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THE FACTOR-SHARES CYCLE AND ITS RELATION TO THE BUSINESS CYCLE

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Abstract

The traditional assumption of constant factor shares (Bowley's Law) may be misleading, for factor shares do vary in both the short run and the long run. The present chapter looks at short-run factor share movements, asking how they relate to the business cycle. Theoretical arguments differ about whether profit and wage shares are procyclical or counter-cyclical, and empirical evidence too yields no neat conclusions. On average, factor share movements roughly offset each other while adhering to a factor-shares cycle, which has similar periodicity to the business cycle but is out of phase with it – the profit share reaches a peak before the top of the cycle and a trough before the bottom of the cycle. Recent experience in developed countries, marked by financialisation, a rising profit share and financially induced recession, has changed the factor-shares cycle. Pressure on the wage share has softened profit squeezes and shifted the cycle towards an underconsumption mode with a procyclical profit share and greater risks of financial instability.

Keywords: Factor shares; business cycles; financialisation; underconsumption; financial instability.

Introduction

Factor shares in national income are generally assumed to stay almost constant in the short run and even the long run. The assumption stemmed from empirical research by Arthur Bowley, who studied British income data for the early twentieth century and found that factor shares were remarkably stable (Bowley and Stamp, 1927). Later studies by Paul Douglas using US data confirmed Bowley's findings (Douglas, 1934). Stability of the factor income distribution, supposedly true at all times and places, has acquired the status of a statistical law (Bowley's Law) or stylised fact that can inform macroeconomic analysis (Kaldor, 1961). It allows modelling to go ahead without worrying about factor shares, on the grounds that they remain inert and have little effect on how the economy adjusts. Macroeconomics can then be simplified by abstracting from distribution. To do so has never been entirely satisfactory, as factor shares are not fixed and show both short-run and long-run movements. Nor are the movements random or accidental – they connect with economic activity and follow recognisable patterns.

Instead of being constant, long-run factor shares change gradually, not always in the same direction. Experience since the late twentieth century divides into two segments. From the 1940s to the 1970s, the wage share in developed countries expanded and the profit share contracted; from the 1980s onwards, the trend reversed as the profit share began to increase (Mohun, 2006; Kristal, 2010). Changes have been slow but well defined and robust enough to cast doubt on any law about factor share constancy. The switch from a falling to a rising profit share was a symptom of changes in the wider economic and political climate – among the key ones were globalisation, the shift towards neoliberalism, higher unemployment, and technological developments (Wolff, 2003; Glyn, 2006; Fichtenbaum, 2009; Hein, 2012, Chapter 2). Long-run trends might seem to have little bearing on short-run analysis under given technology and institutions. They may, nonetheless, have implications for how short-run adjustment takes place and should not be debarred from macroeconomic discussion.

Superimposed on long-run factor share changes are short-run variations that relate to business cycles and have similar periodicity. Potential short-run influences on factor shares are multiple, leading to diverse arguments as to why profit and wage shares might be procyclical or counter-cyclical. Empirical evidence and practical experience suggest that factor shares move in a complex fashion, procyclically and counter-cyclically at different stages of the cycle (Nolan, 1987; Sherman, 1990; Buchele and Christiansen, 1993; Jefferson and Pryor, 2010). The

movements offset each other, limiting the net changes, but factor shares are far from constant. Rather than being fixed, they follow their own cyclical sequence bound up with the business cycle but out of phase with it. A full understanding of business cycles should incorporate the factor-shares cycle and not presume that factor shares stay constant.

The present chapter assesses cyclical factor shares, considering the causality behind them and how they mesh with the business cycle. Existing theoretical and empirical work portrays a standard factor-shares cycle, in which factor shares vary little in the long run but pass through a regular sequence of short-run movements that roughly cancel each other out. This standard cycle has been unsettled by recent trends towards a rising profit share and financialised economies. As the balance in factor shares has swung towards profits, the profit-squeeze stage of the cycle has diminished to leave a procyclical profit share and counter-cyclical wage share. The revised pattern, which tallies with underconsumption theories of the business cycle, increases the likelihood that future economic growth will have to be sustained by expanded credit that runs the risk of renewed financial instability.

Reasons for Short-Run Factor Share Movements

Factor shares, defined at high levels of aggregation, embrace many separate components subject to various causal influences. The wage share comprises wage incomes from a vast range of occupations, all facing their own distinctive circumstances. Experience in one occupation will not necessarily match that elsewhere, so that trends may go in opposite directions. The profit share is usually interpreted loosely to include profits in the classic sense, as returns to industrial capital, along with other property incomes such as interest (returns to financial capital) and rent (returns to land and other fixed assets). As with wages, components of the profit share may face different circumstances and show diverse trends. Any attempt to explain factor share movements must pick out causal influences that dominate at a particular time and determine how aggregate factor shares are moving. Numerous arguments have been put forward about the causality behind factor share movements, though they have never reached a consensus on causes or directions of change. Table 1 lists some examples.

Table 1: Causal influences on cyclical factor shares

Procyclical profit share Counter-cyclical wage share	Counter-cyclical profit share Procyclical wage share
Diminishing returns to labour	Bargaining power
Lagged wage adjustments/ Overhead labour costs	Industrial composition of output
Raw materials prices	

Diminishing returns to labour, a normal assumption in orthodox economic theory, should call for a procyclical profit share and counter-cyclical wage share. All else being constant, higher employment reduces the marginal product of labour, since workers now operate with lower per capita levels of the other, fixed factors. Under competitive labour markets, real wages equal the marginal product of labour and fall as productivity declines. Short-run macroeconomic fluctuations occur with given capital and technology, so diminishing returns would imply a falling wage share and rising profit share as the economy expands. If most industries fit this mould, then the aggregate profit share should be procyclical and the wage share counter-cyclical.

Other arguments supporting a procyclical profit share revolve around lagged wage adjustments and overhead labour costs during the business cycle (Hahnel and Sherman, 1982; Sherman, 1990). In an economic upswing, the rise in incomes goes disproportionately into profits rather than wages, for wage payments and employment will not be adjusted immediately. Only in the late upswing can workers respond and improve their share of the rising incomes: the result will be a mainly positive relationship between profit share and national income. A similar argument appeals to the effect of overhead labour costs on the wage share. Many types of work, especially administrative and professional occupations, can be classed as overhead labour that changes slowly with economic activity. When the economy expands, overhead labour remains constant and does not rise in proportion to national income; only in the event of long-run growth will staff be recruited. The static overhead fraction of wage incomes implies a falling wage share and rising profit share. In a downswing the converse applies: overhead labour is retained, and wage

incomes fall less quickly than total income, producing a rising wage share and falling profit share. Such arguments are found chiefly in the heterodox economic literature, notably underconsumption theories of the business cycle (Hahnel and Sherman, 1982). With classical savings assumptions (in the manner of Ricardo), profit recipients save proportionately more than wage recipients – a procyclical profit share raises the propensity to save during an upswing and hinders expansion. This may provoke an underconsumption crisis that creates a turning point when profits cannot be realised and investment is discouraged. The process reverses in the downswing as a rising wage share helps to sustain demand, ease the realisation of profits and encourage renewed investment.

A further reason for a procyclical profit share may be raw materials prices, which generally vary more than wages (Kalecki, 1971, Chapters 5 and 6). When firms increase production, the prices of raw materials rise faster than wages, which constitute a smaller share of the firm's total costs. When firms reduce production, the prices of raw materials decline quickly to leave wage costs as a larger share of the total. Across the whole economy, these trends would yield a counter-cyclical wage share and procyclical profit share. In common with the overhead labour arguments, the reasoning centres on differences in the variability of components of firms' costs. Each firm and industry will have its own distinctive features, but the same overall pattern would be enough to generate cyclical profit and wage shares.

Arguments for a counter-cyclical profit share have focused on changes in the bargaining power of labour as the economy expands and contracts (Boddy and Crotty, 1975; Goldstein, 1985). During an upswing the fall in unemployment makes labour scarcer and bolsters the workers' position in wage negotiations, enabling them to gain higher money wages and improve the real wage. Their strength should be visible at the aggregate level as a rising wage share in national income and falling profit share. A profit squeeze at the top of the cycle may induce a loss of business confidence and fall in investment sufficient to explain the turning point and provide a theory of the business cycle. Once the downswing has begun, unemployment rises again and the bargaining power of labour dwindles. As real wages prove harder to defend, the wage share in national income will fall and the profit share will rise, until higher profitability restores business confidence and revives investment. The boost to economic activity brings about the lower turning point and upswing of the next cycle.

Another stimulus for counter-cyclical profits may be cyclical changes in the industrial composition of output. Investment being more variable than consumption, its prominence in national income/output varies cyclically, peaking near the top of the cycle. Changes in output

composition are inherent in the cycle and bear upon the factor income distribution whenever industries have different wage shares (Kalecki, 1971, Chapter 6). Any differences are an empirical matter, but it seems likely that investment goods industries will have a higher wage share than others (as Kalecki assumed). If true, then this would raise the aggregate wage share during an upswing because investment goods account for a larger proportion of national income. The trend would be reversed in the downswing as investment goods decline in significance. Hence the profit share could become counter-cyclical merely through the varying composition of output during the cycle, a process distinct from the profit squeeze.

The causal influences in Table 1 give no universal principles about factor share movements. Profit and wage shares could be procyclical or counter-cyclical depending on which causal influences happen to be strongest. Since factor share changes are small in proportionate terms, a possible response would be to assume that they follow no cyclical scheme and stay approximately constant in the short run. This was the argument made by Kalecki, who acknowledged that factor shares are not actually fixed but thought that the various counteracting forces would nullify each other (Kalecki, 1971, Chapter 6). One can therefore find some theoretical justification for assuming that factor shares stay constant. It should be possible, all the same, to go further and identify which causal influences on factor shares prevail at certain stages of the business cycle. Even if factor shares are quite invariant and exhibit no simple procyclicality or counter-cyclicality, they may still move cyclically out of phase with other economic variables. The upshot would be a factor-shares cycle that exists in tandem with the business cycle but remains apart from it.

The Standard Factor-Shares Cycle

Empirical evidence on cyclical factor shares and real wages has borne out the theoretical ambiguities, with contrasting and apparently inconsistent results (Brandolini, 1995). At times profit and wage shares seem procyclical and at other times counter-cyclical. Their waywardness might be taken to mean that they are aloof from business cycles – they might be assumed constant on average, despite the variance around the average. Drawing this conclusion would overstate the randomness of the factor shares at each stage of the business cycle. They are not just random but follow their own cyclical path related to the business cycle yet distinct from it. By recognising the cyclical regularities, we can specify a standard factor-shares cycle.

Table 2 shows the usual sequence of factor-share movements, which has been observed over many business cycles in the past and is corroborated by empirical studies (Weisskopf, 1979; Hahnel and Sherman, 1982; Buchele and Christiansen, 1993; Van Lear, 1999; Sherman, 2003). As the economy begins an upswing, the profit share rises and wage share falls (Stage I). The trend persists through much of the upswing until the economy nears the top of the cycle, whereupon the profit share stops rising and a profit squeeze ensues. The late upswing sees a fall in profit share and rise in wage share (Stage II). When the economy starts to contract, the profit share continues to fall and the wage share to rise, a trend that lingers well into the downswing. Economic activity is now declining, so the cyclicity of factor shares has changed again (Stage III). Towards the bottom of the cycle the wage share falters and the profit share recovers, reversing the cyclical trends until the lower turning point (Stage IV). Once the economy embarks on the next upswing, the sequence will be repeated. The timing and duration of the stages varies case by case, but a common pattern can be discerned.

Table 2: Stages in a typical business cycle

Stage	National income	Wage share	Profit share
I (Early upswing)	Rising	Falling	Rising
II (Late upswing)	Rising	Rising	Falling
III (Early downswing)	Falling	Rising	Falling
IV (Late downswing)	Falling	Falling	Rising

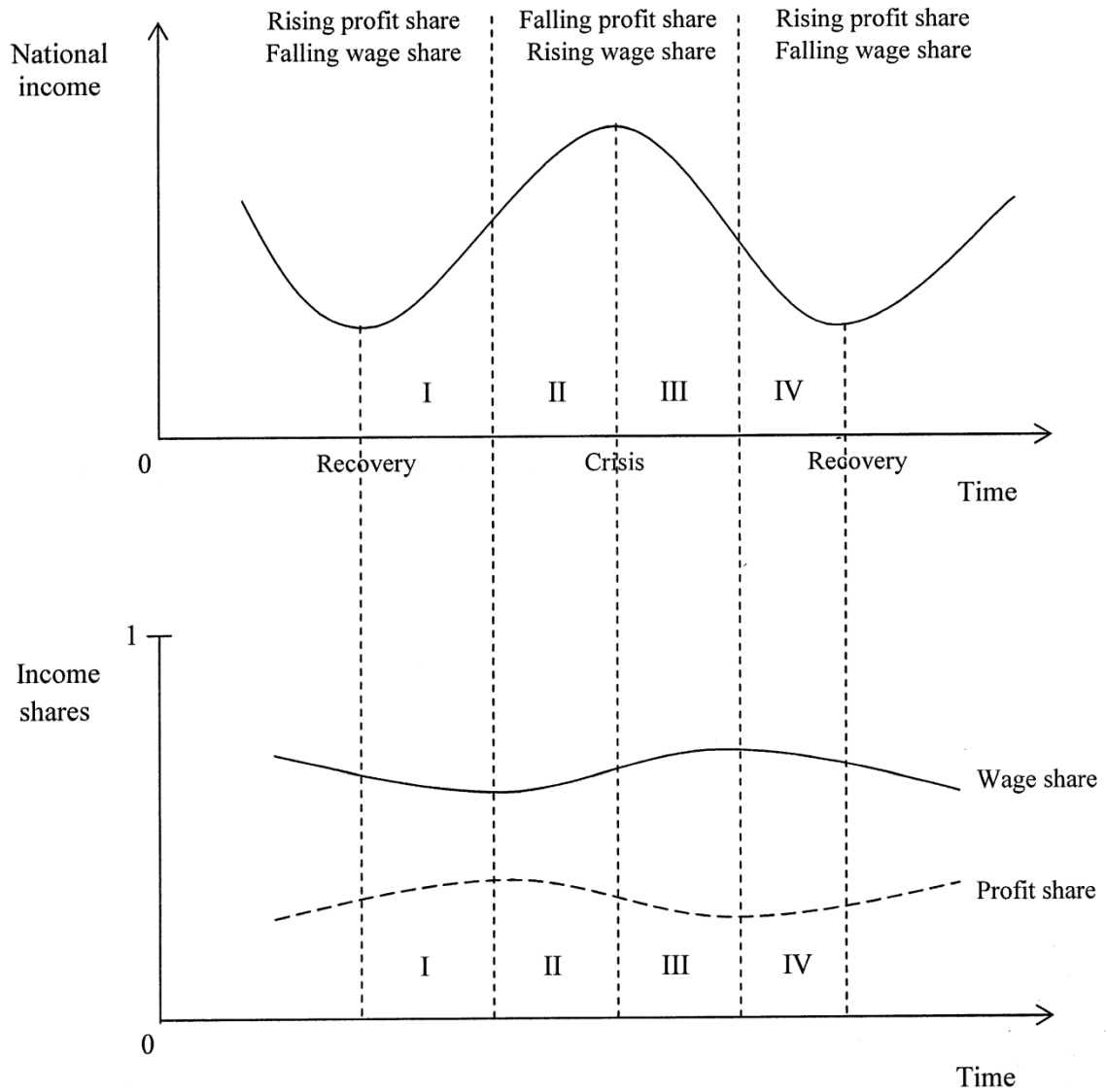
What causes this standard factor-shares cycle? A similar outcome can be obtained from Goodwin's growth cycle model and related approaches, which rest on a version of the profit squeeze argument (Goodwin, 1982; Skott, 1989, Chapter 3). In Goodwin's model, the bargaining power of labour is manifested not by the wage share but by its direction of change, such that high employment brings a rising wage share. The model ties the growth rate of employment to the profit share, on the assumption that investment comes from profits and drives economic growth. These two dynamic relationships, combined in a mathematical model, are enough to generate

cyclical factor share changes as in Table 2, where the profit and wage shares switch between procyclical and counter-cyclical movements. Goodwin's growth cycle can offer a simple and mathematically elegant way to account for the standard factor-shares cycle, subject to the strong assumptions required by the model.

A more general explanation would appeal to a mixture of the causal factors in Table 1. During the early upswing, when unemployment is still high and the bargaining power of labour is low, the biggest influence on factor shares will be lagged wage adjustments and overhead labour costs, creating a rising profit share. Things change once unemployment falls: workers' bargaining power revives and they can push for higher real wages, which will impose a profit squeeze and falling profit share. During the early downswing, lagged wage adjustment and overhead labour costs initially protect the wage share and let it keep rising. Eventually, higher unemployment erodes the bargaining power of labour and the wage share falls. The logic here is that the standard factor-shares cycle can be explained through cyclical shifts in the balance between causal influences in the two columns of Table 1.

Although the factor-shares cycle and business cycle are connected, they do not reach their upper and lower turning points at the same time – they have similar periodicity but are out of phase. The profit share rises in the early upswing but peaks before the top of the business cycle and then starts to fall, reaching a trough before the bottom of the business cycle. The wage-share cycle is the mirror image of the profit-share cycle. Figure 1 shows the standard factor-shares cycle and how it relates to the business cycle. Over a complete cycle, factor shares alternate twice between procyclical and counter-cyclical movements. Whether the factor-shares cycle precedes or lags the business cycle is arbitrary, given that the profit share attains its maximum before the peak of economic activity, while the wage share attains its maximum after the peak. The profit and wage shares are, by definition, inversely related and add up to unity at all times. As average long-run values for the US case, a figure of a third is sometimes quoted for the profit share and two-thirds for the wage share (Young, 2010). In the lower diagram of Figure 1, factor shares vary around a benchmark of one-third profit, two-thirds wages: these proportions typify the values observed in the US but have no special significance.

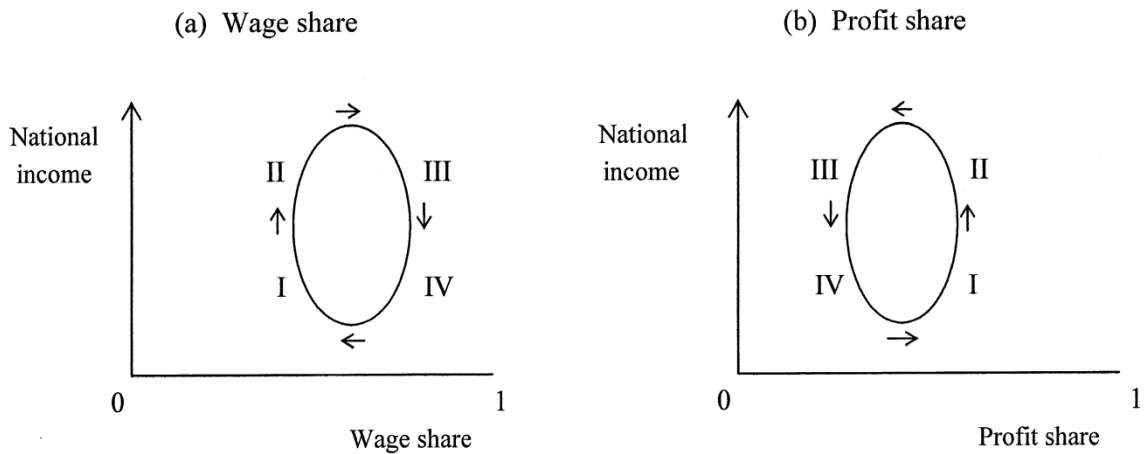
Figure 1: The factor-shares cycle in relation to the business cycle



When factor shares are plotted against national income, the trends in Figure 1 yield a circular path that can be termed the distributive loop (Jackson, 2012). The loop passes through the four stages in Table 2 and goes in opposite directions for the wage share and profit share, as in Figure 2. From the bottom of the business cycle, national income expands in the early upswing, with

the wage share falling and profit share rising (Stage I): the distributive loop goes clockwise for the wage share and anticlockwise for the profit share. By the late upswing the wage share has reached its minimum and starts to rise again, the profit share to fall (Stage II). The rising wage share and falling profit share persist after the top of the business cycle and continue into the early downswing (Stage III). Trends in factor shares are reversed in the late downswing – the wage share falls and the profit share rises (Stage IV). After the lower turning point, the sequence is ready to begin again with Stage I. Limited variation in wage and profit shares, under Bowley’s Law, would narrow the gap between maximum and minimum values for factor shares in Figure 2 and compress the distributive loop into a thinner, more vertical oval.

Figure 2: Distributive loops



In practice, factor share movements will not conform exactly to the standard factor-shares cycle, and each cycle will have its own distinctive traits. The periodicity, amplitude and phasing in Figure 1 may be changeable, together with the shape of the distributive loops in Figure 2. Any factor-shares cycle takes place against all the other forces that impinge on the economy in the short run. Also relevant are the longer term forces causing chronic changes in factor shares that coexist with short-run cyclical movements and may have a bearing on them. Especially relevant to the factor shares cycle are two features of recent economic experience: the financially induced

recession and the long-run rise in profit share. As economies have become financialised, the causality behind business cycles has swayed towards financial issues; as the profit share has flourished, doubts have arisen about profit squeeze theories. The evolving economic environment may alter the factor-shares cycle and how it relates to the business cycle.

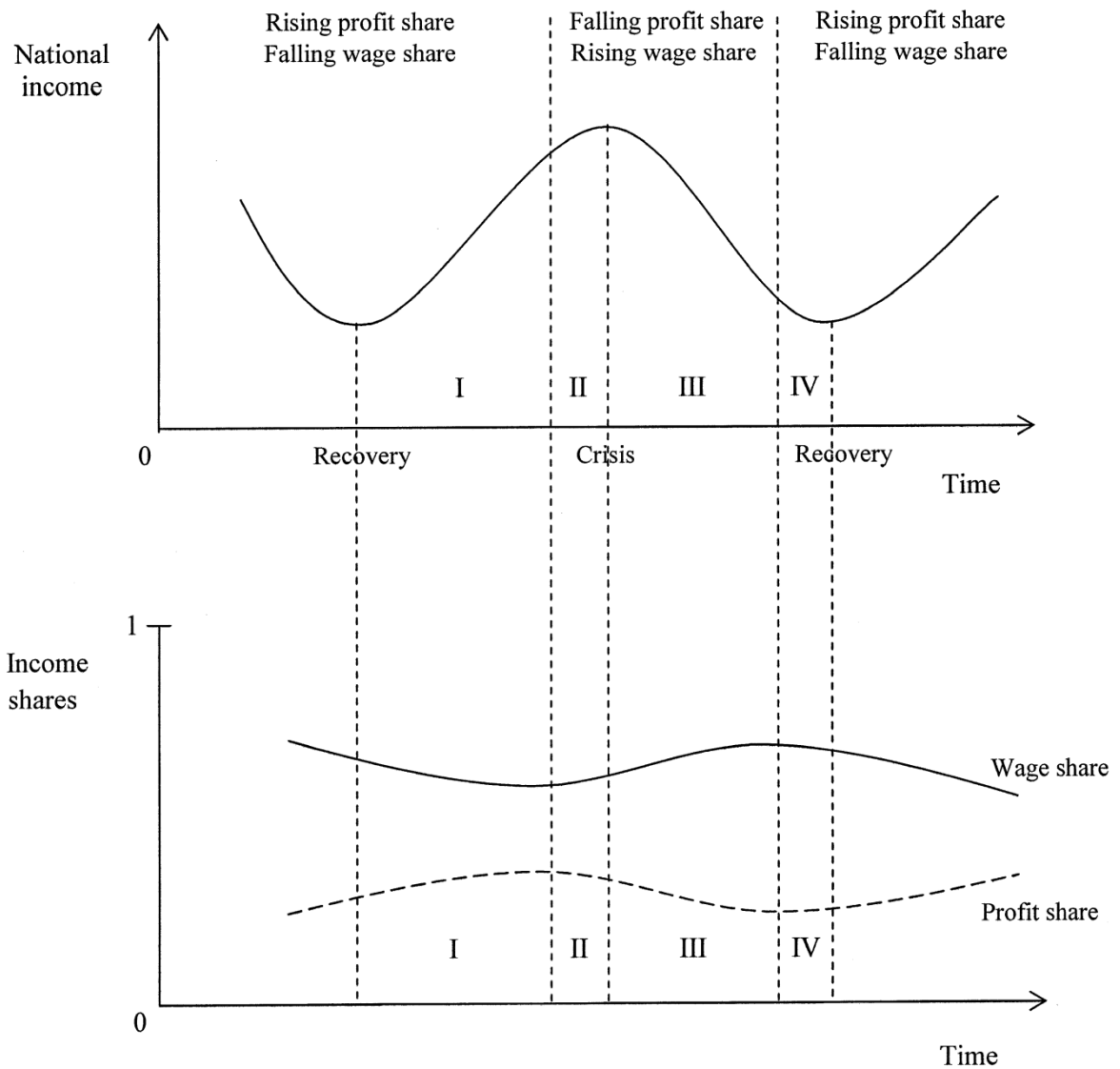
Changes in the Factor-Shares Cycle

From the 1980s onwards, the long-run trend in the factor income distribution has been a rising profit share and falling wage share in virtually all developed countries (Duménil and Lévy, 2002; Mohun, 2006; Carter, 2007; Kristal, 2010; Dünhaupt, 2013). Having lasted for several decades, this trend must signify changes in how capitalist economies are structured and how they function. A detailed causal explanation lies beyond the scope of the present chapter, but the rising profit share coincides with the switch towards neoliberalism and financialisation in the late twentieth century (Glyn, 2006; Zalewski and Whalen, 2010; Hein, 2012, Chapter 2). The end of the Keynesian era loosened commitment to activist macroeconomic policies and saw greater tolerance of high unemployment, which became ubiquitous throughout the developed world. Organised labour suffered a loss of bargaining power at all stages of the business cycle (Peters, 2011). Workers could not uphold their real wages, and the wage share in national income started to decline. Reduced bargaining power of labour affects the business cycle because it curtails the profit squeeze near the upper turning point; the forces that evoke a counter-cyclical profit share are weakened. With less of a profit squeeze from capital-labour conflict in manufacturing industry, the role of finance is enhanced. Neoliberalism has been accompanied by financialisation, which has spawned a deregulated financial sector whose transactions and rentier incomes have swollen relative to the size of national economies (Epstein and Jayadev, 2005; Krippner, 2005; Palley, 2008; Van Treeck, 2009; Onaran, Stockhammer and Grafl, 2011). Instead of providing services to the rest of the economy, finance has been seen as a source of growth in its own right and a spearhead of innovation. Financial instability was always a danger (albeit underestimated), and financial problems have been pivotal to the current recession.

How will the factor-shares cycle react to these changes? The profit share will trend upwards in the long run and the wage share downwards, so that cycles no longer occur around the horizontal trends of Figure 1. Lost bargaining power from permanently high unemployment means that workers will find it hard to squeeze profits even at the top of the cycle. Components

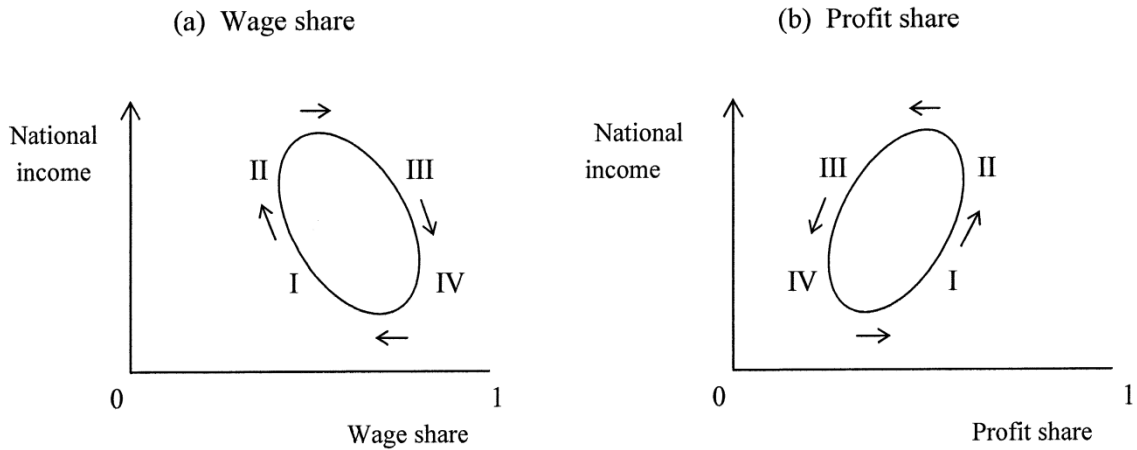
of the factor-shares cycle that rely on the profit squeeze and its relaxation will have less weight compared with others: Stages I and III will expand and Stages II and IV will contract, as in Figure 3. Forces generating a procyclical profit share will gain at the expense of those generating a counter-cyclical profit share. As a cause of the upper turning point, a profit squeeze becomes less plausible than other possible explanations (underconsumption, financial fragility) and loses credibility as a prime mover of business cycles.

Figure 3: The factor-shares cycle with a reduced profit squeeze



A reduced profit squeeze will change the shape of the distributive loops in Figure 2. Stages II and IV, dependent on the imposition and relaxation of the profit squeeze, will become shorter; Stages I and III will assume more importance and stretch out to cover more of the loops. These stages entail a procyclical profit share and counter-cyclical wage share, so they will impart an upward slant to the profit-share loop and downward slant to the wage-share loop (see Figure 4). No longer symmetrical, the loops will be distorted into a narrow oval that gets narrower as Stages II and IV shrink further. The pattern of factor share movements comes to resemble the procyclical profit share and counter-cyclical wage share predicted by underconsumption theories of the business cycle. With a chronic rise in the profit share, the average profit and wage shares cannot remain stable and the distributive loop drifts leftward for the wage share and rightward for the profit share. The main stage of profit expansion (Stage I) will exceed the main stage of profit contraction (Stage III) in its length and intensity. Distributive loops will not repeat themselves exactly and will change their shape and position.

Figure 4: Distributive loops with a reduced profit squeeze



The slope of the curves in Figure 4 is broadly consistent with evidence on cyclical factor shares. Empirical studies have found that profits are procyclical and wages counter-cyclical during most of the upswing and downswing, confirming that the profit share is on the whole

positively correlated with economic activity and the wage share negatively correlated (Sherman, 2003; Schneider, 2011; Hein, 2012, Chapter 2). Any profit squeeze resides only in a small space just before the peak of the cycle and a profit revival just before the trough – as economies have moved from the Keynesian to the neoliberal era, the scope for a profit squeeze has declined (Boddy, 2009). Shorter stages of profit squeeze and revival will reduce the time lag between the factor-shares cycle and business cycle, as in Figure 3. In practice, one would not envisage well behaved distributive loops that keep the same shape and position in every cycle – other variables are not held constant, and many extraneous influences can upset how the economy adjusts. Studies that trace cyclical factor-share movements do, nevertheless, indicate circular motions along paths reminiscent of those in Figures 2 and 4 (Harvie, 2000; Mohun and Veneziani, 2008; Skott and Zipperer, 2010; Zipperer and Skott, 2010). The circular motions, melded with a procyclical profit share, should engender distributive loops with the slanted shapes of Figure 4. In the same way that each business cycle has distinctive attributes, actual distributive loops will differ in scale and shape. The loops in Figure 4 can only be an outline of what might be expected, rather than an exact trajectory to be followed in every factor-shares cycle.

If the profit squeeze is curtailed, then attention turns towards finance and underconsumption when explaining the turning points of the business cycle. In the most recent cycle, a prolonged credit-fuelled economic boom led to the crisis of 2008 and stagnation since then. This experience matched the train of events foretold by Minsky's financial instability hypothesis: a boom occurs through endogenous money and ever-expanding credit, but finance becomes increasingly insecure until the bubble bursts and economies tumble back into recession (Minsky, 1985, 1995; Papadimitriou and Wray, 1998). The downturn is caused primarily by the collapse of credit and the resulting fall in investment spending that deflates the economy and instigates a slump. Finance thus appears to be the cause of the business cycle, and tighter financial regulation would be the obvious way to curb the cyclical fluctuations.

Procyclical profits are essential to the underconsumption view of business cycles, in which a downturn is prompted by trouble in realising profits, not by a falling profit share. Underconsumption theories may seem distinct from financial ones, but they could be intertwined. The last economic boom, taking place against a backdrop of static real wages, saw aggregate demand sustained by consumer credit despite limited disposable incomes (Sherman, 2011; Palley, 2012, Part I; Taylor, 2012). Normally a rising profit share would slow down expansion by raising the propensity to save, as underconsumption theories would contend, but easy access to credit delayed this dampening effect. The drop in demand, when it finally happened, was triggered by financial crisis, yet the heightened importance of finance was due in part to the long-

term decline in the wage share and difficulties in consuming from wage incomes alone. An underconsumption view can mesh with a Minsky-style financial analysis to give a more rounded perspective on events. As far as policy is concerned, this hints that financial regulation on its own may not be enough to forestall future crises (Kotz, 2009; Palley, 2010). Important too is a return to rising real wages that permit steady economic growth without unsustainable credit to pump up aggregate demand. The requirement here would be to stop the slide towards a lower wage share and allow workers to maintain their share in national income and benefit from higher real incomes as the economy grows. Plainly in the interests of the average worker, this would have a collective benefit in so far that it would aid the realisation of profits and yield steadier growth with less intense cycles and lower risks of boom and bust.

The rising profit share witnessed in recent years might seem unambiguously to benefit recipients of property incomes, whether derived from ownership of financial assets or industrial capital. With financialisation, however, the chief beneficiaries have been financial and rentier interests, as against manufacturers and nonfinancial corporations (Epstein and Power, 2003; Epstein and Jayadev, 2005; Dünhaupt, 2012). For industrial capital, the deflationary policy stance and slow aggregate demand growth during the neoliberal era has caused stagnation in product markets, which makes it difficult to sell output and realise profits. Financialisation has urged a switch away from long-run growth objectives towards immediate profitability, with shorter planning horizons, higher real interest rates and different management priorities. The plight of industry has been termed the ‘neoliberal paradox’: nonfinancial corporations face reduced demand and greater product competition that restricts their profits, but at the same time must provide regular short-run profitability in order to satisfy the financial markets and escape the perils of falling stock prices and hostile takeover bids (Crotty, 2005). Even though financialisation has boosted property incomes and the profit share, the dominance of financial and rentier interests has had adverse consequences for the real economy and nonfinancial activities (Dore, 2008; Orhangazi, 2009; Hein, 2011). A revival of the wage share would benefit not only workers but those nonfinancial corporations whose profitability relies on wage-led demand that will persist in the longer term. Improved ability to realise profits would help adjust the distribution of property incomes away from financial capital towards industrial capital. The unbalancing of developed economies has included a shift of factor shares from industrial to financial capital, as well as from labour to capital, and any rebalancing should aim to reverse both these trends.

Conclusion

Factor shares, if they obey Bowley's Law, are supposed to stay constant with only small, negligible divergences from a norm. Yet business cycles cause changes in bargaining power, cost structures and other variables that move factor shares around their (slowly evolving) long-run values. The standard factor-shares cycle sees factor shares varying alongside the business cycle but out of phase with it. We cannot say that the profit share and wage share are procyclical or counter-cyclical: each upswing and downswing of the business cycle is subdivided into stages where factor shares expand and contract. The overall story of near-static factor shares hides a complex sequence of movements that roughly cancel out in every cycle. This applies not only to the business cycle as a whole but to the upswing and downswing viewed separately, as they both include procyclical and counter-cyclical factor share movements for profits and wages. Factor shares do display some stability, though a blanket assumption of constancy gives a false impression. There is no smooth growth path that holds factor shares steady at equilibrium values. Capitalist economies grow through bursts of economic activity, including factor-share variations, which permit long-run progress and benefits shared between profits and wages.

Economic developments since the late twentieth century have challenged the rule of thumb about stable factor shares. From the 1940s to the 1970s, post-war expansion, Keynesian macroeconomic policies and generous welfare measures buttressed the bargaining power of labour relative to capital. Labour raised its share of national income and, within the business cycle, imposed an effective profit squeeze. Today seen as a golden age of prolonged economic growth, the post-war decades were prone to frequent but mild business cycles. Unemployment remained low by current standards – there were no major recessions or financial crises. On the downside, industrial tensions became widespread by the 1970s and capital-labour conflicts brought high inflation and the pitfall of a deflationary backlash. Big changes in economic and political climate took place from the 1980s onwards. Neoliberalism, deregulation of finance, passive macroeconomic policies and high unemployment reduced the bargaining power of labour and restored that of capital. The trend towards a rising wage share petered out, to be replaced by a rising profit share. Unable to protect real wages, labour was too weak to impose a substantial profit squeeze within the business cycle. Deregulated finance temporarily deferred underconsumption through easy consumer credit and rising property prices in the lengthy boom at the beginning of the twenty-first century. The ultimate outcome was destabilising, for the boom could not persist and ended with the 2008 crisis and ongoing global recession. Recovery,

elusive at the moment, would raise the spectre of repeated, severe financial crises if it was linked to another credit-propelled boom.

The changes since the 1980s have disrupted the factor-shares cycle and moved it towards an underconsumption mode based on procyclical profits. With real wages stagnant, expansion is biased towards rising property incomes that generate less expenditure than wage incomes and reduce the chances of sustained growth. Consumer spending can be funded through easier credit (which could become normalised within a reconfigured business cycle), but this would promote financial instability and perennial crises. Despite the learning opportunities offered by the current recession, it still seems likely that any recovery will have to lean heavily on insecure credit. As things stand, the developed economies are locked into Minsky-style problems of unstable finance compounded by underconsumption issues from suppressed real wages. Financial instability has long been a feature of business cycles, but it looms larger through its extension to consumer spending as well as investment.

Prospects for greater stability and smoother growth would improve if the developed economies could regain the standard factor-shares cycle of Figure 1, which would amend the imbalance of bargaining power between capital and labour. Once workers can defend real wages and take a share of income growth, it will become easier for the economy to expand through spending from current incomes rather than consumer credit. Business cycles will not disappear, but they could be shorter and less intense, with lower risk of financial collapse. Financial regulation on its own cannot accomplish these changes, which need coordinated action to raise employment and augment real wages. The message resembles the Post Keynesian arguments to preserve balance between capital and labour in order to lubricate the functioning of the economy. Such arguments are usually made in the context of anti-inflationary measures that seek to combine full employment with low inflation by restraining the bargaining power of labour. Now the problem occurs in reverse: chronic recession and high unemployment have undermined labour's bargaining power and damaged the capacity for revival through real income gains across the population as a whole. Without more equal bargaining power and a return to the standard factor-shares cycle, the next economic expansion is liable to rest upon insecure finance and leave us vulnerable to further crises.

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