivity (offensive rising labour strength) or because the price of wage goods rises faster than the price of output implying that the burden of adverse relative price changes in goods markets is borne by producers (defensive rising labour strength). By defining a weighted index of wage goods and capital goods as a numeraire index of output in the economy Weisskopf is able to decompose the relative price term into two indices, one capturing the extent to which wage goods prices rise faster than output prices in the whole economy and the other capturing the movement of the "terms of trade" between the NFCB sector and the rest of the economy.

Similarly he decomposes the ROC variant into real and

price changes:

$$\xi = (P_y/P_k) \cdot (\bar{z}/\bar{k}) \qquad (5)$$

where $\bar{z}$ is average real capacity output per labour hour $(\bar{Z}/L)$

$\bar{k}$ is the real capital/labour ratio $(\bar{K}/L)$

Again because of the utilisation effect the capital stock will not be fully used. Actual utilised real capital stock (J) is assumed to be equal to $\hat{\Psi}$ times Z. Similarly truly-required labour hours will differ from actual hours so the truly required capital/labour ratio (j^*) equals $\hat{\Psi} \cdot (K/L)$. Incoporating this into equation 5 and rearranging gives (see Weisskopf, 1979, p.358):

$$\xi = (P_y/P_k) \cdot (\bar{y}^*/\bar{j}^*) \qquad (6)$$

From equation 6 a fall in the capacity/capital ratio can occur for two reasons. Firstly it may be the result of a fall in the real component, the real capacity/capital ratio, because the real truly-required capital/labour ratio (j^*) rises faster than the real truly required average labour productivity (y^*). Secondly it could be because the price of capital goods (P_k) rises faster than the price of output (P_y). The first reflects a rise in the technical composition of capital (capital defined here in the Marxist sense), the second a rise in the value elements of capital.

Weisskopf translates this again into a growth accounting identity (see p.363). Instead of the three basic variables of equation 2 he now has three aggregate variables capturing respectively labour strength conditions, realisation conditions and organic composition conditions. The difference between these three and the three basic variables is that the utilisation effect of a fall in capacity utilisation on profit share growth has been removed from that variable where it belongs. In addition the labour strength conditions and organic composition conditions variables are further decomposed into real changes and relative price changes. Tables 6 to 8 and 10 to 12 of his paper summarise the empirical results for this analysis.

The main conclusion from the earlier analysis still holds, that the downward trend in profit rate over the period 1949 to 1975 was due to the effect of falling profit share caused by rising labour strength. Only in the late 1950's does it appear that labour lost ground - between cycles II and III the contribution of labour strength worked against the profit rate decline. During this period the profit rate decline was primarily the result of worsening realisation conditions. In fact taking the cycle to cycle growth rates the direction of the trend in the profit rate in every case matches the direction of the trend in realisation conditions. But when that trend is downwards it is reinforced by rising labour strength, except as already mentioned in the late 1950's. Organic composition conditions generally only make relatively small contributions to changes in the rate of profit. From the intra-cycle analysis the cyclical behaviour of the rate of profit is the result

of cyclically varying realisation conditions but the premature peak in the rate of profit before the peak in each output cycle is the result of worsening labour strength conditions. Weisskopf offers supporting evidence for this result by presenting data on averages of unemployment rates and labour turnover rates during each phase of each cycle and suggests that there is evidence on the tightening of labour markets during phase B of each cycle. Breaking down the labour strength variable into offensive and defensive labour strength components shows that the long term trend of rising wage share is the result of labour's defensive strength. Offensive strength shows a weakening trend - the result of truly-required real productivity rising faster, generally speaking, than truly-required real wage. Offensive labour strength is however of importance in the intra-cycle analysis. In the critical phase B of each cycle it is offensive rising labour strength that generates the largest contribution to the fall in the share of profits and hence in the rate of profit.

3. THE RATE OF PROFIT AND CRISIS : 1975-1982

In this section I extend Weisskopf's data (3) to incorporate two further cycles in the real output of the United States NFCB sector and present extended results for his statistical analysis. The first additional cycle (cycle VI) covers the period from 1975(1) to 1980(2) with the peak in real output in 1979(1). The second new cycle (cycle VII) covers the period 1980(2) to 1982(4) with the peak in real output in 1983(3). This last cycle is very short, although it does conform to the N.B.E.R. definition (see

Weisskppf 1979 footnote p.350), being curtailed sharply by the advent of the Reagan fiscal-deficit expansion and therefore only lasting 10 quarters. It has no phase B, because its expansion phase is very weak and the rate of profit and real output peak simultaneously in 1981(3). After 1982(4) both real output and the rate of profit begin a rapid ascent upwards. Table 1 summarises this.

TABLE 1 : Cycles in NFC output and profit rate 1975-82

Cycle/Phase		Keypoint Quarter	Real Output $\bar{Y}$ (a)	Rate of Profit TT/L (b)
VI	A	$\bar{Y}$ trough 1975(1)	506.2	6.8
	B	TT/K peak 1977(3)	644.7	10.6
	C	$\bar{Y}$ peak 1979/1)	700.1	9.7
VII	A	$\bar{Y}$ trough 1980(2)	667.2	7.4
	C	TT/K, $\bar{Y}$ peaks 1981(3)	702.8	9.1
		$\bar{Y}$ trough 1982(4)	653.8	6.4

(a) Net domestic income $ Billion, 1972 prices.
(b) Corporate profits, adjusted for inventory valuation and capital consumption plus net interest as % of capital stock.

Source: see Appendix

Tables 2 and 3 present results for the initial empirical analysis. They incorporate, for completeness, Weisskopf's own results from his tables 3 and 5 respectively. Table 2 incorporates new estimates of the full period trends of each of the variables covering the new full period 1949(4) to 1982(4). These trend results indicate that falling capacity/capital ratio and falling

capacity utilisation provide a greater contribution to the falling rate of profit than they did before. However in absolute terms the downward trend in the share of profits has remained constant at 1.2% per annum - the downward trend in the rate of profit has become sharper rising from 1.2% per annum to 1.6% per annum. As far as the growth rate between cycles is concerned we see that capacity utilisation has declined consistently over the period 1975 to 1982, both in the period from cycle V to cycle VI and from cycle VI to VII. However, the drop in the rate of profit between cycles V and VI was only slight because in fact between these two cycles the share of profits rose at around 1.2% per annum. Nevertheless between cycles VI and VII profit share fell at over 3% per annum reinforcing the decline in capacity utilisation. Table 3 presents the intra-cycle analysis. In cycle VI the cyclical pattern of the rate of profit (growth in Phase A, decline in phase C) is brought about by similar reinforcing patterns in profit share and capacity utilisation. But in phase B, as Weisskopf found, the profit rate decline is initiated by a decline in the share of profits whilst capacity utilisation continues to grow. However throughout cycle VII capacity utilisation falls, albeit only slightly in phase VIIA. Clearly because the expansion phase of cycle VII was only weak (real output rose by 5% from $667bn to $703bn at 1972 prices) the profit rate increase in phase VIIA was only just over half the absolute size of the profit rate decrease in the contraction phase of that cycle.

TABLE 2 : Rates of growth of basic variables: Full period and between cycles

	(1) Full Period	(2)	(3)	(4) Cycles	(5)	(6)	(7)
		I-II	II-III	III-IV	IV-V	V-VI	VI-VII
Rate of Profit	-1.62	-3.2	-1.5	+2.2	-4.7	-0.09	-4.37
Share of Profits	-1.21	-2.1	-1.1	+0.7	-3.4	+1.19	-3.26
Capacity Utilisation	-0.19	-0.5	-1.3	+0.9	-0.4	-0.17	-1.98
Capacity/Capital Ratio	-0.22	-0.5	+0.9	+0.6	-0.9	-1.11	+0.87

Source: Columns 2-5 : Weisskopf 1979, Table 3, p.352
Columns 1,6,7 : see Appendix

TABLE 3 : Growth rate of basic variables: Cycles I to V phase B and all later phases

	(1) IB	(2) IIB	(3) IIIB	(4) IVB	(5) VB	(6) VIA	(7) VIB	(8) VIC	(9) VIIA	(10) VIIC
Rate of Profit	-10.8	-10.5	- 9.7	-8.2	-11.5	+16.3	+6.2	-21.2	+15.7	-27.6
Share of Profits	- 9.6	- 7.9	-10.1	-6.1	-10.3	+12.9	+6.4	-14.6	+12.8	-21.6
Capacity Utilisation	+ 1.5	- 1.1	- 1.0	-1.6	+4.5	+4.4	+2.3	- 7.1	- 0.7	-10.2
Capacity/Capital Ratio	- 2.7	- 1.6	+ 1.3	-0.4	- 5.6	+ 0.3	+2.2	+ 0.5	+ 3.5	+ 4.3

Source: Columns 1-5 : Weiskopf 1979, Table 5, p.352.
Columns 6-10 : see Appendix

Tables 4 to 7 display results for Weisskopf's more elaborate analysis applied to our new data. Tables 4 and 5 present trend and intra-cycle growth rates for the contribution of each of the three crisis variants with the labour utilisation effect transferred from profit share to capacity utilisation. The contrast between our new results and Weisskopf's earlier analysis is quite striking here. First of all the new trend results for the full period now including the new data for 1975 to 1982 show a marked change from Weisskopf's earlier figures. Labour strength and realisation conditions now contribute in almost equal amounts to the downward trend in profit rate over the whole post-war period. The reason for this increase in importance of realisation conditions can be seen from the cycle on cycle growth rates for cycles V to VI and VI to VII. In both cases labour strength conditions actually work against a fall in profit share - in other words "labour strength" was falling. Between cycles V and VI a very slight downward trend in profit rate is the result of slightly worsening realisation conditions and worsening composition of capital conditions. Between cycles VI and VII realisation conditions worsen considerably working against the falling strength of labour to produce a downward trend in profit share of almost 4.5 percent per annum. Within cycle six much the same pattern appears as Weisskopf identified earlier; namely a worsening of labour strength conditions in phase B before the output peak giving rise to a premature downturn in profit rate despite the continuation of improving realisation conditions throughout that phase of the cycle. However in cycle VII the pattern is quite different since profit rate and real output peak simultaneously and therefore throughout the cycle even after the downturn into phase VIIIC and in contrast realisation conditions worse throughout the cycle,

even falling at an annual rate of nearly 3% per annum during the expansion phase. In the contraction phase (VIIC) which lasted five quarters realisation conditions worsen at an annual rate of over 40%. Consequently although the rate of profit rises at 15.7% per annum during the expansion phase of cycle VII it falls at nearly double that rate during the contraction phase. Contraction and expansion phases of cycle VII are of equal lengths of time. From Table 6 and 7 we gain an indication of the importance of Weisskopf's offensive and defensive labour strength conditions variables during cycles VI and VII. The cycle and cycle growth rates (Table 6) show that between both cycles V and VI and cycles VI and VII offensive and defensive labour strength work in opposite directions - defensive strength rises contributing to the profit rate decline and offensive strength falls working against the decline. Across both cycle to cycle changes the fall in offensive strength outweighs the rise in defensive strength. Within cycle VII in particular the fall in offensive labour strength is dramatic; 20 percent in the expansion phase and 12 percent per annum during the contraction phase. (4).

So to summarise, by extending Weisskopf's empirical analysis into the 1980's, we have shown that his conclusions concerning the importance of rising labour strength in explaining the downward secular trend in the rate of profit are no longer so strong. As far as the period 1975 to 1982 is concerned realisation conditions by far play the largest part in explaining the trend of the rate of profit. The

The worsening of realisation conditions within the United States economy has steadily accelerated since the 1970's. On the other hand, and in contrast to Weisskopf's earlier conclusions, labour strength has fallen, and ceteris paribus would have allowed the rate of profit to increase, but in the context of the severe realisation crisis probably exacerbated the precarious state of effective demand in the economy.

TABLE 4 : Rates of growth of contribution variables: Full period and Between cycles

	(1) Full Period	(2)	(3)	(4)	(5) Cycles	(6)	(7)	(8) 1949-
		I-II	II-III	III-IV	IV-V	V-VI	VI-VII	1975
Rate of Profit	-1.62	-3.2	-1.5	+2.2	-4.7	-0.09	-4.37	-1.20
Contributions of Labour Strength	-0.79	-1.4	+0.9	-0.5	-2.6	+1.65	+1.19	-1.13
Realisation Conditions	-0.61	-1.2	-3.2	+2.1	-1.2	-0.61	-6.45	-0.09
Capital Composition	-0.22	-0.5	+0.6	+0.6	-0.9	-1.11	+0.87	+0.02

Source: Columns 2-5, 8: Weisskopf 1979, Table 6, p.364.
Columns 1, 6, 7 : see Appendix.

TABLE 5 : Rates of growth of contribution variables: cycles I-V phase B, and all later phases

	(1) IB	(2) IIB	(3) IIIB	(4) IVB	(5) VB	(6) VIA	(7) VLB	(8) VIC	(9) VIIA	(10) VIIC
Rate of Profit	-10.8	-10.5	-9.7	-8.2	-11.5	+16.3	+ 6.2	-21.2	+15.7	-27.6
Contributions of Labour Strength	-11.1	- 6.5	-8.6	-3.8	-18.7	+ 6.1	-10.8	- 1.2	+14.9	+ 8.73
Realisation Conditions	+ 3.0	- 2.5	-2.4	-3.9	+12.9	+11.3	+ 6.8	-20.5	- 2.7	-40.6
Capital Composition	- 2.7	- 1.6	+1.3	-0.4	- 5.6	+ 0.3	- 2.2	+ 0.5	+ 3.5	+ 4.3

Source: Columns 1-5 : Weisskopf 1979, Table 8, p.365.
Columns 6-10 : see Appendix

TABLE 8 : Rates of growth of component variables: full period and between Cycles

	(1) Full Period	(2) I1II	(3) II-III	(4) III-IV	(5) Cycles IV-V	(6) V-VI	(7) VI-VII	(8) 1949-1975
Contributions of:								
Offensive Labour Strength	+0.72	-4.2	+0.5	+3.2	+1.3	+4.60	+9.99	+1.09
Defensive Labour Strength	-1.51	+2.8	+0.4	-2.7	-3.9	-2.96	-8.80	-2.22
Technical Composition of Capital	+0.04	+0.2	+1.1	+1.0	+0.2	-0.13	-1.40	+0.62
Value Elements of Capital	-0.26	-0.7	-0.3	-0.3	-1.1	-0.98	+2.26	-0.60
Component Variables:								
Truly req. Productivity	+2.42	+3.0	+4.0	+3.4	+2.4	+1.35	+1.65	+3.15
Truly req. Real wage	+.2.26	+4.1	+3.8	+2.5	+2.1	+0.47	-0.19	+2.90
Truly req. real K/L ratio	+2.37	+2.8	+2.9	+2.4	+2.2	+1.49	+3.05	+2.53
"Terms of Trade"	-0.30	+0.0	-0.1	-0.7	-1.0	-0.77	+0.32	-0.55
Capital/wage good Price ratio	-0.04	+0.7	+0.2	-0.3	+0.1	+0.20	-1.94	+0.05

Source: Columns 2-4 : Weisskopf 1979, Table 10, p.368.
Columns 1, 6-8 : see Appendix

TABLE 7 : Rates of growth of component variables: cycles I-V phase 8 and all later phases

	(1) IB	(2) IIB	(3) IIIB	(4) IVB	(5) VB	(6) VIA	(7) VIB	(8) VIC	(9) VIIIA	(10) VIIC
Contributions of:										
Offensive Labour Strength	-7.4	-13.0	-2.0	+0.2	- 8.6	+14.1	-4.6	+18.2	+20.3	+12.3
Defensive Labour Strength	-3.6	+ 6.5	-6.7	-4.0	-10.1	- 8.0	-6.2	-19.4	- 5.4	- 3.6
Technical Composition of Capital	-1.5	- 0.7	+2.1	+0.4	- 3.1	+ 2.0	-3.2	- 3.4	- 0.1	+ 3.0
Value Elements of Capital	-1.2	- 1.7	-0.8	-0.9	- 2.6	- 1.7	+1.1	+ 3.9	+ 3.6	+ 1.2
Component Variables:										
Truly Req. Productivity	+1.6	+ 1.1	+2.2	+2.7	+ 0.2	+ 4.4	+0.0	+ 0.8	+ 3.2	+ 4.2
Truly Req. Productivity	+3.8	+ 4.5	+2.7	+2.6	+ 2.0	+ 1.7	+1.0	- 2.5	- 0.5	+ 2.1
Truly Req. real K/L ratio	+3.1	+ 1.8	+0.1	+2.2	+ 3.3	+ 2.4	+3.2	+ 4.5	+ 3.3	+ 1.1
"Terms of Trade"	-1.1	+ 0.4	-1.3	-1.0	- 2.3	- 1.6	-0.1	+ 0.2	+ 1.3	+ 0.3
Capital/wage good Price ratio	+0.1	+ 1.3	-0.5	-0.1	+ 0.3	- 0.1	-1.2	- 3.7	- 2.3	- 0.9

Source: Columns 1-5 : Weisskopf 1979, Table 12, p.369
Columns 6-10 : see Appendix

4. DECOMPOSING LABOUR'S SHARE

In only going as far as decomposing income into profits and employee compensation Weisskopf's analysis conceals a great deal of information concerning the behaviour of different components of labour income and in particular the differences in the behaviour of wage and salary shares. In fact many political economists, Marx included (5), would regard the lumping together of wages and salaries into "wage share" as a gross over-simplification since they clearly perform different roles in the process of production. Marx saw this distinction in terms of productive and unproductive labour, "exploited" labour and the "labour of exploiting". In addition in Kaleckian theories of income distribution determination (Kalecki 1971, Cowling 1982) the distinction between wages and salaries is crucial since wages might be assumed to be a variable cost of production whereas salaries are invariant to the level of output. Furthermore it might well be argued that wage-earners and salary-earners see themselves as distinctly different interest groups, the latter identifying themselves with the entrepreneurial class, or as a separate managerial class and therefore opposed to wage-earners in the distributional struggle (Zeitlin 1974, Baran & Sweezy 1966).

In this section Weisskopf's share of employee compensation in domestic income in the NFCB sector is decomposed into three smaller shares allowed by the data available. In addition to wage and salary share, a supplemental labour cost share is

removed from employee compensation share. This removes from employee compensation the costs of providing supplemental employee benefits such as pension contributions, medical insurance contributions, and unemployment insurance contributions. The data does not allow these benefit contributions to be accurately subdivided into the supplemental benefits paid to wage-earners and salary-earners separately and no attempt at an apportionment is made here.

Figure 1 and Table 8 show the behaviour of these shares in the post-war period. The trends of each of the three shares are quite pronounced. The share of production worker wages falls from 57 percent of net income in 1948 to 40 percent in 1983 while salary share in the same period rises from 17 percent of net income to over 30 percent, and the share of supplemental labour costs from 4 percent of net income to 14 percent. So at first glance the evidence seems to suggest quite strongly that since World War Two production workers as a group have lost out in distributional terms, to the advantage of the salariat. However we must qualify that statement by noting that some proportion of the rising share of pensions and unemployment benefits contributions would have offset the downward trend in production workers payroll share, although as we shall argue in greater depth later this increasing share of supplemental benefits going to production workers does not imply that production workers as a whole enjoyed larger pay packets.

In order to assess the contributions of wage-earners and salary earners to the rising labour strength crisis variant, and

also the contribution of a rising share of supplemental benefit contributions we must remove the overhead labour utilisation effect. We shall assume that only salaried employees comprise overhead labour, as Weisskopf does - so only salary share and the the proportion of supplemental benefits contributions paid on behalf of salaried employees are incurred as a cost in proportion to capacity output rather than actual output. As Weisskopf does we shall assume overhead labour is employed so that it is geared to some optimal level of capacity utilisation and, as Weisskopf does, we shall assume that level is 90 percent. Because we have no separate data on production worker supplemental labour cost.and salaried staff supplemental labour cost we have to make an assumption about how total supplemental labour cost is divided between the two. The assumption made here is that it is apportioned according to the proportions of wages and salaries in total payroll. So

$$EC/Y = W/Y + S/Y + C+Y = 1 - TT/Y \qquad (7)$$

where EC is total employee compensation
W is production worker wages
S is salaries
C is total supplemental labour cost

and $C = Cw + Cs \qquad (8)$

Cw is supplemental labour cost paid to production workers
Cs is supplemental labour cost paid to salaried staff

where $Cw = (W/(W + S)).C \qquad (9)$

$Cs = (S/(W + S)).C \qquad (10)$

To remove the utilisation effect we assume salaried (or overhead) hours are geared to optimal capacity utilisation, $\hat{\Psi}$. So the formula for "truly-required" salaried hours is:

$$L_s^* = (\Psi/\hat{\Psi})L_s \qquad (11)$$

and "truly-required" salary bill (S^*) is:

$$S^* = sL_s^* = (\Psi/\hat{\Psi})sL_s \qquad (12)$$

where s is average salary.

We also need to remove the utilisation effect from the supplemental labour cost paid on behalf of salaried staff. The expression for truly-required supplemental labour cost paid to salaried staff is:

$$C_s^* = (\Psi/\hat{\Psi})C_s \qquad (13)$$

So: $$C^* = C_w + C_s^* \qquad (14)$$

where C^* is total truly-required supplemental labour cost.

We can write the expression for truly-required employee compensation, (EC^*):

$$EC^* = W + S^* + C^* \qquad (15)$$

and $$EC^*/Y = W/Y + S^*/Y + C^*/Y \qquad (16)$$

Fig. 1 : Labour Shares In the NFCB Sector

WS: Share of production worker wages in net income
SS: Share of salaries in net income
CS: Share of supplemental benefits in net income

Source: see Appendix to Chapter

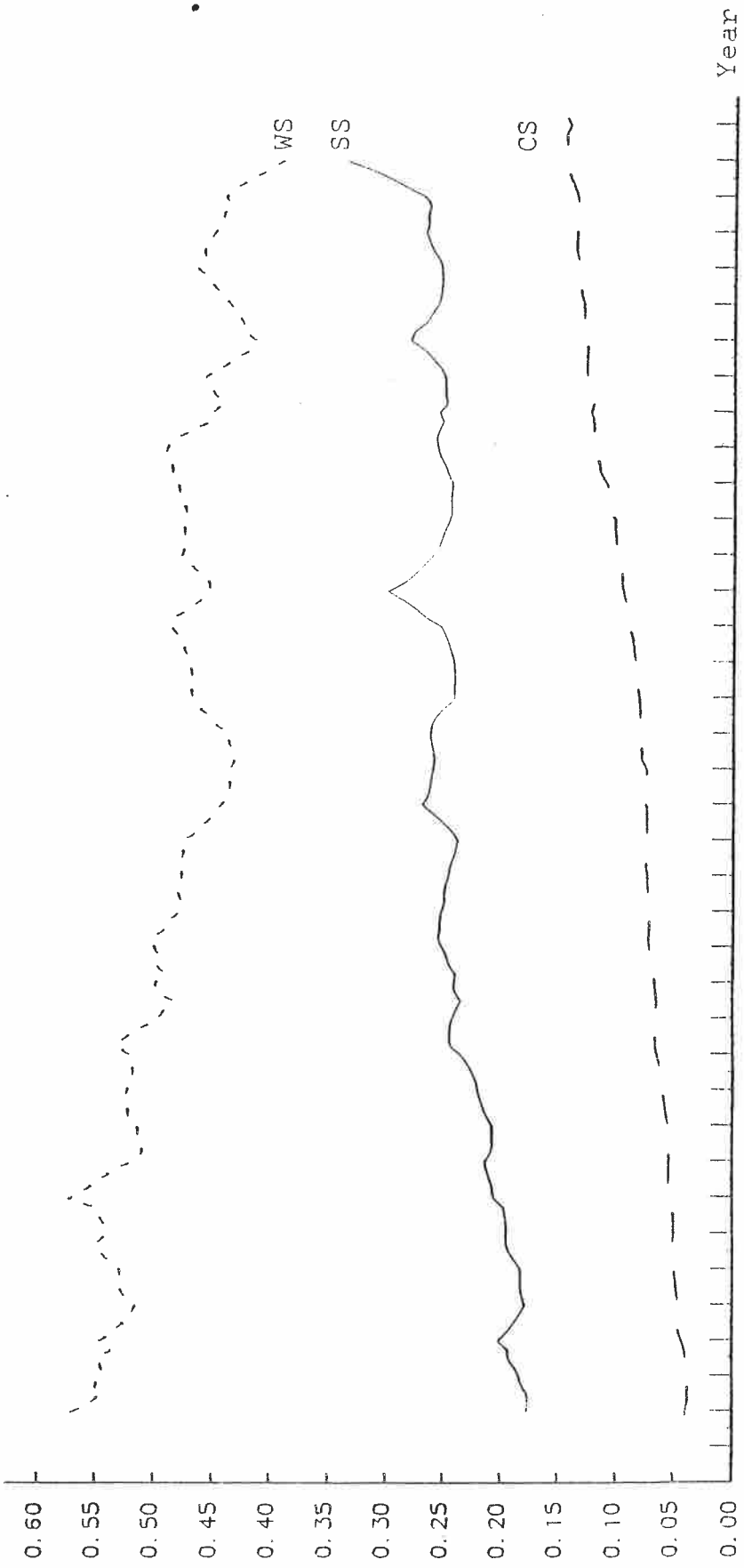

TABLE 8 : Levels of Actual and Truly-Required Labour Shares at Key-points in each cycle (%)

Phase	Date	EC/Ȳ	W/Y	S/Y	C/Y	$\bar{EC}^*/\bar{Y}$	$\bar{W}/\bar{Y}$	$\bar{S}^*/\bar{Y}$	$\bar{C}^*/\bar{Y}$
1A	1949(4)	79.4	54.7	20.3	4.4	77.7	56.8	16.6	4.3
1B	1950(4)	74.1	51.6	18.0	4.6	76.9	53.9	18.3	4.7
1C	1953(2)	79,5	54.8	19.8	5.1	80.8	55.5	20.2	5.2
2A	1954(2)	81.3	54.8	21.1	5.5	81.2	56.4	19.3	5.5
2B	1955(2)	77.3	51.0	20.8	5.5	79.4	53.0	20.8	5.6
2C	1957(1)	80.2	51.8	22.2	6.2	83.6	54.7	22.5	6.4
3A	1958(2)	83.8	52.4	24.7	6.7	81.4	54.2	20.7	6.5
3B	1959(2)	78.5	48.4	23.6	6.5	80.1	50.4	23.0	6.7
3C	1960(1)	80.1	49.1	24.0	7.0	81.0	50.9	23.1	7.1
4A	1960(4)	82.7	50.1	25.3	7.3	80.9	51.6	22.2	7.2
4B	1966(1)	77.1	43.2	25.9	8.0	80.2	44.6	27.2	8.3
4C	1969(2)	81.2	47.7	24.8	8.8	81.2	48.3	24.2	8.8
5A	1970(4)	85.3	45.4	30.1	9.8	79.4	45.0	25.3	9.1
5B	1972(4)	82.5	47.4	24.7	10.4	80.6	47.3	23.2	10.2
5C	1973(3)	83.5	48.0	24.5	11.0	81.2	47.2	23.3	10.7
6A	1975(1)	86.6	48.4	25.9	12.2	82.7	49.2	21.8	11.7
6B	1977(3)	81.5	41.9	26.9	12.7	77.4	40.9	24.3	12.1
6C	1979(1)	83.2	44.3	25.5	13.3	78.5	42.4	23.5	12.6
7A	1980(2)	86.0	45.9	26.2	13.8	75.3	42.1	21.1	12.1
7C	1981(3)	83.5	43.6	26.4	13.5	72.0	39.5	20.8	11.7
	1982(4)	87.4	39.1	33.5	14.7	70.1	35.2	23.1	11.8

Note: The first four columns show the levels of actual shares of employee compensation, wages, salaries, and supplemental labour costs respectively. The second four columns show the truly required real levels of these shares.

Source: see Appendix

To discriminate between defensive and offensive labour strength we need to separate relative price changes and real share changes. We will assume (perhaps heroically) that wages, salaries and supplemental benefits are all spent on the same bundle of goods so the same price index will convert all three into real terms:

$$EC^*/Y = Pw/Py\ (\bar{W}/\bar{Y} + \bar{S}^*/\bar{Y} + \bar{C}^*/\bar{Y}) \qquad (17)$$

We now have an indication of the offensive strength of the recipients of the three components of labour income, wage-earners, salary-earners and the trustees of the various insurance schemes that incorporate supplemental labour cost. Our justification for separating out C, rather than apportioning it to wages and salaries, is that it does not represent labour income actually received by production workers or salaried staff. They have only the potential to receive this income if they cease at some point in the future to be wage-earners or salary-earners through ill-health, lay-off or retirement. At any given point in time the supplemental benefit income accrues to the trustees of these various welfare schemes. Clearly at a fiven point in time production workers might use their labour strength to press for increased benefit entitlements but providing they remain in work that increased benefit entitlement does not represent an increased capacity to "bring home the bacon". If increased wages and increased benefits are substitutes and workers press for the latter if they feel they are unable to make headway in increasing the former then

increased benefits might be viewed as an expression of defensive labour strength.

Finally we can subdivide wage and salary shares into average earnings and hourly productivity components:

$$\frac{EC^*}{Y} = \frac{Pw}{Py}\left(\frac{\bar{w}}{\bar{y}_w} + \frac{\bar{s}^*}{\bar{y}^*_s} + \frac{\bar{C}^*}{\bar{Y}}\right) \qquad (18)$$

where w is average hourly real production worker wage

s^* is truly-required hourly real salary

y_w is average real output per production worker hour

y^*_s is truly-required real output per salaried hour

5. EMPIRICAL EVIDENCE FOR THE DECOMPOSITION OF LABOUR'S SHARE

The transformation of equation 6.18 into a growth accounting identity is possible but is not practicable since a change in one of the three shares does not unambiguously imply a change in the same direction of employee compensation share and hence a change in the opposite direction for profit share. Hence in what follows we will consider the exponential growth rates of the three component shares but will not attempt to transform those growth rates into contributions to the growth rate of profit share using a multiplier as Weisskopf was able to do with just one labour share. Cycle to cycle growth rates for employee compensation share and three component shares are presented in Table 9. The rate of growth of real truly-

TABLE 9 : Rates of Growth of Labour Shares : Full Period and Between Cycles

	Full Period		Cycles II-III	III-IV	IV-V	V-VI	VI-VII
Real truly req. Employee Comp. Share	-0.155	0.859	-0.386	-0.132	0.184	-0.887	-1.842
Real Prodn. Worker Share	-1.011	-0.351	-1.670	-1.295	-0.052	-2.071	-2.401
Real truly req. Salary Share	0.509	3.192	1.560	1.453	-0.786	-0.484	-1.472
Real truly req. Supplement lab. Cost Share	3.157	4.430	3.524	2.617	3.683	3.037	-0.061

Source: see Appendix

required employee compensation share is equivalent to Weisskopf's labour strength conditions variable before the multiplier to convert labour share growth rates into profit share growth rates is applied. An idea of the importance of the rates of changes of each share in explaining the rate of change of profit share can be gained by considering the levels of each real truly-required income share (Table 8).

Real truly-required employee compensation share fell in four out of six of the cycle to cycle periods - particularly during the late 1950's and middle 1970's to early 1980's. But although its trend is downwards during four of the six sub-periods, nevertheless during the long boom from the mid-1960's to the early 1970's (cycle IV to cycle V) the trend is steadily upwards. This coincides with the long profits squeeze identified and much discussed in the literature of the time both in the United States (Nordhaus 1974, Boddy and Crotty 1975) and elsewhere (Glyn and Sutcliffe 1972). Both Boddy and Crotty (1975) and Glyn and Sutcliffe (1972) attribute this profits squeeze to a rising labour strength crisis. But by decomposing employee compensation share we can see that in fact any rise in offensive labour strength during this period was largely illusory and really "defensive" in that the upward trend in employee compensation share is entirely due to a sharp rise in the share of supplemental benefit contributions. Between cycles IV and V real truly-required supplemental labour cost share rose by nearly 3.7 percent per annum - throughout the whole period this

TABLE 10 : Rates of Growth of Labour Shares: Intra-cycle analysis

Phase	$\overline{EC}^*/\overline{Y}$	$\overline{W}/\overline{Y}$	$\overline{S}^*/\overline{Y}$	$\overline{C}^*/\overline{Y}$
1A	-0.960	-5.155	9.537	9.966
1B	1.965	1.123	3.967	3.509
1C	0.450	1.577	-4.272	6.120
2A	-2.169	-6.151	7.423	2.771
2B	2.929	1.802	4.415	7.667
2C	-2.166	-0.749	-6.713	1.077
3A	-1.599	-7.223	10.671	2.352
3B	1.547	1.256	0.453	7.368
3C	-0.128	1.893	-5.456	2.265
4A	-0.185	-2.767	3.901	2.844
4B	0.393	2.407	-3.635	1.550
4C	-1.510	-4.677	2.953	2.656
5A	0.792	2.513	-4.333	5.429
5B	0.871	-0.445	0.676	7.261
5C	1.228	2.772	-4.302	5.730
6A	-2.653	-7.317	4.359	1.339
6B	0.978	2.418	-2.370	2.607
6C	-3.306	-0.659	-8.469	-3.049
7A	-3.649	-5.145	-1.150	-2.926
7C	-2.073	-9.211	8.355	1.083
Av.for Phases A	-1.094	-3.768	3.762	2.898
Av.for Phases B	1.390	1.716	0.297	4.011
Av.for Phases C	-1.118	-1.545	-2.226	2.269

Source: see Appendix

growth rate was only exceeded in the early 1950's when the level of the share was at a very low base. So the profits squeeze was not the result of offensive labour strength working through to rising real wages. Truly required real wage and salary shares actually fell during this period. Labour was only making headway in that it was gaining benefit entitlement - this was not money that was going into pa packets but to the trustees of the various pension, social security and health care schemes. It is only in the 1970's and 1980's as unemployment rose and more and more of those who were working in the 1960's reached retirement age that labour actually started to receive this money.

Real production worker wage share shows a downward trend in each cycle to cycle period - overall a downward post-war trend of 1 percent per annum. The conclusion here is very strong, that production workers have consistently lost ground throughout the post-war period and have at no time been able to use offensive labour strength to tilt the distribution of income in their favour. However the real truly-required salary share shows an upward trend in the first three cycle to cycle periods - salaried workers were on the offensive. The salary share gains stop after cycle III and the trend becomes a downward one. In the last two cycle to cycle periods, though, it is interesting to note that although production workers' real wage share was falling at an average rate of over 2 percent per annum, faster than at any other time since 1949, the trend of real truly-required salary

share does not match this, falling at a slower rate.

From the intra-cycle analysis (Table 10) we can see that it is in phase B of each cycle that production workers can make offensive gains, but of course they more than lose these gains when the cycles are averaged out. Because there is no phase B in cycle VII production workers fare particularly badly in the early 1980's; real wage fell at an unprecedented 9 percent in 1982. The picture for salary earners is quite different - they are at their most offensive in phase A of the cycle - the phase when production workers are at their least offensive. Salary share continues on average to improve in phase B, though at a much reduced rate. So in the business upswing salaried staff can immediately appropriate for themselves the benefits of improved business conditions. What this shows is that it is clearly misleading to group wage and salary earners together as one type of labour since both have quite different experiences of changing distributional shares. The clear inverse relationship that exists between wage share and profit share does not hold between salary share and profit share. If we look at the long business cycle of the 1960's (cycle IV) we see that the direction of salary share changes correspond precisely to the direction of profit share changes. Certainly during the 1960's and to a lesser extent in other periods since 1949 when capitalists have done well so have salary earners.

Tables 11 and 12 break down the changes in real wage

TABLE 11 : Rates of Growth of Average Real Earnings and Real Productivity : Full Period and Between Cycles

	Full Period	Cycles I-II	II-III	III-IV	IV-V	V-VI	VI-VII
Real.Av.Production Worker Earnings, w	1.794	3.456	2.130	2.379	1.897	-0.050	-0.624
Real Av.Production Worker Productivity y_o	2.805	3.808	3.798	3.674	1.902	2.021	1.777
Real Av.Truly req. salary s*	1.636	3.267	2.112	2.839	1.495	-1.009	-0.211
Real Av.Truly req. Salaried Worker Productivity, y_s^*	1.127	0.075	0.552	1.386	2.281	-0.525	-1.261

Source: see Appendix

TABLE 12 : Rates of Growth of Average Real Earnings and Real Productivity : Intra-cycle Analysis

	$\bar{w}$	$\bar{y}^*_o$	$\bar{s}^*$	$\bar{y}^*_s$
1A	4.920	10.074	1.809	-7.728
1B	3.576	2.453	3.427	-0.540
1C	2.360	0.783	2.355	6.627
2A	3.665	9.815	4.302	-3.121
2B	3.944	2.142	3.832	-0.583
2C	0.817	1.566	-1.503	5.210
3A	2.638	9.861	4.389	-6.283
3B	1.317	0.061	4.661	4.208
3C	0.920	-0.973	0.513	5.969
4A	2.385	5.152	2.990	-0.912
4B	3.267	0.860	2.498	6.133
4C	-1.007	3.670	-1.230	-4.183
5A	3.413	0.900	2.908	7.241
5B	0.470	0.916	0.053	-0.624
5C	-2.478	-5.250	-4.016	0.286
6A	-0.175	7.143	0.482	-3.878
6B	3.506	1.088	-5.004	-2.634
6C	-4.059	-3.401	3.706	12.175
7A	-0.924	4.222	-0.876	0.274
7C	-0.336	8.875	0.628	-7.727
Av.for Phases A	2.070	5.840	2.563	-1.199
Av.for Phases B	3.148	1.432	1.849	1.552
Av.for Phases C	-0.783	0.763	-0.187	2.039

Notes: $\tilde{w}$: real average production worker hourly earning
$\tilde{y}_o$: real average production worker output per man-hour

$\tilde{s}^*$: real truly req.average hourly salary
$\tilde{y}^*_s$: real truly req.average salaried employee output per man-hour

Source: see Appendix

share and real salary share into changes in real average wage, real average salary and real production worker and salaried worker productivity changes (equation 18). As far as production workers are concerned their average productivity from cycle to cycle always increases more than their average earnings. This gap between the growth of productivity and the growth of earnings starts to widen in cycles VI and VII as real earnings start to fall but real productivity continues to rise at around 2 percent per annum. In fact in cycle VII itself, despite falling real earnings in both subperiods productivity growth accelerates to nearly 8 percent per annum. It is difficult to discern much pattern from the intra-cycle analysis though, certainly in the first four cycles and also in cycle VI, phase A is when production worker real productivity rises fastest generating the initial drop in wage share in each cycle. Phase B sees the largest rise in average wage, and this is usually larger than the rise in productivity and explains Weisskopf's observation that phase B is the crucial point in the cycle when pressure from labour brings about a downturn in in the rate of profit. The story for salary earners is generally the reverse of that for production workers. Salary growth is faster than salaried worker productivity growth especially in the first four cycles. The gap closes and average salary falls faster than average salaried worker productivity after cycle IV bringing about a change in the trend of salary share. In the first four cycles phases A and B are of equal importance in explaining the rise in average salaries over the cycle, but this pattern breaks down after 1970.

The contrast between the behaviour of wage and salary variables is striking in phase VIIC. Real production worker earnings fall and their productivity rises rapidly at nearly 9% per annum but real salaries rise and their productivity falls equally rapidly at nearly 8% per annum. So the sharp slump in the U.S. economy engineered by the newly elected Reagan administration after 1980 seems to have brought about a sharp redistribution of income away from production workers towards salaried workers. From Table 10 we see that wage share fell at over 9 percent per annum and salary share rose at over 8 percent per annum in phase VII C - and salary share here is adjusted for the utilisation effect so this cannot be explained in terms of differential rates of adjustment between direct and overhead labour inputs.

6. EXPLAINING THE TREND OF WAGE SHARE

Having discovered that the trend of wage share has since the Second World War been markedly different from the trend of salary share and from the trend of overall employee compensation the question of what determines wage share remains unanswered. In this section of the paper we aim to assess whether the Kaleckian degree of monopoly theory can offer any insight into why wage share has exhibited a steady downward secular trend during the time period in question (Kalecki, 1971).

A casual glance at some of the recent literature on

changing patterns of market power and competition in the post-war U.S. economy suggests little evidence exists to point to rising monopolisation. For example, White (1981) concludes that as far as aggregate concentration is concerned there is little evidence of an upward trend, though aggregate concentration may tell us little about changing market concentration. Data on weighted averages of 4-digit industrial concentration suggest that industrial concentration has remained largely constant since World War Two, or at least that any very slight increase must be at the pace of "glacial drift" (Scherer, 1980). Shepherd (1982) concludes that competition in the U.S. economy has increased significantly in the years between 1939 and 1980. He bases this conclusion on data on the proportions of national income generated by industries within different size bands of concentration. During this period the author asserts that many industries have moved from monopolistic or tightly oligopolistic categories to what he terms "effectively competitive". Effectively competitive markets (with a four-firm concentration ratio below 40%) in 1939 accounted for 52 per cent of national income and in 1980 accounted for over 76 percent of national income. Most of this change has occurred since 1958. However Shepherd's conclusions rely on a comparison of the position of the economy in 1958 and 1980 and therefore his data reveals nothing about changing trends within that twenty-two year period. Shepherd's analysis by selecting arbitrary benchmarks and grouping industries within bands of the 4-firm concentration ratio, ignores two further dimensions to changing industry

structure, namely movements in concentration within the bands, and secondly changes in the size distribution of firms within industries, which would be picked up by more sophisticated inequality measures of concentration, such as the Herfindahl index. Furthermore Shepherd's analysis may miss changes in the degree of monopoly brought about by conglomerate merger knitting together industries in extra-market connections, and through the movement of corporations in the last twenty years towards establishing transnational bases of operation. Concentration is only one aspect of monopoly power - for example it cannot capture changes in the pattern of collusion within oligopolies. Gordon (1985) examines the behaviour of more direct measures of monopoly power is post-war United States, namely the degree of monopoly and Tobin's q (the ratio of market value to replacement cost). The degree of monopoly is closely related to the concept of monopoly welfare loss, the extent to which monopolistic pricing behaviour in the economy reduces total welfare surplus. Tobin's q reflects the extent to which the capital market expects future discounted profits to raise the rate of return on the firm or industry's assets above its cost of capital. Gordon finds that in the post-war period the degree of monopoly in manufacturing industry rose sharply until 1972 and then fell in the 1970's, levelling off again in the early 1980's. His estimates of Tobin's q for the non-financial corporate business sector, show a similar rise until about 1970, a fall until the late 1970's and then a levelling off and slight recovery in the early 1980's.

He concludes that this evidence points to a substantial rise in monopoly power in the 1950's and 1960's and that it would appear that anti-trust activities during this time were quite ineffective in curbing this growth. His explanation for the drop in the figures during the 1970's is that it is due to increasing foreign competition from Europe and the Far East.

Figure 2 shows the behaviour of the degree of monopoly for the whole of U.S. manufacturing industry from 1958 to 1982 using Manufactures data. It shows a sharp increase of around 15 percent between 1958 and 1970, then falls until 1975, rises slightly until 1979, falls again in 1980 and then possibly enters a new upward trend in the 1980's. Kalecki derives the following expression for wage share (Kalecki, 1971, Equation 6.1, p.62).

$$w = \frac{1}{1 + (k-1)(j+1)} \qquad (19)$$

where
- w is the share of wages in value added
- k is the ratio of proceeds to prime cost (the degree of monopoly)
- j is the ratio of aggregate materials costs to the wage bill

Table 13 presents five yearly averages of these variables computed from the Annual Survey of Manufactures for the whole of U.S. manufacturing industry. From this we obtain a good picture of why wage share has trended downwards in the post-war period. Initially, until 1970 the main reason for the downward trend was simply that the degree of

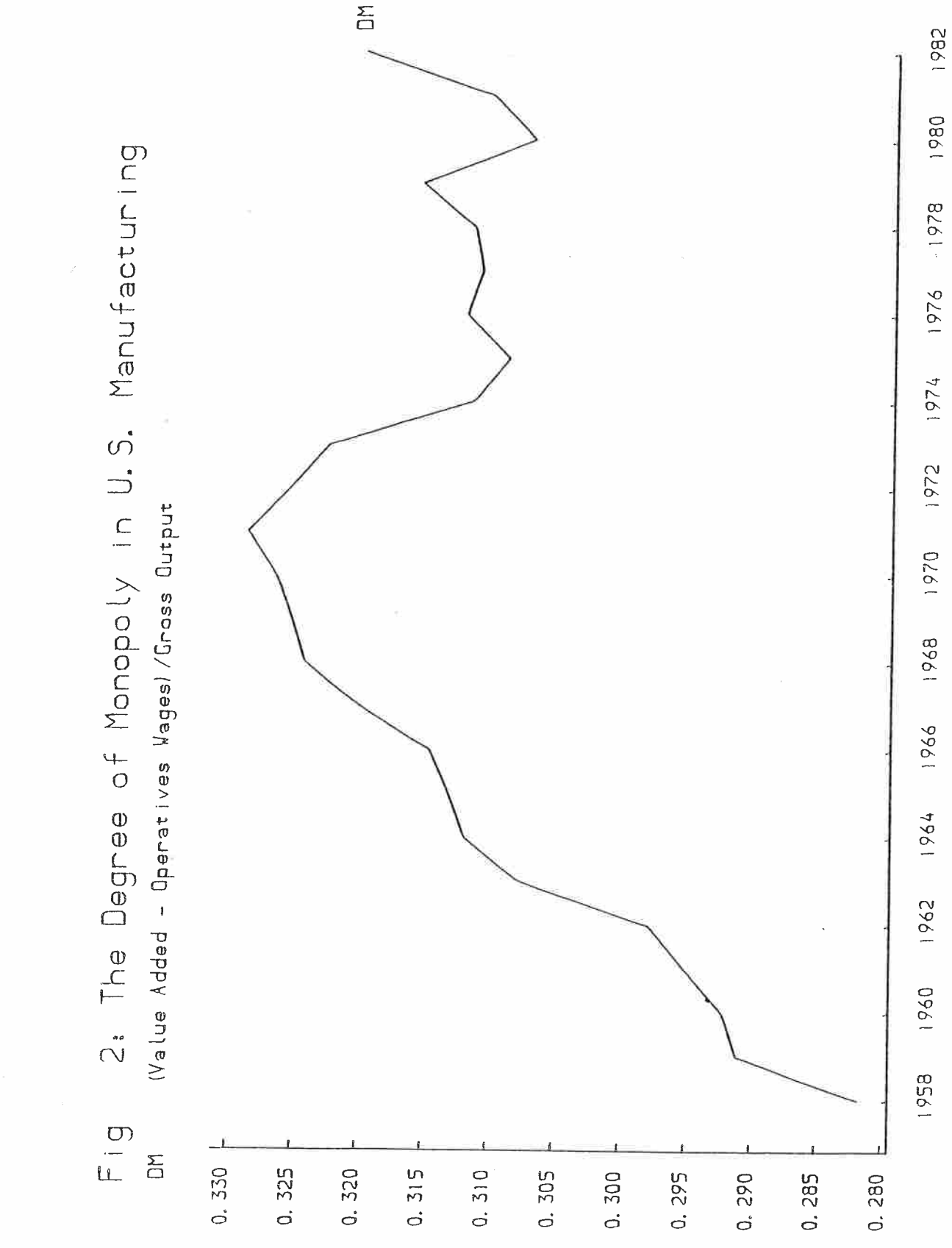

Fig 2: The Degree of Monopoly in U.S. Manufacturing

DM (Value Added - Operatives Wages)/Gross Output

TABLE 13 : Wage Share, the Degree of Monopoly and the Ratio of Wages Bill to U.S. Manufacturing Industry - 5 year averages 1958-1982

	Wage Share W/Y	Degree of Monopoly k	Ratio of Wages to Materials. M/W
1958-62	.338	.292	2.516
1963-67	.316	.314	2.647
1968-72	.303	.326	2.735
1973-77	.276	.314	2.996
1978-82	.256	.313	3.213

Source: Author's computations from Annual Survey of Manufactures/Census of Production 1958-1982

Notes: The degree of monopoly, $k = (Y-W)/V+M)$

$W/V' = 1/(1+(k+1)((M/W)-1)))$. See equation 2.18, Chapter 2.

monopoly rose, though the rising ratio of materials to wages costs reinforced this. The peak in the degree of monopoly in 1970 coincides with the point when most American manufactures markets started to experience sharply rising levels of import penetration. but this does not change the trend of wage share because very shortly afterwards materials costs start to rise rapidly as a result of the O.P.E.C. oil price increases of 1974 and 1979. So despite a slightly downward trend in the degree of monopoly. as measured across five yearly averages, wage share still falls because of the rising pressure of raw materials costs. As far as the period up to 1970 is concerned conventional studies of industrial concentration seem to be not accurately capturing

the impact of monopoly power on pricing. The degree of monopoly theory holds up well from the evidence presented here and the suggestion that rising market power as revealed in rising price-cost margins does explain the downward trend in wage share. Wage share was unable to rise in the 1970's when most U.S. industries started to experience rising levels of import penetration because raw materials costs started to rise rapidly at the same time. But for the two O.P.E.C. oil price increases in 1974 and 1979 the degree of monopoly series shows an upward trend after the initial shock of import penetration in the early 1970's.

7. CONCLUSION

In his original paper Weisskopf concluded that the rising strength of labour variant received far more empirical support than other explanations of crisis. In the long run this labour strength was of a defensive nature in that capitalists absorbed a larger share of adverse price changes than the price level of wage goods. In our extension of his study to incorporate two additional business cycles covering the seven years from 1975 to 1982 we have shown that his original conclusions are no longer so strong (sections 2 - 3). As far as these seven years are concerned all the decline in the rate of profit was explained by a deterioration in realisation conditions, indicative of the general recession conditions experienced by the U.S. economy at the time.

When incorporated into the full post-war trends the data for the two new cycles gives results that show that labour strength and realisation conditions now contribute in equal proportions to the post-war decline in the rate of profit.

We have then gone on to decompose labour share into wage, salary and supplemental labour cost components (sections 4, 5 and 6) on the grounds thar the recipients of these three categories of labour income are substantially different interest groups, not all of whom can be assumed to identify themselves as the employed class. In the case of supplemental labour costs (that money paid as contributions to various social insurance schemes) it is certainly not the case that this income represents money in the pay packet for labour. The share of this component was seen to rise consistently throughout the period 1949 to 1982 and any upward trend in employee compensation was largely the result of the increase in this component. Salary share was seen to mirror fairly closely the share of profits; but production worker wage share consistently declined. It was suggested that any labour strength crisis, particularly as identified by previous authors in the late 1960's, was illusory in that it was the result of the rising share of supplemental benefit contributions, and as far as production workers are concerned they have consistently lost ground in the distributional race throughout the post-war period. The reason for this, it was suggested in section 6, lies in an increasing degree of monopoly particularly until about 1970, though production workers have been unable to

recover lost ground since then because of the rising burden of raw materials costs which has squeezed the degree of monopoly.

A declining labour share would conceivably have contributed to the worsening realisation conditions of the late 1970's and early 1980's. Wage share as we have seen declined consistently and by the mid 1970's salary share had levelled off too. The increasing share of income devoted to supplemental labour costs may well also have added to conditions of stagnation since these social insurance contributions can be viewed as comprising a form of enforced saving which would have reduced effective demand in the U.S. economy still further. Pitelis (1983) discusses the role of these forms of "contractual" savings on realisation problems in the context of the British economy during this same period.

So the behaviour of our various components of labour share is consistent with, and probably contributory to the general conditions of realisation crisis experienced by the U.S. economy in the late 1970's and 1980's. The rising overall labour share certainly conceals a good deal about distributional patterns since the late 1940's. This trend does not indicate that labour strength was in the ascendancy, although the salariat did increase its share steadily until about 1970. Any distributional gains made tended to be defensive, the result of relative price movements, or illusory, to the extent that workers obtained concessions in terms of increased coverage

by various forms of social insurance rather than increased pay in their pay packets, and as we have just discussed this situation probably contributed to the vicious realisation crisis of the last 10 years.

FOOTNOTES:

(1) In the context of the United States empirical studies of profit rate behaviour in this connection have been conducted by Nordhaus (1974), Holland and Myers (1979) and Feldstein and Summers (1979).

(2) Of course, as Weisskopf notes, the other variables may well change in response to this but for the purposes of identifying sources of the decline the ROC variant points to declining ξ.

(3) All the data definitions, construction, and sources are detailed extensively by Weisskopf in an appendix to his paper. (See Weisskopf (1979) Appendix, pp.375-377.)

(4) In response to Munley's critique (Munley 1981), Weisskopf makes alterations to his definitions of offensive and defensive labour strength (Weisskopf 1981) by removing the terms capturing the relative price of wage goods and defining defensive labour strength as the smaller of the two terms measuring the rate of growth of real wage share and the rate of growth of the price index capturing the terms of trade between the NFCB sector and the rest of the economy. For completeness Table 14 presents results using these amended definitions. Offensive labour strength now only takes place if this index falls and then it is measured as the extent to which workers have defended themselves against adverse price changes by raising real wage share. In the period 1975 to 1982 only in phase VIB did this happen - offensive labour strength growth contributes nearly 11 percentage points of the annual fall in the rate of profit. In all other cases labour was not on the offensive and lost ground defensively since not only do relative prices move against them but real wage share fell too. This is also the case in the cycle to cycle pattern between both cycles V and VI, and VI and VII. Over the whole period on average relative prices moved against labour but they were able to recover some, but not all of this lost ground, by the fact that the real wage rose.

(5) For example, Marx (1976), pp.448-450, 1039-1048, Marx (1981) pp.506-514 and also Moseley (1985).

TABLE 14 : Contributions of RSL with Weisskopf's amended definitions

	Cycle V-VI	Cycle VI-VII	Full Period	VIA	VIB	vIC	VIIA	VIIC
Contribution of: RSL	1.21	4.44	-0.72	5.15	-7.55	4.96	19.71	8.00
Offensive RSL	-	-	-	-	-10.96	-	-	-
Defensive RSL	1.21	4.44	-0.72	5.15	3.41	4.96	19.71	8.00

APPENDIX

Data Sources and Definitions : Section 3

Y: "domestic income" of the NFCB sector, current prices - source: NIPA, various issues

$\bar{Y}$: "domestic income" of the NFCB sector, 1972 prices - source: NIPA, various issues

$\bar{Z}$: capacity output; $\bar{Y}$ divided by the rate of capacity utilisation in manufacturing sector expressed as a centered 7 quarter moving average - source: FRB, various issues

K,$\bar{K}$: net fixed capital stock (residential and non-residential) in NFCB sector at current and 1972 prices plus inventories (source: Holland and Myers 1979 Table A2a, extended by the author's estimates) linearly interpolated from annual data (see Weisskopf 1979) - source: SCB, various issues.

Pw: U.S.Department of Labour's monthly consumer price index for all items, converted to a quarterly basis and keyed to 1972 = 1 - source: SCB. various issues

PY $Y/\bar{Y}$

W: "compensation of employees" in NCFB sector current prices - source: NIPA, various issues

L: index of total labour hours of all persons in non-financial corporations (1967 = 100) multiplied by Gorman's estimate of actual labour hours in the NFCB in 1967 (see Weisskopf 1979) - source: computed from MLR, various issues

W and L were apportioned to wage and salary earners using annual data on salary bill, wage bill, production worker man-hours, and overhead labour employment (assuming an average of 2000 hours a year for each overhead employee, see Weisskopf 1979) in manufacturing industry. Quarterly series were interpolated as before. Source: ASM/COM, various annual issues

Data Sources and Definitions : Section 5

EC: "compensation of employees" in NFCB sector, current prices - source: NIPA, various issues

C: "supplements to wages and salaries" in NFCB sector, current prices - source: NIPA, various issues

The difference between EC and C is "wages and salaries" and this was apportioned to production worker payroll (W) and salaries (S) using the same method as above.

Abbreviations:

NIPA: National Income and Product Accounts, U.S.Department of Commerce.

FRB: Federal Reserve Bulletin

SCB: Survey of Current Business, U.S.Department of Commerce

MLR: Monthly Labour Review, U.S.Department of Labour

ASM: Annual Survey of Manufactures, U.S.Bureau of the Census

COM: Census of Manufactures, U.S.Bureau of the Census

BIBLIOGRAPHY:

P.A.Baran & P.M.Sweezy (1966), Monopoly Capital, New York, Monthly Review.

R.Boddy & J.Crotty (1975), "Class Conflict and Macro-Policy: The Political Business Cycle", Review of Radical Political Economy, Spring. pp.1-19.

K.Cowling (1982), Monopoly Capitalism, London, Macmillan.

M.Feldstein & L.Summers (1977), "Is the Rate of Profit Falling?" Brookings Papers on Economic Activity, Vol.8. No.1. pp.211-227.

A.Glyn & R.B.Sutcliffe (1972), British Capitalism, Workers and the Profits Squeeze, Harmondsworth, Penguin.

M.J.Gordon (1985), "The Post-War Growth in Monopoly Power". Journal of Post-Keynesian Economics, Fall. Vol.8. No.1. pp.3-13.

D.Holland & S.Myers (1979), "Trends in Corporate Profitability and Capital Costs", in R.Lindsay (ed.) The Nation's Capital Needs : Three Studies, New York Committee for Economic Development.

M.Kalecki (1971), Selected Essays on the Dynamics of the Capitalist Economy 1933-70, Cambridge, Cambridge University Press.

K.Marx (1976), Capital, Vol.1, Harmondsworth, Penguin.

K.Marx (1981), Capital, Vol.3, Harmondsworth, Penguin.

F.Moseley (1985), "The Rate of Surplus Value in the Post-War U.S.Economy : A Critique of Weisskopf's estimates", Cambridge Journal of Economics, Vol.9, pp.57-79.

F.Munley (1981), "Wage, salaries and the profit share" : A Reassessment of the Evidence", Cambridge Journal of Economics, Vol.5, pp.159-173.

W.D.Nordhaus (1974), "The Falling Share of Profits", Brookings Papers on Economic Activity, No.1, pp.169-208.

C.N.Pitelis (1983), "'Contractual' Savings and Underconsumption Realisation Problems of British Capitalism in the Recession", Warwick Economic Research Paper, No.236.

F.M.Scherer (1980), Industrial Market Structure and Economic Performance, 2nd ed.. Boston. Houghton Miffin.

W.G.Shepherd (1982), "Causes of Increased Competition in the U.S. Economy, 1939-80", Review of Economics and Statistics, Vol.64, pp.613-626.

T.E.Weisskopf (1979), "Marxian Crisis Theory and the Rate of Profit in the Post-War U.S.Economy", Cambridge Journal of Economics, Vol.3, pp.341-378.

T.E.Weisskopf (1981), "Wages, Salaries and Profit Share : A Rejoinder", Cambridge Journal of Economics, Vol.5, pp.175-182.

L.J.White (1981), "What has been happening to Aggregate Concentration in the United States?" Journal of Industrial Economics, Vol.29, pp.223-230.

M.Zeitlin (1974), "Corporate Ownership and Control : the Large Corporation and the Capitalist Class", American Journal of Sociology, Vol.79, No.5, pp.1073-1119.