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Working for the economy

The economic case for trade unions



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Summary

The UK has paid a heavy economic price for three decades of anti-union policy and law. If the recovery from the recession is to be placed on a secure footing, the status of trade unions as an essential part of sound economic policymaking must be restored.

The share of wages in national income has declined across the developed world over the last thirty years. At the same time, and despite political rhetoric, growth in wage rates is significantly down on the levels achieved in the post-war period. For the UK, the boost provided by extraordinary levels of household debt created in the 2000s, and the consumption it fuelled, collapsed spectacularly during the financial crisis of 2008.

These two facts are associated. Although wages are treated purely as a cost for businesses in conventional economics, where reductions in wages imply greater profits, and therefore more growth, this is only part of the story. Wages and salaries paid to employees are not simply a cost to businesses. They are also the means by which consumers buy products. If wages fall as share of income, it implies a shrinking of the market. The result is a drag on profits and growth.

The UK is a wage-led economy

Our research shows that, for nearly all European countries, including the UK, growth is 'wage-led'. This means that the boost to demand from rising wages outweighs other impacts on profits and international competitiveness; growth in national income is driven by growing wages more than by growing company profits.

For every 1% reduction in the share of national income going to wages, UK national income – measured by GDP – is reduced by 0.13%, or £2.21bn at current values. Wage share has declined from its 1975 peak of 76% to an historic low of 67% today; this has had a direct impact on national income.

Decline in union density has slowed economic development

The slide in the wage share is the outcome of deliberate government policy, enacted more forcefully in the UK than in much of Europe, to reshape labour market institutions. Trade unions have been legally curtailed and unionisation has declined from a peak of nearly half the workforce (49.9%) in 1981, to its low point today (25%).

The slide in union authority, as indicated in falling density, has driven the falling wage share. The literature suggests that this fall in union density is of far greater impact than 'skill-biased' technological change or globalisation in explaining the decline in wage share.

Declining union presence has, as a result, fed directly into lower growth overall. The evidence we present suggests that the decline in union density, from its peak in 1975 to today, has reduced UK GDP by up to 1.6% – a significant and permanent loss. Restoring union density to the levels seen in the early 1980s would, thanks to the impact on the wage share, add £27.2bn to UK GDP.

The bias of policy for many years has therefore been mistaken, implicitly assuming the UK to be a profit-led economy. Far from boosting growth, and therefore promoting a 'trickle down' effect, it has both worsened inequality by squeezing the wage share, and at the same time hampered overall economic development – a clear lose-lose. Restoring the wage share, in a wage-led economy like the UK's, is a win-win: improving both equality *and* development.

Introduction

This paper presents robust econometric evidence on the positive impact of trade unions and collective bargaining on economic growth. Contrary to the assumptions embedded in the increasingly restrictive legal regime governing trade union activity, now to be tightened further under proposals made in the Queen's Speech 2015, responsible trade unionism can boost economic growth and reverse widening inequality: a win-win for both efficiency and social justice, usually considered rare in economics.

Building on previous econometric work on 'wage-led growth', the evidence presented here demonstrates that for a range of European countries, including the UK, an increasing trade union presence ensures that a greater share of economic output is distributed to the labour force. This is against the strong assumptions of economic policymaking across the continent, which has favoured (or at least turned a blind eye to) a rising share of income going to the owners of capital as the necessary complement of encouraging entrepreneurship, investment and innovation. The 'trickle down' effect was supposed to ensure that, even if inequality rose, all would be better off as a result.

'Neoliberal' policies along these lines have significantly reduced trade union authority in both workplaces and wider society – decisively so in the case of the UK. Weakened trade unions have, in turn, reinforced the shift in the distribution of income towards those who own capital, rather than the workforce, over and above the widely-reported impact of 'skill-biased' technological change. A survey of the evidence on the latter, presented here, suggest that the impact of technological change on the wage share is far less clear than conventionally presented. It has been changes in the structure of the labour market, and in particular the steady decline of trade union bargaining power, that has had the more substantial impact across the continent. But, regardless of causes, as the macroeconomic analysis presented in this paper indicates, the shift away from wages and salaries in national income has come at a cost not only in terms of fairness or other social concerns, but directly in economic outcomes.

The logic is simple: wages and salaries have a dual role. As well as posing a cost to businesses, wages paid to labour also provide a market demand for output, hence higher consumption. Recognising that rising wages produce larger markets can also lead to increased investment (and therefore economic growth) by businesses. The balance of the cost of rising wages against the expanding market offered by rising wages will determine the character of economic growth in any given economy – ‘profit-led’, in which costs dominate, or ‘wage-led’, in which the market effect dominates.

The evidence presented here shows that European economies in general, and the UK in particular, are wage-led. Policies, as in recent practice, that reduce the share of income going to wages imply as a result an economy-wide cost in lost growth and output. In a wage-led economy, a declining share of wages leads in turn to a reduced rate of economic growth. Society becomes both more unequal and, disturbingly, less efficient. Far from securing more rapid rates of growth, neoliberal policy in Europe has produced a distinct cost.

We estimate that the loss of output from a falling wage share in the UK is significant. For every 1% increase in the share of profits in national income, GDP is reduced by 0.13%, or £2.21bn at the UK's current GDP. Any positive effects from a greater transfer of resources to the owners of capital, appearing as both an insignificant impact on investment and a mild impact on foreign exports, are more than offset by the fall in consumption expenditure. The decline in the wage share of national income in the UK, from a peak of 76% in 1975 to 67% in 2014, has, we suggest, reduced overall economic growth. And it has been the slide in union authority, best seen through the slide in union density, which accounts for that slide in the wage share by up to 9.3% according to our estimates.

Placing this together, we estimate that for the UK the decline in unionisation (as represented by union density) has reduced UK GDP by up to 1.6% over three decades – a significant and permanent loss of output. Alternatively, if union density were to recover to the levels seen in the early 1980s, with close to half the workforce in the unions, GDP would be 1.6% higher, or £27.2bn. This would be a significant, and permanent, net gain.

In other words, the ongoing bias of policy towards restricting trade union rights, at least partly motivated by the intention to deliver higher economic growth, is profoundly ill-conceived. To boost growth and reduce inequality, policy must instead focus on supporting and sustaining responsible trade unionism. Partly, government can set a direct lead on this, removing the 1% cap on pay increases in the public sector and restoring collective bargaining where it has been undermined. More generally, the severe legal restrictions placed on trade unions in the UK have most likely had a detrimental impact on economic growth. Derestricting union activities, most notably in allowing them a greater capacity to organise and act in defence of their members, would help promote union membership and therefore have a positive impact on economic growth.

Overall, the evidence here shows that the bias of policy (and the political narrative) against unionism and restrictions on union activity cannot be justified in any economic terms. The UK has, collectively, paid a heavy price for three decades of anti-union policy and law. If the recovery from the recession is to be placed on a secure footing, the status of trade unions as an essential and desirable part of sound economic policymaking must be restored.

Reading this report

The data presented in Chapter 1 shows the dual trends, of a significant decline in the share of national income going to wages and declining strength of collective voice, that have characterised the past four decades. We cover how and why the bargaining power of employees has reduced significantly across Europe in recent years, with the UK leading the trend, and present the empirical evidence that this decline in membership and efficacy is related to a declining labour share of income.

In Chapter 2 we consider what negative impact this has had on economic prosperity, laying out the evidence that strong collective bargaining structures make for more robust economies. Chapter 3 provides policy proposals from seven UK trade unions aimed at reversing the negative economic impact that restrictions on the bargaining power of workers have had.

1. The value of collective voice in the workplace

The labour market in the UK has become increasingly characterised by a falling wage share, stagnating median wages, growth in low-paid, precarious work and runaway top to bottom pay ratios. Behind these trends has been a decisive shift of power in favour of employers in determining employment terms, as unionisation, fair-wage and collective bargaining structures have been seriously undermined.¹

Wages are determined in a bargaining process that starts with the most fundamental elements of the economy: the ability of those who own capital to buy labour. Over time, bargaining structures have developed to negotiate the interests of the labour force with their employers. For the UK, like other European countries, the main institutions that negotiate from the standpoint of the labour force are trade unions.

As we show in this chapter, trade unions have been consistently undermined over the last three decades, right across Europe. The predominant economic argument provided for the anti-union policies and labour market deregulation that have characterised this undermining is that despite a loss of their bargaining power, workers overall will gain from economies that are better able to produce profits and therefore faster growth. The findings of our research counter this claim.

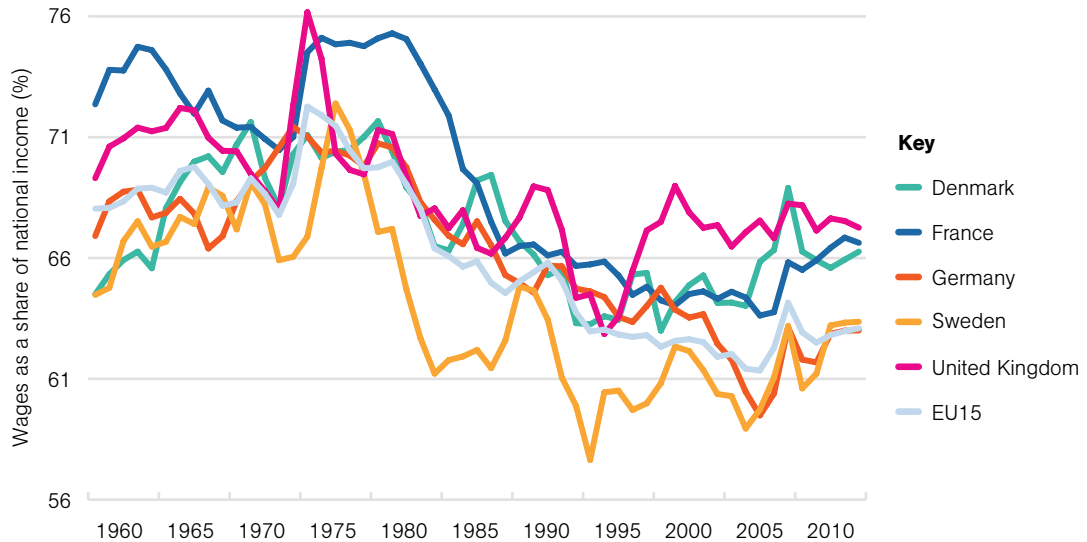
To begin, we here take a look at the ways in which, despite very different histories, a common European drive to reduce union power has set in. We address dominant arguments presented for the decline in the wage share, and make the case that – whatever impact technological change may have had – it is the decline in unions' bargaining power over wages that has been decisive.

1.1 Less money for more work

The decades since the 1970s have seen a significant shift in the distribution of the national incomes of developed economies. Regardless of their specific histories and institutions, European countries have seen a pronounced decline in the share of national income received by labour – the 'wage share' – and a corresponding increase in the share going to capital in the form of profits of private business owners, shareholders and financial investors – the 'profit share'.

Figure 1 illustrates the wage share for selected EU countries since the 1960s. Despite significant differences in the industrial relations and welfare regimes of these countries, a clear decline in the wage share from the 1980s onwards is a common feature in all of them.

Figure 1: Decline in the wage share across Europe²



Source: AMECO³

Note: 'EU15' shows an average of wage share decline in 15 European Union Member States: Austria, Belgium, Denmark, Finland, France, Germany, Greece, Ireland, Italy, Luxembourg, Netherlands, Portugal, Spain, Sweden and the United Kingdom.⁴

For the UK, the wage share reached its peak in 1975 at 76.2% and by 2014 had decreased by 8.9%, to 67.3%. This decline is a trend in the advanced countries such as Germany and Sweden, as is shown in the graph, but also in many developing economies, for example in India, South Africa and Mexico.⁵ Over the period 2000 to 2008 the share of wages declined in 58% of what the International Labour Organization (ILO) categorises as the 'emerging economies' such as Brazil, Indonesia, South Africa and Turkey, as well as in 53% of low- and middle-income countries and 60% of the least developed countries.⁶

This declining wage share has arrived alongside a pronounced increase in the inequality of wealth and income, with a particularly dramatic increase in the share of both the top 1% and 0.1% of income earners. Since wage income is generally more equally distributed than income from profits, many scholars have argued that there is a causal relationship between the two trends – meaning that society has become more unequal specifically because the share of national income going to wages has decreased.⁷ The UK has seen a particularly sharp divide in the way the declining wage share has impacted more and less well-paid workers. Most of the fall in the wage share has been borne by those earning average wages and below, while earnings for those at the very top have raced away. This means that people on average and low wages have effectively been hit twice, having access to a shrinking slice of a progressively smaller wage pie.⁸

Box 1. Including the income of the self-employed in the wage share

Income generated by self-employed workers makes up an important part of the wage share. Difficulties in accurately measuring the income of this group, however, often lead to it being based on overly simplistic assumptions, or left out of calculations entirely.

With the proportion of self-employed workers within the UK labour force increasing, it is ever more important to include their labour income in measures. We have therefore calculated the wage share as the total share of GDP that goes to labour compensation, adjusted to include a labour compensation for each self-employed person equivalent to the average compensation of dependent employees. This methodology is used by a number of official databases, including that of the European Commission and OECD.⁹

1.2 Why has the wage share fallen?

Such a stark change, occurring across different countries simultaneously, has naturally attracted scholarly attention. The remainder of this chapter presents an explanation of the fall in the wage share that focuses on the role that bargaining institutions play in determining how any economy distributes its output.

A conventional approach to the ‘functional income distribution’ (the division of an economy’s output between labour and capital) would conclude that as labour is paid according to its productivity, wages fall when the workforce become less productive. This is generally known as the ‘neoclassical’ approach. What this approach does not fully account for is how wage levels are affected by the relationship between employees and their employers. Here we argue instead that, while factors such as productivity have an impact on the remuneration of workers, wages are principally determined by the relative bargaining power of workers and employers. As the labour market is not a passive instrument that allocates rewards on the basis of contributions (as the neoclassical approach assumes), wages are not automatically determined by the level of input of employees. The labour market is a complex, social institution made up of people, and as such is open to many influences.

Further to this, taking into account the influences on the labour market, our approach to the declining wage share acknowledges that the determinants of the bargaining power of both employees and employers are multidimensional. The capacities of both parties to negotiate wages are influenced by market conditions, the coverage of labour market institutions such as trade unions, and the legal and political context in which bargaining operates.¹⁰ We explore the implications of looking at the bargaining power of labour as a key determinant of the decreasing wage share, alongside alternative explanations for the decline, in the sections that follow.

1.3 The role of unions in maintaining the wage share

European societies have evolved, over many years, similar institutions to help regulate the labour market. Although the form and extent varies across countries, these institutions have historically acted as the primary route through which labour expresses its collective voice. This institutional role of trade unions in bargaining for labour has been critical and has developed alongside

capitalism as a vehicle for setting wages. In recent years, however, there has been a pronounced decline in membership of unions and in the share of the workforce covered by collective bargaining.

There are a number of factors to consider when establishing a picture of the bargaining power of employees at a national level. The strength of collective voice depends on bargaining structures, access to government and the militancy of the workforce. To draw up an international comparison we present data for a number of countries in the UK on the following three variables:

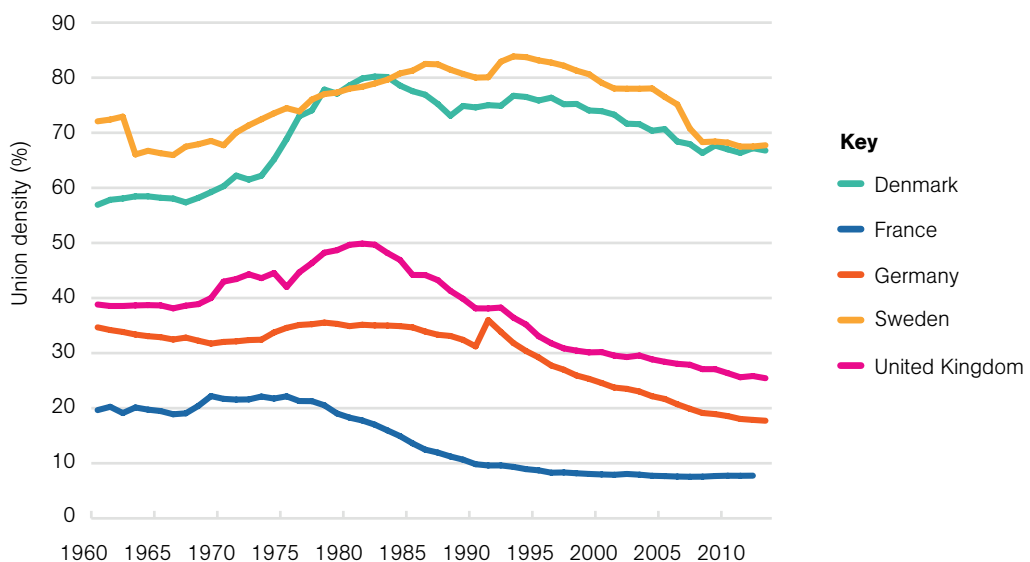
1. Union density
2. Bargaining coverage and wage setting
3. Strike activity

1. Union density

Although institutional arrangements regarding the expression of collective voice differ between countries, union density (defined as net union membership as a proportion of wage and salary earners in employment), is seen as the best, and is the most commonly used, variable to assess the actual strength of trade unions.¹¹ Unsurprisingly, it has been found in repeated studies to have a significant impact on the wage share, a point we explore more thoroughly in Chapter 2.

The graph in Figure 2 shows how union density has changed in selected European countries since 1960.

Figure 2: Fewer people in unions



Source: OECD¹²

Note: Union density is calculated as union membership as a proportion of wage and salary earners in employment.

A cross-country comparison at a glance shows that union density is higher in the UK than in Germany and France, although remarkably lower than in Sweden and Denmark.¹³ The pattern of declining union density is common across European countries, but the UK has experienced one of the strongest declines amongst them.¹⁴

Union density in the UK has halved (from 49.9% in 1981 to 25.4% in 2013), a decline which is only surpassed by Austria (40.5%), Portugal (40.2%) and Ireland (25.2%)¹⁵ and clearly exceeds that in Germany (18.3%) and France (14.4%). The general trend of the decline in union density is apparent across all the EU15 countries, with only Belgium, Finland and Spain (a country where trade unions were illegal until 1977) reporting a higher union density in the 2010s than in the 1970s.¹⁶

Box 2. The changing picture of industrial relations

Labour unions bloomed in many countries across Europe between the 1950s and 1970s. In the UK, with a Fordism accumulation regime characterised by large, hierarchically organised firms, it was standard procedure for terms of employment to be negotiated between trade unions and employers' organisations.¹⁷

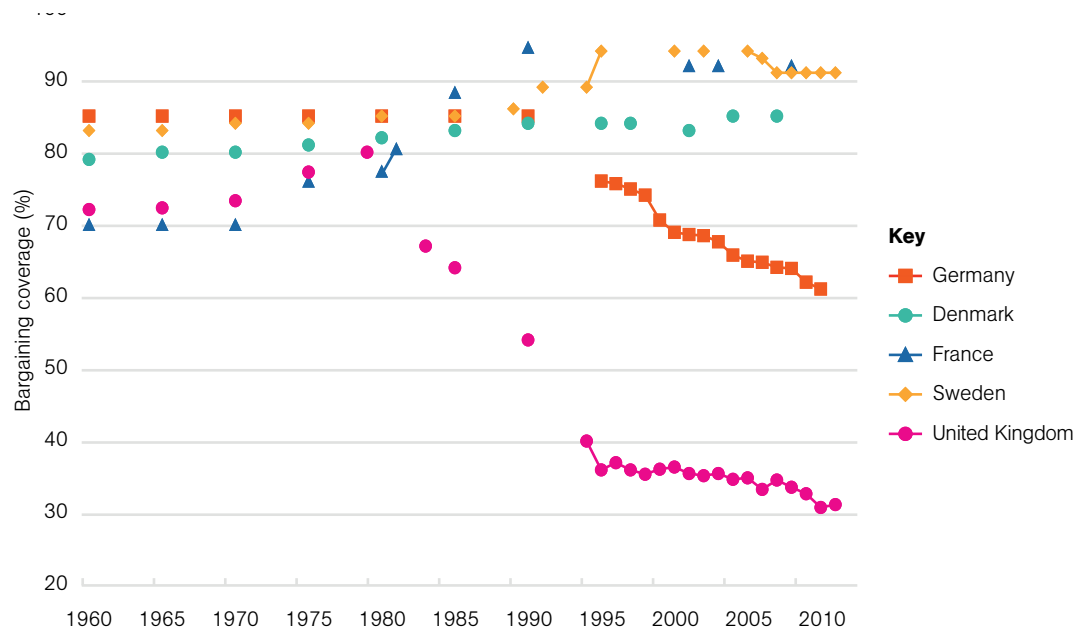
The picture today is markedly different. Several factors have contributed to the decline in union powers and union recruitment from the 1980s onwards. Most notably, the legal environment for trade unions became hostile in many countries, particularly the UK. This legislative hostility was characterised by a trend towards limiting legal protections available to individual workers, while at the same time overturning the tradition of trade union 'immunities' [See Box 5]. Additionally, the scope for legal industrial actions narrowed, while the internal procedures of trade unions became subject to burdensome regulation.¹⁸

Alongside these changes, industrial relations have become increasingly characterised by 'multi-skilling' and flexible employment contracts, with negotiation of wages and terms of employment being conducted at lower levels of administration. Changes to incentive regimes have seen pay increasingly being linked to performance, reducing solidarity among workers, while the erosion of social security and universal labour standards have simultaneously diminished solidarity at a societal level. On top of these factors, the rise of the service sector and concurrent decline of industries that traditionally had high levels of employee organisation has contributed to what has been the fastest national decline of union density out of all the European countries. These macroeconomic factors affecting bargaining power are covered in more detail on page 16-20.

Union density alone is not enough to describe the whole picture of industrial relations and the strength of the collective voice of workers. Complementing density with other variables such as union structure, bargaining levels and the militancy of workers gives a richer picture.

2. Bargaining coverage and wage setting

While union density measures the potential of union bargaining pressure, the actual effectiveness of unions in providing and defending minimum standards of income and employment is captured by looking at bargaining coverage. Bargaining coverage is defined as the number of employees covered by collective wage bargaining agreements as a proportion of all wage and salary earners in employment who have the right to bargaining.¹⁹ Figure 3 shows changes in the levels of coverage for our selected countries.

Figure 3: Decline in collective bargaining²⁰

Source: Visser, J. (2013), ICTWSS²¹

The rate of collective bargaining coverage is close to union density in the UK and other Anglo-Saxon countries such as Canada and the US. This reflects the fact that these countries have a highly decentralised structure, where bargaining takes place at the level of individual workplaces rather than applying to all employees across sectors. This means that, on the whole, benefits negotiated by union members apply directly to them.

In France the setup is different: there, terms negotiated by unions apply to the wider workforce, albeit often on a loose basis. This is closer to the system in Denmark, Germany and the Netherlands, where collective bargaining is still primarily conducted at industry level between individual trade unions and employers' organisations. Here, many employers support the sector-wide application of agreements as it levels the playing field between the staff costs of firms.²²

As Figure 3 shows, bargaining coverage has seen the strongest decline in the UK, from its peak of 80% in 1979 to 31.2% in 2011. It has declined from its respective peak in Germany by 24%, 3% in Sweden and 2.5% in France. Notably, collective bargaining has stayed relatively stable in Denmark, at 80–85%, since the 1960s.

Despite the fact that labour markets across the EU have been transformed by the same macroeconomic factors affecting other countries, such as technological change and the development of increasingly globalised and financialised economies, there is still a remarkable divergence in union structures across countries.

Box 3. Leading the race to the bottom of bargaining

The UK was the world pioneer in the development of collective bargaining during in the early decades of the 20th century, with the development of trade unions and wage councils. Unfortunately the UK also led the attack on the frameworks in place to facilitate negotiations, with the series of reforms to trade union powers that took effect during the 1980s and early 1990s. Prior to this, the state played a central role in institution building to facilitate sectoral bargaining structures, structures which in their early days were well regarded too by employers, who saw them as a means of avoiding undercutting by competitors.²⁴

The government-led reforms, however, saw the majority of employer federations break up or cease to be involved in agreements. As a result, today the picture is very different. The vast majority of the British workforce is no longer covered by collective bargaining arrangements, particularly those in the private sector. When bargaining does occur it happens at the level of the company or individual workplace, with firms setting their own terms and conditions.²⁵

In numbers: while coverage was as high as 70% in 1950, rising to 82% in 1979, it has since plummeted, to 25% today. Leading an international race to the bottom, the UK was until very recently the only country in the EU with collective bargaining coverage at a level below 50%.²⁶

Table 1.1 below provides a fuller picture of the differences in the coordination of wage setting, in line with the cross-country differences in collective bargaining coverage.

Table 1.1: Coordination of wage setting

	Germany	Denmark	France	Sweden	UK
1: Fragmented wage bargaining					1980–2011
2: Mixed industry and firm-level bargaining			1961–2011		
3: Industry-level bargaining	1964–65, 1968–77, 1998–2001	1981–86		1988–90, 1983–84, 1993–96	1961–74
4: Extensive, regularised pattern setting	1960–63, 1966–67, 1978–97, 2002–11	1987–2011		1985–87, 1997–2011	1975–79
5: Centralised bargaining by peak association(s)		1960–80		1960–83, 1991–92	

Source: ICTWSS.²⁷

Here the coordination of wage setting has been ranked based on a number of variables.²⁸ Rather than looking solely at the level where bargaining takes place, or at the degree of coordination, the table categorises the countries based on a set of expectations about which institutional features of wage setting arrangements are likely to generate more or less coordination.²⁹ It therefore takes into account the fact that similar legal frameworks can result in different degrees of coordination.³⁰

As can be seen in the table, since 1980 the UK has been classified as a country with a fragmented wage bargaining regime, meaning that bargaining is largely confined to individual firms with a minimum degree of coordination. Mixed industry- and firm-level bargaining, with no or little pattern of bargaining and relatively weak elements of government coordination of the setting of basic pay rates (statutory minimum wage) or wage indexation, prevail in France for most years. Denmark (1981–86) was characterised by industry-level bargaining with irregular and uncertain pattern setting and only moderate union concentration.

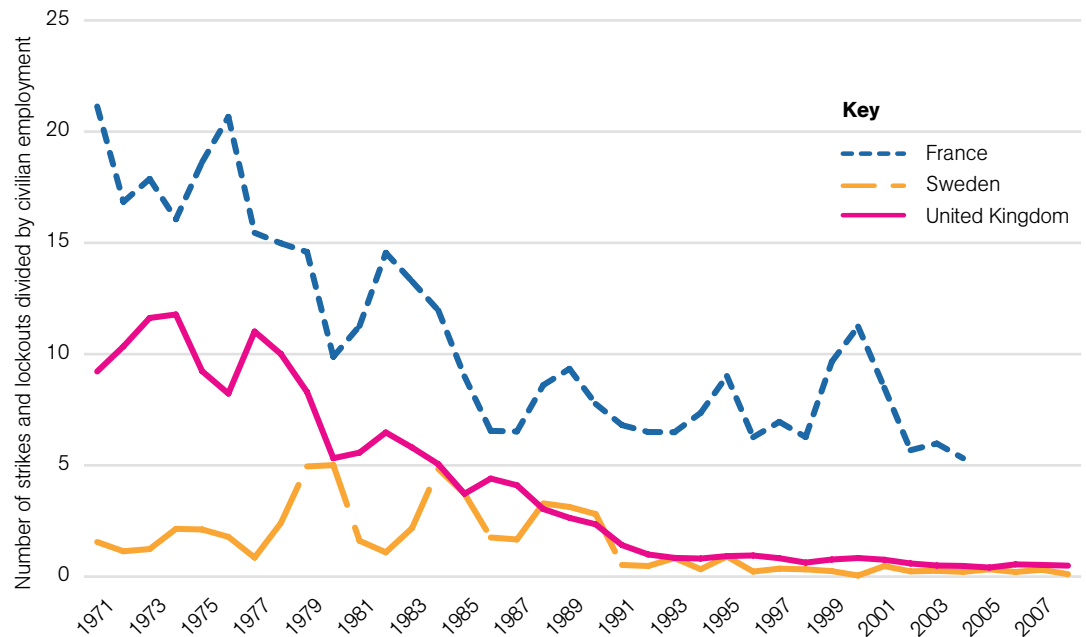
The same level of wage setting coordination is assigned to the UK from 1966 to 1968 and 1972 to 1974, although government arbitration and intervention played a stronger role than in Denmark. Extensive, regularised pattern setting coupled with a high degree of union concentration characterises German wage setting coordination in most years. In Sweden, the picture prior to 1983 was one of highly coordinated, centralised bargaining by peak associations, with or without government involvement.

Changes over the recent decades follow distinct paths. Sweden and Denmark, for example, have less coordination now than between 1960 and 1980, but are more coordinated than they were in the late 1980s and 1990s, while in Germany a relative high level of coordination has been maintained. There has been no change in the entirely uncoordinated bargaining regime of the UK and most other Anglo-Saxon countries since the 1980s.

Despite the fact that EU Member States are, as we have shown, quite diverse in terms of coordination structures, coordination of wage bargaining is, as expected, positively correlated with union density and bargaining coverage. In other words, when union density is low, both the coordination of wage negotiations and the level of their coverage are both also low. One obvious explanation for this is that bargaining is allowed to go uncoordinated only when there are low levels of unionisation and with limited bargaining coverage – as is the case in the UK. If the reverse was true and density and coverage were both high, coordination would be a more viable option.³¹

3. Strike activity

Another variable commonly used to measure the bargaining power of labour is strike activity, measured as the number of strikes and lockouts divided by the number of employees.³² Historically, the high level of unionisation in the first two to three decades after World War II was accompanied by a high level of union militancy in negotiations. In the following decades, however, the organisational base of the collective bargaining structure was weakened and consequently the power of the strike was severely reduced.³³ Figure 4 shows strike activity for a selected set of countries.

Figure 4: Strike activity in France, Sweden and the UK

Source: ILO, OECD³⁴

Note: Strike activity is calculated as number of strikes and lockouts divided by civilian employment (in hundreds of thousands of workers).³⁵

What can be discerned quite clearly for the three countries plotted is that strikes have declined considerably across all, with the most significant decline being in the UK and France. These countries are characterised by different labour relations; for example the low absolute level of strikes in Sweden can be related to the 'peace obligation', according to which Swedish trade unions are only allowed to take industrial action during negotiations of national collective agreements. However, as Sweden has a stronger mechanism to include political demands of unions, as well as having a high level of bargaining coverage and high union density, it can be argued that the decline in strikes there will not have had as strong an effect as it has had in the UK and France.

Where both union density and collective bargaining coverage are low, such as in the UK, the bargaining position of workers strongly depends on their militancy and willingness to strike.³⁶

Box 4. Why has strike activity declined in the UK?

Forming the basis of British trade union law, 'immunities' from the normal application of the common law were first established at the end of the 19th century. These immunities mean that employees taking part in official union activities carried out as part of a trade dispute, such as strike action, are not held accountable for – are 'immune' from – financial losses incurred by their employer.

Major pieces of legislation that made up the government's industrial relations reform of the 1980s and 1990s saw these immunities become significantly constricted; one way in which this happened was through the bureaucratisation of official strike balloting processes.

Despite the correlation between a reduction in strike activity and the legislative restrictions put on the rights of union members to strike, there are cases that complicate this trend. First, 2011 saw the highest rate of industrial action in the form of strike days since 1990, with 1.4 million working days being lost due to industrial action – a 280% increase from the previous year largely due to coordinated industrial action against proposed changes to public sector pension schemes.³⁷ With 1.5 million employees taking part, 2011 saw the highest number of people involved in strikes since records began in the 1980s.

Another complication to the relationship between legislation and levels of industrial action is the potential for unintended consequences to arise. The drivers behind strike action involve a combination of political, economic and social factors that cannot necessarily be controlled for by regulation. Further levels of bureaucratisation placed on industrial action could for example lead to a diversification of activities, with trade unions opting to carry out actions outside of the legal framework as a last resort.³⁸

1.4 Why the collective bargaining power of the workforce has weakened

The restriction of bargaining rights and the deregulation of labour markets affect the bargaining power of the labour force via both direct and indirect channels. In Boxes 3, 4 and 5 we covered some of the direct changes that have taken place in the UK having the effect of restricting union powers. These structural changes can be summarised as the following:

- Dismantling of union powers via legislative changes
- Reduced role of the state in facilitating sectoral bargaining structures
- Decline in employers regarding collective bargaining as beneficial to their sector
- Less coordination of collective bargaining agreements

There are, in addition, a number of connected factors that have reduced the bargaining power of the labour force somewhat more indirectly. These are changes that, when looking at the economy as a whole, affect the strength of the position in which employees stand when negotiating with their employers. Because of these factors, alongside the decrease in trade union density there has also been a decrease in influence even where there is collective bargaining coverage. We have identified five interrelated channels through which the bargaining power of the workforce has been weakened in most countries across Europe, applying particularly in the UK:

1. High unemployment and welfare state retrenchment, cutting the 'fall-back' options for workers
2. Increased flexibility of firms in a global market
3. Financialisation and shareholder power
4. Technological change
5. The changing landscape of work

1. High unemployment and welfare state retrenchment, cutting the 'fall-back' options for workers

High unemployment exercises a downward pressure on wages for the simple reason that with more people searching for work it is possible for employers to offer any new employee a lower wage – or use the threat of unemployment to reduce wages for existing employees.

Furthermore, the deregulation of the labour market carried out between the 1970s and 1990s, which involved changes to unemployment insurance benefits, employment protection policies, trade union powers, and payroll taxes, and the introduction of active labour market policies, reduced workers' bargaining power significantly by increasing the power of the threat of dismissal.³⁹ Other aspects of welfare state retrenchment, like reduced public spending in education and health, have the effect of decreasing the social wage of labour.

2. Increased flexibility of firms in a global market

While the fall-back options of the workforce have been restricted, having the effect of reducing the bargaining capacity of workers, the fall-back options of firm owners have increased. The broad trend of globalisation has brought with it increased options for firms to relocate to other countries or register their status offshore. These represent a threat to workers' bargaining power, as they all act to reduce the necessity to any given firm of maintaining a stable and steady workforce.

Furthermore, the terrain on which trade unions must confront firms has changed dramatically over the last two decades as a result of changes in the way production is organised. Rather than concentrating activities under a single roof, and maintaining tight control over the whole production process, firms can now coordinate their activities in increasingly complex and dispersed ways, involving outsourcing, networked collaborations and market-based transactions.⁴⁰ The increasing prominence of multinational companies that are structured in this way exerts further negative pressure on workers' bargaining power, for instance through the increasing use of relocation threat to gain concessions in negotiations.⁴¹

Many economists have pointed out that globalisation, by integrating the global markets for goods, services, capital and labour, reduces workers' bargaining power through placing them in direct competition with workers from across the world. The impact of labour migration on bargaining power is, however, not clear, since migrant labour often acts as a complement to labour being performed locally, rather than a direct competitor: migrants performing necessary work that would otherwise be left undone, and so creating further employment opportunities for native workers.⁴²

3. Financialisation and shareholder power

Over the past four decades, the financial sector has been extensively deregulated and has expanded enormously as a result. Financial markets, products and firms now play a much larger role in many areas, from pensions and social insurance, to homes and public infrastructure.

Privatisation and the dominant drive to maximise value for shareholders at all costs have led firms to increasingly engage in financial activity focused on extracting the largest possible short-term profit, as opposed to core operations that rely on the labour of a workforce. This increased role of financial activity and the rising prominence of financial institutions are trends that can be referred to collectively as ‘financialisation’.⁴³

Similarly to globalisation, financialisation has increased the ‘exit options’ for capital which can now be invested in real as well as financial assets.⁴⁴ Multinational companies in particular are able to adapt to this new environment because, unlike firms located in a single state, they are able to shift their resources between different national jurisdictions to maximise financial benefit.⁴⁵ With the status of the workforce as the backbone of firms and their productive activities giving way to an emergence of ‘investor identities’, the bargaining power of labour at the national level is reduced.⁴⁶ Hostile takeovers of listed companies and firms adopting a ‘downsize and distribute’ strategy both reduce prospects for workforces to agree on beneficial compromises.

4. Technological change

A conventional argument put forward for explaining the declining bargaining power of labour is the effect of skill-biased technological change. The advancement of information and communication technology and the replacement of routine tasks by machines are held to have increased the demand for skilled labour, while reducing the demand for unskilled workers. Developments such as these might decrease workers’ bargaining power overall if they fall behind in the perceived race between education and technology; however, as discussed in Box 6, the ultimate effect of these changes in relation to the other factors outlined remains ambiguous.

Box 5. Technological change is not the only answer

The precise reasons that the wage share has fallen are a matter of ongoing debate. Principal channels discussed in macroeconomic literature are technological change, globalisation, financialisation and the decline in the bargaining power of labour market institutions.

While all of these are likely to play some role, their relative contribution has been difficult to establish. There is increasing evidence, however, that the most popular explanation among mainstream economists – technological change combined with globalisation – cannot suffice to account fully for the shrinking of the wage share. Instead, there has been increasing attention more recently to the decline of labour market institutions and the role of financial activities as major drivers of changes in the wage share.⁴⁷

The dominant conclusion, as most prominently represented by the IMF and the European Commission, is that technological change is the primary determinant of falling wage shares, followed by globalisation.^{48,49} However, scholars have argued that a close examination of the reported findings reveals serious robustness issues regarding the effects of technology in particular.⁵⁰ Indeed both the IMF and the European Commission

report that the technology variables do not allow for the inclusion of other variables such as time trends, meaning that the measures of technology used do not properly capture its influence.

An increasing number of other approaches emphasise instead the negative effects of globalisation, financialisation and the decline in government spending on the bargaining power of labour, and hence the wage share.⁵¹ Taking economic decisions to be inherently political, these approaches place power relations, oligopolistic markets, excess capacity and involuntary unemployment at the core of analysis, consistent with the main features of contemporary market economies.

5. The changing landscape of work

Individual workers today find themselves in an increasingly isolated position in the economy. This is set to become more challenging in the future world of work, where the jobs gap is set to grow, jobs may be displaced by technology and the nature of workplaces will place more responsibility on the individual.⁵²

Changes in the organisation of work have contributed to the rise of a multi-tier labour force, in which increasing numbers of employees are not covered by trade unions. This is the case across much of Europe, with the UK at the forefront of changes with a dramatic rise in non-standard contracts, replacing regular employee contracts with freelance positions. Younger workers are today starting their careers in a fundamentally different economic and political environment than previous generations, unions are a lesser-known component of working life and casual working contracts are the norm.

While certain labour market changes have brought with them positive outcomes, such as the strong increase in the share of female union members in white-collar peak organisations,⁵³ in Boxes 7 and 8 we explore two examples of how changes to the way we work have had a negative effect on the collective bargaining power of employees.

Box 6. The rise of a self-employed workforce

The structure of the labour market in the UK and elsewhere is undergoing significant changes. The proportion of employed people with full-time, permanent contracts is reducing as other working arrangements become increasingly prevalent. These 'non-standard' contracts, such as temporary posts, part-time work and self-employment, accounted for a third of total employment in OECD countries in 2013.⁵⁴

Technological innovations made possible by an increasingly internet-based service industry have enabled leaner organisational designs, often through subcontracting work out to self-employed workers. In the UK the number of people in self-employment has grown by 40% since 2000, with a record one in seven people in the workforce now in self-employment.⁵⁵ Within this growing component of the labour market there has, however, been an overall drop in earnings, with average income from self-employment down by 22% since 2009.⁵⁶ Many self-employed workers struggle to survive on very low incomes, with the poorest 20% of self-employed workers earning a quarter less than the poorest 20% of employees.⁵⁷

Indeed, as a trade-off for being one's own boss, self-employed people tend to be paid less and have fewer benefits. Included in these figures are a significant number of workers falsely assuming self-employed status, often encouraged by employers to reduce their tax responsibility and so that workers can be engaged without being bound by employment rights and entitlements such as holiday pay, sick pay and pensions. Without coordinating structures between individual workers, collective bargaining coverage to address the pay and conditions of this group poses a significant conundrum.

Box 7. Effects of public sector cuts on collective bargaining

Since 2010 the UK has been committed to a programme of spending cuts unprecedented in its recent history. The financial crisis hit the UK hardest amongst the G7 nations as a direct result of its exceptionally large financial system. The Labour government of the time allowed government spending to absorb the impact of the shock, with the result that the budget deficit rose to 11% of GDP by 2009, the highest of any EU country. It was this rise in the deficit (and government debt) that provided the new government with the pretext for its austerity package.

At the centre of this has been a cap on public sector pay awards, with nominal increases in pay set at a limit of 1%. Even with inflation at historically low levels, this has represented a serious drag on the standards of living of public sector employees. At the same time, significant cuts to government departmental spending have resulted in the loss of 375,000 jobs between the start of 2010 and the end of 2014, and a forecast of a further 580,000 public sector job losses by the end of the planned austerity period, 2018–19.⁵⁸

Public sector trade union membership has, inevitably, fallen as a result, by 339,000 between 2010 and 2014, just under figure for the total loss in employment. Collective bargaining, meanwhile, has also declined, falling from a peak of 72% of public sector workers covered by collective agreements in 2007, to 60.4% by 2014. This is, nonetheless, dramatically higher than in the private sector, where collective bargaining has dropped continuously for at least 20 years, and now stands at just 15.4%.⁵⁹

While the status of unions in the public sector has undoubtedly weakened, and collective bargaining has been undermined by the process of austerity, it is not clear what secondary impact this has had on private sector bargaining conditions. Average private sector pay has risen at a consistently higher level than public sector pay over the last year or more, although the average disguises significant variation by sector. This has closed the gap in average pay between public and private sectors; allowing for employers' size (with larger employers tending to pay more), private sector workers have average wages 3.8% above the public sector average.⁶⁰ Moreover, reversing three decades of continuous decline, private sector trade union membership has risen over the last three years, rising by 195,000 from 2010 to 2014. This rise is not as rapid as the increase in private sector jobs, and so union density overall has fallen. Nonetheless it reflects labour market conditions potentially more amenable to collective bargaining.⁶¹

1.5 Evidencing the effect of union density on the wage share

While bargaining takes place between employers and workers or their respective representatives, as we have discussed, there are many factors that influence the relative bargaining power of both parties. The strength of unions is shaped by their history, and depends on the economic, political and institutional environment their members face. Other, at first sight seemingly unrelated, factors such as the extent of regulation on the product and the financial market can play a role, as well as long-term technological change.

The relative size of the effect of those factors is therefore a question of empirical investigation. The next section outlines how the interplay of these factors is analysed in the economic literature both theoretically and empirically.

Box 8. Income distribution is central to the performance of the economy

Thomas Piketty's groundbreaking *Capital in the 21st Century*, published in English in 2014, compellingly suggested that current levels of inequality in wealth were approaching levels last seen in the late 19th century. With low rates of growth, more and more of any nation's income would flow to the owners of capital, rather than the sellers of labour.

In contrast to Piketty's core argument, however, the research presented here suggests a different relationship. As the wage share has fallen, this has led to lower growth – not that lower growth has provoked a falling wage share of income. The mainstream literature has tended to focus on the 'inevitability' of a declining wage share given technological changes associated with a decline in the demand for less-skilled work, and the opening up of the world market through globalisation. The evidence for this view is, perhaps surprisingly, quite weak, with no clear relationship between identified technological changes and the wage share of national income.⁶²

Piketty extends this framework to argue for the importance of institutional changes in determining the distribution of income in any given economy, but his analysis deliberately does not look into the process by which that income is produced. The research presented here seeks to show that the question of income distribution is central to the performance of the economy, and that (in particular) the steady erosion of independent bargaining institutions for labour has resulted in both a more unequal distribution *and* worse economic performance overall.

Measuring the negative impact of de-unionisation

Many studies find a statistically and economically significant negative impact of de-unionisation on the share of wages in national income. Table A.1 in Appendix 1 presents a summary of the findings in eight empirical studies that estimate this affect. Out of the eight studies included, five obtain a statistically significant effect of union density on the wage share.⁶³

The evidence summarised suggests that a 1 percentage-point point decrease in union density leads to a 0.019–0.379 percentage-point decrease in the wage share.

With regards to theoretical literature, union density has been found to be associated with an increase in the real wage,⁶⁴ especially in countries with a low level of bargaining coordination,⁶⁵ and with a decrease in personal income inequality – as proposed recently by the IMF.⁶⁶ Another important angle put forward in the literature is that, in addition to these direct impacts, in a national and international context, stronger labour unions are likely to exercise political pressure in favour of redistributive policies, thereby decreasing income inequality through taxes and benefits.⁶⁷

More subtle, indirect impacts such as these pose a challenge to measuring the precise empirical effect of union density on the wage share. For example, for countries where collective bargaining coverage exceeds union membership, focusing solely on union density is likely to have underestimated the respective impact of unions on the wage share.⁶⁸

Table 1.2 shows the historical decline in union density for the EU15 countries (excluding Luxembourg) and the US in the second column. The third to fifth columns show the economic impact of this decline on the wage share.⁶⁹ The decline in union density has considerable effects in most countries apart from Belgium and Spain. While union density barely declined in Belgium, the special case of Spain due to the Franco era was discussed above.

Table 1.2: Economic effects of union density on the wage share

Country	Historical change in union density	Maximum effect (Kristal, 2010)	Average effect	Minimum effect (ILO, 2011)
Austria	-40.49	-15.35	-7.33	-0.77
Belgium	-1.33	-0.50	-0.24	-0.03
Denmark	-13.43	-5.09	-2.43	-0.26
Finland	-12.02	-4.56	-2.18	-0.23
France	-14.45	-5.48	-2.62	-0.27
Germany	-18.26	-6.92	-3.31	-0.35
Greece	-17.70	-6.71	-3.21	-0.34
Ireland	-25.16	-9.54	-4.56	-0.48
Italy	-13.57	-5.14	-2.46	-0.26
Netherlands	-24.06	-9.12	-4.36	-0.46
Portugal	-40.22	-15.24	-7.29	-0.76
Spain	-1.26	-0.48	-0.23	-0.02
Sweden	-16.13	-6.11	-2.92	-0.31
UK	-24.44	-9.26	-4.43	-0.46
EU15	-15.75	-5.97	-2.85	-0.30
USA	-20.09	-7.61	-3.64	-0.38

Notes: The change in union density is calculated as the difference between union density at its peak and the latest available value (2013 or 2012). All numbers are expressed in percentage points. The point estimators used for the calculation are the following: maximum effect (Kristal, 2010) = 0.379; mean = 0.181; minimum effect (ILO, 2011) = 0.019.

Summary

The data presented in this chapter has shown the dual trends of a significant decline in the share of national income going to wages and declining strength of collective voice which have characterised recent decades. We have covered how and why the bargaining power of employees has reduced significantly across Europe, with the UK leading the trend. The empirical evidence presented indicates that this decline in membership and efficacy is related to a declining labour share of income. In the next chapter we consider what effect this has on the functioning of the economy.

2. Declining union density has slowed economic development

Despite some signs of economic recovery since the recession, ordinary people are not yet sharing in the upturn. We present the evidence to show that without a strong collective voice for workers, the overall share of wages will be squeezed and the wheels of the economy will slow.

Though in the UK the portion of income going to profits of companies has increased since the 1980s, the growth rate of this national income itself, as measured in GDP, has slowed.⁷⁰ In other words, despite the fact that company profits are accounting for an increasingly large slice of the economic pie, the pie itself is growing more slowly.

In the following sections we look at what determines economic growth in the UK and other countries in Europe, and subsequently what impacts the interrelated trends of a declining wage share and declining union density have on economic activity.

2.1 What determines economic growth?

The decline in the wage share appeared at the same time as a weaker growth performance over the last three decades in the UK and other European countries, the US, Japan, and several major developing countries such as Turkey, Korea and Mexico.⁷¹

In the UK the seemingly higher growth rates of 2000–07 appear, with hindsight, as something of an illusion: in the absence of strong productivity-oriented wage increases, it was rising household debt that fuelled consumption. This proved to be a fragile growth model that collapsed in the Great Recession. Average annual growth in the 2000s (2000–13) in the UK, including the years of the recession, is considerably low at 1.7%.⁷²

But are these two facts – of declining wage share and falling growth – related? The same economic facts can be open to different interpretation. Mainstream economic policy has emphasised the ‘supply side’ rather than the ‘demand side’ of the economy. Crucially, this has meant treating wages predominantly as a component of costs to a business, reflecting the point of view of capital owners.

As a result, mainstream economics is geared towards the assumption that when the wage share falls, and so the profit share increases, the economy will be boosted. Investment by firms will pick up, encouraged by greater profits,

and (because labour costs will be, relatively, falling) exports will become more competitive and more will be sold overseas. This thinking guides policies promoting wage moderation in Britain and Europe.

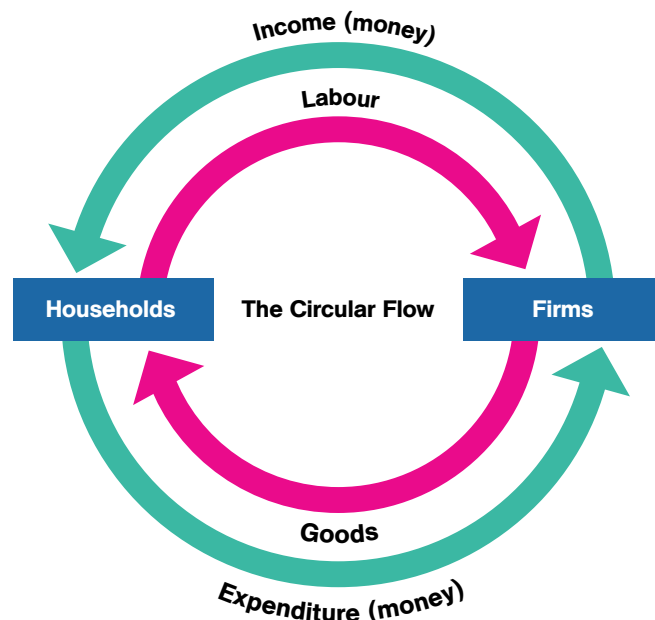
The basic facts of distribution and growth over the last few decades, however, pose a puzzle from the perspective of these mainstream policies. Profit shares have risen since the 1980s, but growth is lower. This directly contradicts both mainstream theory, and its application in policy. Measures to restore profitability have seemingly not also led to a restoration of growth – or as the *Financial Times* put it in reporting on research indicating the dilemma: ‘capital gobbles labour’s share, but victory is empty’.⁷³

Wages play a dual role in the economy

In the economic theory and related policies outlined above, which focus on the supply side of economic relations, wages are treated first and foremost as costs to a business. What follows is the assumption that wages must be moderated to ensure the share of income going to company profits remains high.

But there is another side to this coin: the *demand* side, where wages are not merely an economic cost detracting from company profits, but the cause of demand in the economy through spending, and as such play an essential role in generating revenues. As is shown in Figure 5, rising wages are both a cost to employers and a potential source for new sales – they cut into profits and yet can boost them.⁷⁴

Figure 5: The circular flow of income in the economy



Demand therefore plays a central role in determining growth. Correspondingly, the distribution of national income between wages and profits has a crucial effect on demand levels.

As two components of national income, the wage share and profit share are directly related: when the wage share is lower, profits (payments to those owning capital) are higher. The potential impacts changes to these shares have on levels of economic activity can be summarised as:

1. Consumption is expected to decrease when the wage share decreases, since workers have a higher 'marginal propensity to consume' compared to those who own capital (see Box 9)
2. Higher profitability, resulting from a lower wage share, is expected to stimulate private investment for a given level of aggregate demand
3. Net exports (exports minus imports), for a given level of domestic and foreign demand, will fall with higher costs of labour per unit of output produced.⁷⁵

Box 9. Marginal propensity to consume

'Marginal propensity to consume' (MPC) is a technical term referring to the proportion of each additional £1 of income received by an individual that will be spent. It is lower when individuals save a lot (rather than consume) and higher for those individuals who save little. When the wage share decreases, meaning that the income share overall of those with a higher MPC falls, the overall consumption of a country decreases; if the reverse happens and the profit share is squeezed, consumption increases.

The total effect of the decrease in the wage share on aggregate demand depends therefore on the relative size of the reactions of these three factors (consumption, private investment and net exports) to changes in the income distribution. If the total effect is negative (a falling wage share produces falling demand), the demand regime is called 'wage-led'. If it is positive, with a falling wage share leading to *increased* demand, the regime is 'profit-led'.

Box 10. How the total effect is calculated

The empirical analysis used is based on econometric estimations of consumption, investment, exports and imports.⁷⁶ The total effect of a change in wage share on exports is a combination of the effect of labour costs on prices, the effect of general prices on export prices, and the effect of export prices on exports.⁷⁷

The effect of the wage share on GDP via the channel of international trade depends not only on the sensitivity of exports and imports to prices, but also on the degree of openness of the economy – in other words, on the share of exports and imports in national income – since a greater share of exports and imports in the whole economy implies that the economy must be more open. This means that in relatively small open economies, net exports may play a major role in determining the overall outcome, but the effect becomes much lower in relatively closed large economies.

One size doesn't fit all

In theory, both scenarios are possible. Whether the negative effect of lower wages on consumption or the positive effect on investment and net exports is larger is an empirical question that will depend on how a particular economy is structured. The economy is more likely to be wage-led when consumption is very sensitive to the income distribution, when investment is not sensitive to profits (being driven more by demand), when domestic demand is a large part of total demand, or, finally, if net exports do not respond much to relative prices, including the price of labour.

If, alternatively, the responsiveness of investment to profits is rather strong, and foreign trade is an important part of the economy (as it is the case in small open economies) and is very responsive to labour costs, then the economy is more likely to be profit-led. In a wage-led economy, a fall in the labour share would generate a decline in GDP. A higher wage share is required for growth. Pro-capital policies would generate more growth only if an economy is profit-led.

The economic model described here offers a *general* theory of demand and growth, rather than a theory that works in only one kind of economy, those that are profit-led. Supply-side economic theory and the policies it supports have, however departed from the assumption that any particular economies are profit-led, and as such that *all* economies, taken together, must be profit-led. An example of this specific approach is the European Commission's (EC) policy of wage moderation, designed and prescribed to all the countries in Europe despite the national differences.

The EC explicitly argues that wage moderation (real wage growth below productivity growth) is the key to preserving growth and jobs in a competitive global economy. From this perspective, further deregulation in the labour markets would be regarded as a positive development, based on an implicit assumption that Europe as a whole is profit-led.⁷⁸ Similarly, these policies have been exported to the developing world through the IMF and the World Bank, maintaining the assumption that the world taken as a whole must be profit-led.

Based on this assumption, pro-capital redistribution policies have been implemented simultaneously in many developed and developing countries in the post-1980s period. The result of this has been a global race to the bottom in the wage share, with countries pursuing policies which have forced each other into further declines in the share of national income going to wages. As changes in policy in one country can in turn impact on others, in determining whether a country is driven by wages or by profits, analysis of this global interaction is crucial: measuring, for example, how a change in the wage share in a country's trade partner affects the import prices and foreign demand for that country.

Box 11. Is an economy wage- or profit-led?

The share of wages in national income can matter for growth because spending by individuals from their wages is the main component of demand. If there is a squeeze in the wage share, their capacity to spend also declines. And if spending power is squeezed, firms, facing smaller markets, will quite rationally choose to hold back on investment and production. Growth overall is likely to fall.

This can work the other way round. If the wage share is reduced, then the share for profits automatically rises. With more profits to spend on investment, and potentially falling wages making exports more competitive, growth could be boosted.

Since either situation is possible in theory, empirical research is needed to settle the issue.⁷⁹

2.2 Which economies are driven by wages, and which by profits?

Building on the growing body of work that challenges the assumption that profits drive growth,⁸⁰ this section first summarises the most recent estimates regarding the effects of the changes in the wage share on growth for the UK as well as other European and G20 countries.⁸¹ The studies used go beyond the nation-state as the unit of analysis, discussing global effects, based on the responses of each country, to changes not only in domestic income distribution, but also to its trade partners' wage share.

We show the results for the estimates by Onaran and Obst (2015) in Table A.2 in Appendix 3. What these results demonstrate is that, for all the European countries tested, domestic demand is led by wages. In other words, although there is some boost to investment from an increasing profit share, it is overwhelmed by the negative impact on consumption spending that a falling wage share produces.

This picture shifts only slightly if we also take into account the *international* impacts of changes in domestic profit and wage share – the impact on net exports, as discussed above. The effects of net exports on national income are profit-led: a rising share of profits in general boosts net exports. In addition, due to the 'multiplier effect' (see Box 12), the impacts of changes in net exports, investment and consumption on national income will be magnified.

Box 12. The multiplier effect

The effect by which an increase or decrease in spending in one part of the economy has a 'ripple' effect across the rest of the whole economy is known as the multiplier effect. Each £1 spent is received by someone else, who then spends some part of their new earnings, meaning someone else receives more income, and spends some part of it, and so on until the ripples die out.

The size of this multiplier effect – the multiplier – is determined by the marginal propensity to consume and import, as well as the response of investment to demand. A large multiplier means even a small initial change can have a significant overall effect.

2.3 The UK is a wage-led economy

Results from this econometric analysis indicate that the UK is a wage-led economy.⁸² A 1 percentage-point *increase* in the profit share leads to a 0.13% *decrease* in private demand, after the multiplier effects.⁸³

This fall in demand is due to a decline in the share of consumption, which cannot be offset by a modest rise in net exports. This indicates that the rise in profitability (the rise of national income going to the profit share) does not in fact have a significant impact on investment, implying that investment spending in the UK is largely determined by companies' expectations of future sales, rather than immediate profits.

For the rest of Europe, it should come as no surprise that large economies like Germany, France and Italy are wage-led. The impact of falling wage share on net exports is not enough to overwhelm the fall in domestic spending that results. For smaller, open economies like Belgium and Denmark, this does not apply – although, interestingly, even smaller economies like Greece and the Netherlands are wage-led, even when taking the net export effect into account. These results are summarised in Table 2.1 under the 'national result' column.

However, this is only a first step. We have briefly discussed how different economies can interact with each other – which the wage share of a trading partner, since it may well shift demand and prices in that partner, can feed back into another country. Once we make allowance for these additional international effects, the pattern shifts somewhat. Only Belgium and Denmark remain profit-led, while the EU as a whole is wage-led. See the second column for each country's 'total result'.

This implies that policies to moderate wages in Europe as a whole are likely to have only moderate effects on foreign trade, but will have substantial effects on domestic demand, depressing growth. Second, if wages were to change simultaneously in all the EU countries, the net export position of each country would change little, because extra-EU trade is comparatively small. As a result, when all the EU countries pursue 'beggar thy neighbour' policies, promoting domestic wage reductions to improve international competitiveness, the actual effects on international competitiveness will be minor, and the domestic repression of demand will dominate the outcome.

Table 2.1: Summary of results for individual countries

Country	National result	Total result
Austria	Profit-led	Wage-led
Belgium	Profit-led	Profit-led
Denmark	Profit-led	Profit-led
Finland	Wage-led	Wage-led
France	Wage-led	Wage-led
Germany	Wage-led	Wage-led
Greece	Wage-led	Wage-led
Ireland	Profit-led	Wage-led
Italy	Wage-led	Wage-led
Luxembourg	Wage-led	Wage-led
Netherlands	Wage-led	Wage-led
Portugal	Wage-led	Wage-led
Spain	Wage-led	Wage-led
United Kingdom	Wage-led	Wage-led
EU15	-	Wage-led

Note: The 'total result' takes account of the international effects that arise when countries interact with one another.⁸⁴

These estimates imply that the contraction in the UK, as well as in other wage-led countries, is much higher once these trading-partner effects are taken into account. In this race-to-the-bottom scenario, a 1 percentage-point simultaneous decrease in the wage share across Europe leads to a decline in the GDP of the UK of 0.20 percentage points, so the effect is now economically a lot more important. In this case the EU15 as a whole contracts by 0.30 percentage points.

Dominant policy approaches that impose the same wage moderation policies in all countries, by contrast, must implicitly assume that Europe or the world as a whole, as well as the majority of individual countries, are profit-led. This is against the logic of our findings, given that the effects of a fall in the wage share on domestic consumption more than offsets the effects on investment. If there is not much trade outside an economic union, then the union as a whole cannot be profit-led.

To give a fuller picture, studies have shown that the US, Japan, and, in the developing world, Turkey and Korea are also wage-led.⁸⁵ Overall, the results indicate that large and relatively closed economies are more likely to be wage-led. Canada and Australia in the developed world, and China, South Africa, Mexico, Argentina and India, are profit-led; as in small open economies, the net export effects are higher in all these countries.⁸⁶

Box. 13 Trade unions: collective solutions to a collective action problem

It may be rational for any individual firm to give its own workforce as small a share of the income it generates as possible, with a view to increasing its profits. This is because – without considering any negative effects on productivity – a simple estimation can be made that a cut to wages will leave more company income for profits. But if every firm, or even just a large number of firms, behaved like this, the economy would be pushed into a recession, as lower wages lead to lower spending.

This is because even though a higher profit share at the firm level seems to be beneficial to individual capital owners, at the level of the whole economy a generalised fall in the wage share shrinks demand and means fewer goods and services are sold, however cheap it now is to produce them. This is the problem of the ‘realisation’ of profits.

The rationale of an individual firm, contemplating wage restrictions to boost profits, cannot be generalised into the rationale of a whole country. Individual firms might prefer to suppress the wages of their own workers to increase profits, but they would prefer all other firms to give a pay rise so that there is someone to buy their goods.

Furthermore, even in the profit-led countries, a regional fall in the wage share leads to an overall aggregate demand deficiency, and potentially produces an economic contraction in the individual profit-led country as well. A seemingly rational pro-capital strategy at the level of an individual firm or country is irrational and contractionary at the macro- or regional level.

This is a classic collective action problem, in which choices that are rational for every individual or firm are irrational for society as a whole.

Solving collective action problems generally involve some form of collective intervention, for example in the form of direct government action. The regulation of fishing waters is a classic case, where, if left unchecked, individually rational behaviour leads to the damaging result of over-fishing.

In the case of firms deciding the portion of profits to pass on to employees, collective intervention comes in the form of collective bargaining institutions such as trade unions. Trade unions bring together the voices of employees to bargain for adequate wages and working conditions, which in turn impacts demand in the economy overall.

2.4 What has been the impact of the fall in union density on growth?

These findings allow us to estimate how the decline in unionisation has fed into a falling wage share, and therefore lower growth. As discussed in Chapter 1, research results from a number of studies indicate that the dramatic fall in the union density in the last three decades in the UK has led to a 9.3 percentage-point lower labour share in GDP.

The effects in the other EU15 countries are similarly significant, although the magnitudes are mostly lower due to a lower decline in the union density. Even according to the average effect of the estimations regarding the impact of union density, the deterioration in union power has led to a decline in the wage share of 4.4 percentage points in the UK.

Table 2.2 reports the total estimated effect on GDP growth in a number of countries arising from their declining union densities over the last three decades.⁸⁷

Table 2.2 Estimated impact of the fall in the union density on growth

	Maximum effect	Average effect	Minimum effect
Austria	-0.108	-0.052	-0.005
Belgium	-0.469	-0.224	-0.023
Denmark	0.320	0.153	0.016
Finland	-1.552	-0.742	-0.078
France	-1.301	-0.622	-0.065
Germany	-3.041	-1.454	-0.152
Greece	-6.837	-3.267	-0.343
Ireland	-0.497	-0.237	-0.025
Italy	-1.308	-0.625	-0.066
Luxembourg	-0.320	-0.153	-0.016
Netherlands	-1.601	-0.765	-0.080
Portugal	-5.778	-2.761	-0.290
Spain	-0.853	-0.408	-0.043
Sweden	-1.709	-0.817	-0.086
United Kingdom	-1.596	-0.763	-0.080
EU15 GDP	-1.814	-0.867	-0.091

In the UK the fall in union density in the last three decades has reduced GDP by up to 1.6%. If we use the average of the estimated effects of the fall in union density, the loss in GDP is about 0.8%. Overall, the race to the bottom in labour's share in the EU15 has resulted in GDP being reduced by up to 1.8%.

Alternatively, if the union density in the UK were to recover to the level of 1981, at 49.9%, national income would be up to 1.6% higher, and the wage share increased by 9.3 percentage points to 76.6% of GDP. According to the average of the estimated effects of unionisation on the wage share, the impact of reversing the fall in union density would still generate 0.8% more national income, alongside a wage share increase to 71.7%. Even the lowest bound of the estimations indicates that a rise in union density has positive rather than negative impact on both growth and equality.

Box 14. Moving away from growth as the sole measure of progress

This chapter, and this report, has looked at the impact on standard economic outcomes of changes in the wage share and unionisation over the last few decades. We have concentrated especially on Gross Domestic Product (GDP) for two reasons. First, because it is well-known, widely used and is treated as a rough proxy for many other outcomes. Second, because at the heart of claims for a supply-side approach to economic policy over the last few decades has been the belief that this would boost growth – the so-called trickle down effect. The evidence presented here exposes this belief as, for most European countries (including the UK), significantly wrong. It is intended as a direct criticism of supply-side economic policy.

However, the first point is more questionable. While growth and GDP are treated as a proxy for many other desirable outcomes, they are not in themselves desirable. Serious problems have emerged in recent decades with that claim: many economists have highlighted the issue of the decoupling of GDP rises from improvements in most people's living standards, with rising inequality directly to blame.⁸⁸ More of the increase in the economy's output, as registered by GDP, seems to be falling into fewer hands. It is only when looking beyond the single measure of GDP that a clearer picture of the UK economy emerges. For example, while employment levels have recently been on the rise, according to ONS figures, job satisfaction levels, and hence the quality of roles being created, are declining. In 2010, 61% of people in work said they were mostly completely satisfied with their job, but the latest data shows that this has fallen to only 54%.⁸⁹

Moreover, GDP itself, if we think of it as a measure of scale of activity, hides deeper problems. At any given scale of economic activity, there are demands placed on available resources, including 'public goods' like a non-polluted atmosphere. As scale increases, registered through rising GDP, those demands rise – even with efficiency improvements. Where resources are constrained, this increasing scale becomes a problem. Compelling cases have been made that a focus on growth as a measure of progress is not compatible with long-term economic planning, most notably in its implications for climate change.⁹⁰ Calls for alternative measures of economic progress have gained momentum.⁹¹

GDP growth, then, cannot be taken as the sole viable indicator of progress. It comes attached to fundamental issues about the nature and purpose of the economy and its broader impact. The approach advocated here, although starting with a critique of those policies intended to boost GDP by squashing the wage share, should be seen as a starting point for a wider turn towards more comprehensive measures of economic progress and, alongside them, an economic policy more directly focused on outcomes that are demanded by and give meaning to people's lives.

Summary

Our analysis has underlined the negative effects that inhibiting union activities has on the economy. The evidence presented indicates that the long-term deterioration in collective voice in the UK and elsewhere in Europe has been counter-productive in terms of macroeconomic growth. Legal restrictions on the ability of trade unions, where these bite sufficiently to reduce their bargaining capacity, are contrary to good economic policymaking where countries are in wage-led growth regimes, and where labour's share of income has declined. Economic recovery and stable, equitable development needs a rise in the collective voice of labour.

3. Implications for policy

The extent of economic losses brought about by the reduction in collective bargaining in the UK is a crucial concern for policymakers. The benefits delivered by trade unions throughout their history remain not just relevant in the 21st century but essential for economic recovery and equality.

Our evidence concludes that, as a wage-led economy, the UK's prosperity requires a boost to the share of national income going to wages. The past four decades have shown that even in times of growing corporate profits, when left to their own devices employers share less with their workforce. It is the workforce, therefore, through the institutions that represent it, that plays an essential role in bargaining for its share of company, and indeed national, revenue, with a view not solely to maintaining, or indeed improving, living standards of individual workers, but also to enabling the functioning of the national economy as a whole.

Responding to these findings, we have included considerations and recommendations for policy from seven supporting unions.

An effective voice at work is vital

John Hannett, General Secretary, Usdaw

The findings of this report are extremely welcome, but should come as no surprise to anyone with an interest in labour relations. In all of my years as a trade unionist, the link between employee voice, fair pay and economic success has seemed to me an obvious one. This research demonstrates that link conclusively.

A voice at work is vital – on that, there seems to be a consensus. However, what is frequently glossed over in the debate on employee engagement is exactly what form that voice should take.

It is, no doubt, tempting for employers to simply tick the box marked 'staff engagement' on their corporate social responsibility report, by sending out a survey, or holding a staff forum once a year. This achieves nothing, if their employees are still working unsocial hours in poor conditions, earning low wages and feeling that their concerns are not taken seriously by their employer. In such circumstances, it's hard to see how an employer can expect a worker to put in discretionary effort and boost their productivity in any significant way.

With the UK's productivity levels struggling to improve following the recession, it is clear that there needs to be sustained growth in wages to promote demand and develop more productive businesses. Engaged workforces are vital to solving the productivity puzzle, and collective voice in the workplace through trade union representation is key to that engagement.

There has been much talk of the Living Wage both pre- and post-election, and it is certainly true that the Living Wage must be promoted, to address the problems of low pay. However, there are wider issues to consider than just hourly pay rates. We need to look at the whole employment package, so that, for example, people are getting the hours they need to bring home a decent income. This can only be achieved by effective trade union representation.

There need to be improvements to the statutory recognition procedure, to strengthen workers' rights to collective bargaining. We also need stronger frameworks for information and consultation, and European Works Councils, which commit employers to more meaningful and timely consultation with worker representatives.

One area where the quality of consultation is vital is in redundancy situations. There were many cases during the recession where unions worked with businesses to preserve jobs. Consultation in redundancy should be mandatory for all sizes of business, and the current loophole which excludes small workplaces which are part of large chains from the legal requirements needs to be addressed.

Forward-thinking employers understand that decent pay and conditions are an investment in their business, not a burden. They also recognise the value of independent trade union representation in giving their workers a genuine voice in the workplace, problem-solving and managing change. However, the animosity towards unions from the current government will doubtless have a ripple effect outwards, so we must continue to make a strong case for union representation and collective bargaining as part of a successful economy.

A radical shift is needed

Mike Clancy, *General Secretary, Prospect*

The findings of the report confirm that the decline of collective bargaining and employee workplace voice in the UK has damaged macroeconomic performance. At a time when the Westminster government, employers and unions are commenting on wage share, productivity and skills development, the value of collective perspective and voice should not be in doubt. Yet it is.

Prospect believes that the challenges of the macro economy will not be solved by a labour market of low regulation, self-interested corporate choice and ever-declining collective voice. The government is espousing an agenda of low tax, higher pay and reducing welfare bills. Well, the report shows one thing: left to their own devices, employers don't easily share with their employees when corporate value grows and the economy recovers. Wage depression is synonymous with having no one to bargain on your behalf. We knew this instinctively, but the report gives economic grounding to the opinion.

There is much policy talk around union 'reform', industrial action thresholds and similar. Little of this relates to the principal mission of unions to work with employers to ensure productive, safe and engaged workplaces. Prospect wants to shift the political discussion to a higher level.

The government is starting out on a familiar road on 'reform' but we want to talk about transformation – though not on unilaterally imposed terms, where only an employer view dominates.

We need a new workplace vision where collective employee voice supported by statute becomes a UK norm. We will only address the issue of declining wage share, improve productivity and create good work by legitimising again the voice of employees. Any number of employer-sponsored engagement schemes are not enough. True voice is independent, influences key corporate decisions and can ensure that employees share in rising value.

If the plethora of engagement practices and HR transformation programmes were working effectively the UK would not have a skills crisis, the government would not be telling employers they have to stop depending on welfare to subsidise wages, and we would not be lagging behind competitors on productivity. Something is plainly wrong and acceptance of the workplace norms of the last three decades is not the starting point for fixing it.

This is radical and there will be strong opposition. Corporate Britain has become accustomed to deciding matters themselves and any proposal that employees should have the right to elect representatives who would then influence matters that have been previously reserved to the executive to decide unilaterally, will be dismissed as old fashioned or suitable only for others. This requires more than consultation on periodic events such as business transfers or redundancy. It is more than information and consultation. I am talking about codetermination, bargaining and agreement as a replacement for dispute and strike. Therefore it presents challenges to unions and employers alike.

The next decade will decide whether the UK continues to head toward US levels of union membership, bargaining coverage and decline of employee voice (with the associated levels of inequality) or takes a different route that is more reflective of systems that endure in Europe. Policymakers need to wake up to this and realise that short-term choices, animated by particular events or ideology, will in the end create an environment where in the UK there is no effective counterparty to the untrammelled authority of employers. And look where that has got us so far.

How to achieve sustainable and fair economic growth

Janet Davies, *General Secretary and Chief Executive, Royal College of Nursing*

This report makes a compelling argument that boosting the wage share is essential to sustainable economy recovery – it is clear that the falling share of wages in the overall income of our country has resulted in lack of purchasing power for working people, growing inequality and a real sense of social injustice. Meanwhile, the UK is suffering from stalled productivity which represents a huge block to sustainable and fair economic growth.

Finding solutions to these problems will depend on a better deal for working people, with the promise of secure work, and better pay. This means long-term action to reverse the trend towards a low-pay economy particularly in the care sector, capping excessive rewards at the top, and increasing the extent of collective bargaining and workplace participation.

Effective trade unions are a vital element of reaching the goal of a stronger economy and a fairer society. Unions that can bargain for a rise in real wages will boost consumer spending and in turn kick-start productivity through increased innovation and investment.

Increased earnings will undoubtedly increase purchasing power, yet without an associated rise in productivity, the benefit to the workplace or firm will be limited. Workplace productivity is inextricably linked to trust, and high levels of trust only come when employees are listened to and fully involved. This is particularly important in the workplaces where RCN members work. Health and social care are highly labour intensive, and real improvements in the workplace leading to improved patient care depend on highly engaged, motivated and well-paid staff. This means ensuring that health and social care staff have individual and collective voice, which enables them to contribute to decision making and their representatives to negotiate over terms and conditions.

The RCN has a strong network of stewards and safety and learning representatives, making a significant contribution to bargaining and negotiating over such areas as terms and conditions, health and safety, and staff development. Day after day they contribute to workplace productivity by helping reduce staff turnover and improve the quality of care in the NHS and the independent sector.

Engaged workforces are vital for improved productivity growth, and unions are central to making this happen.

Why government should promote collective bargaining

Mark Dickinson, *General Secretary, Nautilus International*

Freedom of association and the effective recognition of the right to collective bargaining are fundamental principles and rights at work. They are key tenets of democracy and essential means through which workers are able to balance bargaining power in employment relations and negotiate improvements in their working conditions.

Economic research on unions proves that unionised workplaces have higher productivity than non-union workplaces. Studies suggest that this positive effect on productivity appears across all industries that maintain good labour–management relations. Through a union, employees have a means to participate in a dialogue with management, enabling them to collaboratively engage with their employer in labour–management partnerships to identify problems and processes that are wasteful, inefficient, or harmful to the employer’s operation. A unionised workforce can also reduce employee turnover and increase the retention of highly skilled and experienced employees, in turn encouraging increased investment in staff training.

Thus, employee rights should not be viewed as costs or inefficiencies, as evidence points to the contrary. While collective agreements are designed to allow parties to negotiate and resolve issues, not to make market economies more or less efficient, it is important to emphasise that collective bargaining can be good for an employer’s bottom line and for the economic prospects of the country.

Collective bargaining has remained a critically important mechanism for improving terms and conditions of employment and protecting workers, while at the same time facilitating stable and productive employment relations for employers.

Negotiations between trade unions and employers can also facilitate commitment to improve work organisation, skills and productivity in return for employment security and a share in the gains. It is the process of collective bargaining that makes this exchange possible and the commitments credible. The active involvement of trade unions and works councils in the change process is associated with improved firm performance.

During the recent economic and financial crisis, in countries with highly coordinated collective bargaining, trade unions and employers were able to negotiate agreements that preserved jobs while at the same time facilitating the adjustment of enterprises. State support for short-time work and training, regulated through collective agreements, helped the social partners to mitigate the effects of the crisis on employment and earnings.

In developing-country contexts, weak or missing institutions place limits on the potential contribution that trade unions and collective bargaining can make to narrowing wage gaps (including between men and women). In addition, the absence of collectively agreed rules governing employment relations can result in a large number of ‘unregulated’ workplace conflicts which can have

a negative effect on efficiency. Rather than exacerbate informal employment, there is evidence that stronger trade union rights are associated with higher shares of formal employment.

In my own industry, that of shipping, deregulation in the 1980s and the scrapping of the National Maritime Board has led to fragmentation in the industry and a regulatory vacuum in respect of, for example, training and recruitment (recognised by the employers' organisations as well as the unions), which has led to the need for a 'Seafarers' Bill of Rights' (the Maritime Labour Convention 2006) which references the role of collective agreements positively throughout its pages.

Governments need to play an active role in promoting collective bargaining, taking into account its voluntary nature. The focus of policymakers needs to be on how to improve the reach and effectiveness of collective bargaining, not on how to reduce its scope and coverage. There is also a need to strengthen trade unions and employers' organisations in order to enhance the quality of collective bargaining outcomes in a global economy.

Productivity in the public sector – the forgotten success of union engagement?

Dave Penman, *General Secretary, FDA*

The private sector can represent productivity in pounds and pence with relative ease. The public sector sometimes struggles to demonstrate productivity success with such clarity. Despite this, the productivity successes in the public sector are nonetheless real. The key to those successes is the engagement with unions who have retained a strong presence in the public sector, regardless of the pressures and strains on union membership.

Developing employment policies, structural reforms and workplace changes are areas of working life that are integral to maximising productivity. When unions are involved in these areas, and properly engaged, this demonstrably improves the effectiveness of the process and the participation of the staff involved. Without engaged and empowered staff, transformation takes longer, can be acrimonious and is less likely to result in the longer term rewards sought.

Unions are experts in the world of work. We have aided employers in dealing with crises, adopting new technologies and taking on new challenges. Through the training that we provide to members, the skills developed by workplace representatives and the experience and breadth of workplace knowledge of officials, unions can provide invaluable assistance to employers across the economic spectrum.

The only way to access these benefits is for employers, including the Government, to engage with unions. Finding out the obstacles to improved productivity isn't the exclusive preserve of high-billing consultants. The easiest way is to ask the people doing the work, and unions talk to their members, but more importantly they listen.

Employers with foresight recognise this and prioritise union engagement. Contrary to media perception, unions want the workplaces in which they operate to succeed. In the public sector we work to ensure that the best possible public services are provided to the public. We highlight areas that threaten that objective: poor morale, recruitment and retention issues, ill-equipped offices, health and safety dangers, and a host of other threats. Working with an employer to resolve these issues is in everyone's interest and is what members rightly expect unions to do. Unfortunately for all concerned, it's difficult to quantify and does not make the headlines.

In the next decade the public sector and those that work in it, benefit from it and manage it face some daunting challenges; 'doing more with less' is a glib mantra but it has become the guiding principle throughout the public sector. We are starting to see the effects of regarding union engagement and staff involvement as optional extras. False economies are no economies at all. Sometimes, as the private sector knows well, you have to invest to save. Investing in technology is sensible and if done properly pays dividends to all. Investing in the workforce, however, achieves far more. Positive relations with unions can harness the skills, experience and knowledge of hundreds of thousands of public sector workers. The results could be genuinely revolutionary.

The FDA believes in positive trade unionism. We believe that constructive and challenging engagement with employers brings out the best in staff relations and organisational productivity. As this report shows, the dead hand of pay restraint and anti-union rhetoric achieves nothing but division, stagnation and a moribund economy. We welcome this report and the challenges it poses to those whose focus is on rebuilding the UK economy and the UK workforce.

Building a consensus

Paul Moloney, *Trade Union and Industrial Relations Manager,
Society of Radiographers*

The findings of this report show that the agenda pursued by trade unions not only benefits our members but has far reaching impact across the economy as a whole. While this may not be news to trade unions, the findings of the report enable us to frame a different argument aimed at those who have not previously supported unions but instead have actively supported attempts to curtail our influence in the UK. This in turn offers the opportunity to begin to build a consensus around the positive economic benefits that higher trade union membership brings.

The report is also timely as its findings enable unions to contribute with more confidence to the debate on productivity. My own union, the Society of Radiographers, has two long-standing aims that will improve considerably the productivity of radiographers, raise their skill levels and ensure that as a profession we remain cost-effective for the NHS. We have argued that our members, where trained and competent, should be able to prescribe from a list of medicines and be permitted to make diagnoses from the scans they perform. Of course this benefits our members, who will see better career progression, but the benefits in improved patient care and value for money for the NHS are just as important: a classic win-win situation.

The report shows that this win-win exists on a far wider scale across all sectors of the economy. It shows us that better employment law, improved training opportunities, better employment security and better pay are essential for delivering not just a fairer but also a more productive economy. This without doubt represents the real value of these findings.

We may have failed so far as a movement to make the argument for a fairer economy. Often our arguments for the control or abolition of zero-hours contracts, for less draconian industrial action laws or even for increased spending on training, as examples, have been dismissed as being anti-business and therefore anti-consumer, -passenger or -patient. This report shows that nothing could be further from the truth and that we can have a different debate with those who oppose us, arguing that while our policies will create a fairer economy, they will also create a more efficient economy.

Those currently in government may believe that the way to prosperity is through de-skilling, deregulation and cheap labour and are prepared to attack anything that stands in the way of this, whether it be trade unions or the European Union, but this report shows that is only the way to prosperity for a few.

Our task now is to take this report and debate it with those who may not be our natural allies but who do compete by being better rather than cheaper. There are many businesses who wish to work in this way and know it delivers sustainable long-term return for shareholders. But they have to look over their shoulder at those undercutting them and winning business by simply being cheaper. For far too long UK policy has been to protect those who want to compete by undercutting pay, pensions and other conditions and not those who want to compete by investing in skills. This report shows this approach needs to be reversed and trade unions embraced if we want a better, more prosperous future.

An active industrial strategy based on social partnership

Roy Rickhuss, *General Secretary, Community*

The economic impact of a collective workplace voice should benefit both the business and its employees. However, the new economy requires a government willing to help facilitate that collective voice if those benefits are to be achieved. I fear that the apparent hands-off, leave-it-to-the-market approach of this new Conservative government will not help facilitate such relationships but serve only to drive down standards. Government should help businesses to make long-term plans for growth. There is clear evidence from many other European countries that involving employees in long-term decision making can be a key factor in helping to increase productivity and developing a loyal workforce, committed to the future success of the business.

In an increasingly competitive global market, I am convinced the only way for the UK to compete with the major emerging economies is for our businesses to be underpinned by a social partnership: a partnership which sees businesses invested in their communities and employees committed to helping the company do well. My own experience of negotiating with CEOs of multinational companies is that very often, it is the local relationships on the

shop floor which are best equipped to meet a shared aspiration or tackle an industrial challenge.

The UK government should bring together ministers, employers and trade unions to develop an active industrial strategy for each of UK's key sectors. A partnership at work fund should be established to support best practice in industrial relations and ensure that employer/employee relationships are fit for the 21st century.

For us to make these policy proposals a reality we need to build a coalition of support from all sides of industry. We need good employers, key decision makers and trade unions working together with the support of government. We also need to recognise that trade unions have a reputational problem. For every negative and often frenzied story about the abuse of trade union power there are hundreds of positive interventions made by trade unions in partnership with employers that never see the light of day.

Many argue that the trade union movement isn't given a fair wind by the press and the right-wing media in particular. While I don't disagree with this analysis, I don't believe this will change overnight and therefore we must find a way to cut through. We should be unashamedly proud of our successes, we should stand with good employers talking about the economic challenges we face, and above all we must make responsible trade unionism the default employee voice for these first decades of the 21st century.

Conclusion

Decent wages, and the strengthening of the collective institutions that support them, are fundamental to the creation of the new path for the UK economy. The research presented in this paper reveals the labour movement and the workforce it represents to be in the backbone of economic prosperity, dispelling the predominant narrative of keeping labour costs down in the interests of competitiveness.

Evidence has shown that most economies, including the UK – and, crucially, the global economy, treated as a whole – are wage-led rather than profit-led.⁹² This means that a decrease in the wage share of national income will tend to lower their growth. Despite this, the wage share has declined in 26 out of 30 high-income countries from 1980 or 1990 onwards.⁹³

This declining wage share reflects a political consensus in economic policymaking that is, despite the financial crisis and its consequences, still driven too much by the belief that supply-side measures to improve competitiveness and promote market efficiency will automatically lead to better social outcomes. The financial crisis and its consequences have, however, begun to open up questions on this consensus. The presence of rising inequality, in particular, resulting from supply-side policy over many years, has begun to attract critical attention. The IMF published evidence in 2015 showing that strong unions make economies more equal, and therefore more prosperous.⁹⁴

This paper adds another strand to the argument that the inequality/growth trade-off does not exist. We have laid out the evidence that the inequality of the share of income at a national level – in favour of the profits of firms over wages of workers – is a drag on economic activity. As we have seen, the picture for the UK is particularly damning, with the decline of collective bargaining in the last three decades having reduced GDP by up to 1.6%. In light of this, the belief that countries with decentralised collective bargaining systems and weak trade unions gain an economic advantage can be dismissed.

Unions have been a critical force in building trust and solidarity across workforces, establishing strong networks and a collective narrative in society, reducing inequality and wage dispersion in organisations and whole sectors, and achieving workplace democracy. To reverse the diminishing of the share of income going to wages that has been the trend for four decades, labour institutions and the economy must be reconnected in a rightfully symbiotic relationship.

Appendices

Appendix 1: The effect of union density on the wage share

Table A.1 Review of empirical literature

Authors, year	Dependent variable	Independent variables and signs (if significant)	Estimation method	Sample	Marginal effect of union density
EC 2007	Wage share	Union density, minimum wage (+), K/L (+), ICT, PMR, trade openness (-), BRR (-), EPL (-), tax wedge (-), ALMP	OLS, FE, trend (not reported)	13 OECD countries, 1983–2002,	Insign.
IMF 2007	Wage share	Union density, Import (+) and export prices, K/L (+), immigration, offshoring, ICT, tax wedge, BRR	OLS, FE	18 countries, 1982–2002	Insign.
Stockhammer 2009	Wage share	Union density (+), ICT, K/L, trade openness (-), tax wedge, product market regulation, EPL, terms of trade, BRR, investment ratio, financial globalisation (-), long-term real interest rate	1. OLS, 5-year averages, FE and double FE; 2. OLS, annual data, FD	15 OECD countries, 198–2003	Min: 0.13*** Max: 0.2**
Kristal 2010	Wage share	Union density, strikes (+), political orientation, productivity (-), social expenditure (-), manufactured imports (non-OECD countries) to GDP (-), unemployment, immigration (-), inward FDI	ECM, FE	16 OECD countries, 1961–2005	Short-term: 0.379** Long-term: insign.
ILO 2011	Wage share	Union density(+), K/L, trade openness, BRR, tax wedge, EPL, young and old workers to labour force, GDP per capita, exchange rate, long-term real interest rate, financial globalisation	GLS, FE (period)	16 countries, 1981–2005	Min: 0.019*** Max: 0.083***
Stockhammer 2013	Wage share (private Sector)	Union density (+), ICT, K/L, trade openness (-), terms of trade (-), government consumption (+), growth rate, financial globalisation (-)	1. OLS, FE; FD; 5-year averages 2. GMM	28 OECD countries, 1980–2000	Min: 0.096* Max: 0.281***
Dünhaupt 2013 ⁹⁵	Wage share	Union density, strikes, trade openness (-), inward (-) and outward FDI, import prices (-), unemployment (-), public sector (+), dividend and interest payment (-)	1. OLS, double FE; FD 2. FGLS, double FE	13 OECD countries 1986–2007	Insign.
Kohler, Guschanski, Stockhammer 2015 ⁹⁶	Wage share	Union density(+), unemployment, EPL, GRR, trade openness, ICT, financial openness index, stock market turnover ratio, household debt	1. OLS, FE; 2. FD	14 OECD countries 1989–2011	Min: 0.119** Max: 0.327***

Key:

K/L = capital labour ratio. Trade openness calculated as exports plus imports divided by GDP.

BRR = benefit replacement ratio.

EPL = employment protection legislation. The tax wedge is the wedge between the labour cost to the employer and the corresponding net take-home pay of the employee.

ALMP = expenditure on active labour market policies.

Immigration = foreign labour force as a ratio of total labour force.

Offshoring = imports of intermediate inputs to gross output.

ICT = stock of information and communication capital to total capital stock.

Financial globalisation = foreign assets plus liabilities to GDP.

Political orientation = dummy variable for left wing governments.

FDI = foreign direct Investment.

Public sector = public sector value added to total value added.

Dividend and interest payment = dividend and interest payment of non-financial corporations to capital stock.

OLS = ordinary least squares.

FE = fixed effects.

FD = first differences.

ECM = error-correction model.

(F)GLS = (feasible) generalised least squares.

GMM = generalised method of moments.

*, ** and *** indicate statistical significance at the 10%, 5% and 1% level respectively.

Appendix 2: A review of contesting theoretical approaches

Different economic schools of thought developed distinct starting points for their analysis of functional income distribution. The neoclassical approach, which also forms the basis for the New Keynesian analysis, starts with a production function with two factors: capital and labour. The relative income shares of labour and capital are determined by technology.⁹⁷ Hence, the focus on technological change which characterises many studies in the mainstream economic tradition derives directly from their theoretical approach.

There are two critical assumptions in this framework: perfectly competitive markets and full-capacity utilisation. As soon as the assumption of perfect competition is dropped, i.e. if firms and workers act in oligopolistic markets as is mostly the case, relative bargaining power is influenced by the price-setting power (mark-up power) of firms. There is a substantial literature in the New Keynesian tradition that derives from this.⁹⁸

Consistent with the nature of modern capitalist economies, the relaxation of the assumption of full-capacity utilisation, i.e. the acceptance that capitalist economies are marked by presence of excess capacity and involuntary unemployment, gave birth to Keynesian macroeconomics, which emphasise the role of effective demand in determining output, income and employment. Consequently, functional income distribution is governed by demand, i.e. consumption of workers and capitalists and, more importantly, by the propensity to invest, which is driven by aggregate demand and business expectations, i.e. the animal spirits of the private investors.⁹⁹

The Political Economy approach sees distribution as a result of power relations. Technology might affect bargaining relations but technological change itself is an endogenous outcome of conflicts in the labour process. Wages are negotiated between employers and employees and are therefore subject to social norms and relative bargaining power. Consequently, scholars in this tradition have offered a more thorough analysis of the determinants of bargaining power. Marxist economists emphasise the sphere of production as the source of surplus and the core determinant of income distribution. Economists working in a post-Keynesian or Kaleckian tradition start directly from the assumption of oligopolistic markets and focus on the sphere of circulation. They take on board both imperfect competition and the presence of excess capacity and involuntary unemployment as crucial factors in analysing distribution, and emphasise the degree of monopoly in a market, which is determined by the degree of competition between firms, as well as union power and, in a more recent interpretation of the literature by the strength of the financial sector.

Although the New Keynesian and the Political Economy approaches to income distribution start from different assumptions, both arrive at a bargaining framework to analyse distribution of income, at least in the more recent studies in the New Keynesian tradition. The effects of globalisation and financialisation have also been integrated in empirical studies in both traditions, even though the latter aspect features less prominently in the mainstream New Keynesian analysis.

Appendix 3: The effect of the profit share on national income

Table A.2 summarises the effects of a 1 percentage-point increase in the profit share on consumption, investment and net exports, based on the estimations by Onaran and Obst.¹⁰⁰

Table A.2 Summary of the effects of a 1 percentage-point increase in the profit share at the national and European level

The effect of a 1 percentage-point increase in the profit share in only one country on:									The effect of a simultaneous 1 percentage-point increase in the profit share on % change in aggregate demand
C/Y	I/Y	X/Y	M/Y	NX/Y	Private excess demand / Y	Multiplier	% Change in aggregate demand (F*G)		
A	B	C	D	E (C-D)	F (A+B+E)	G	H	I	
A	-0.277	0.000	0.234	-0.161	0.396	0.119	1.039	0.124	-0.185
B	-0.151	0.206	0.000	-0.053	0.053	0.108	0.740	0.080	0.009
DK	-0.155	0.169	0.185	0.000	0.185	0.198	1.246	0.247	0.107
FIN	-0.243	0.000	0.074	0.000	0.074	-0.169	1.316	-0.222	-0.304
F	-0.324	0.101	0.062	-0.078	0.140	-0.083	1.559	-0.129	-0.228
D	-0.397	0.000	0.049	0.000	0.049	-0.348	1.136	-0.395	-0.442
GR	-0.564	0.000	0.099	0.000	0.099	-0.465	1.984	-0.923	-1.027
IRL	-0.229	0.161	0.000	-0.074	0.074	0.006	0.863	0.005	-0.066
I	-0.410	0.156	0.050	-0.087	0.137	-0.117	1.451	-0.170	-0.238
L	-0.153	0.000	0.000	0.000	0.000	-0.153	0.535	-0.082	-0.128
NL	-0.322	0.078	0.000	-0.069	0.069	-0.175	0.820	-0.144	-0.191
P	-0.402	0.000	0.000	-0.182	0.182	-0.219	1.546	-0.339	-0.477
E	-0.410	0.088	0.044	-0.068	0.113	-0.210	2.147	-0.450	-0.544
S	-0.388	0.128	0.057	-0.056	0.113	-0.147	1.058	-0.155	-0.271
UK	-0.252	0.000	0.074	-0.066	0.140	-0.112	1.129	-0.126	-0.195
EU15 GDP									-0.298*

Source: Onaran and Obst (2015)¹⁰¹

Key:

A = Austria, B = Belgium, DK = Denmark, FIN = Finland, F = France, D = Germany, GR = Greece, IRL = Ireland, I = Italy, L = Luxembourg, NL = Netherlands, P = Portugal, E = Spain, S = Sweden, UK = United Kingdom

* The country-specific growth rates from column I are multiplied by the weighted share of each country in EU15 GDP.

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Endnotes

1. For discussion see Kersley, H., Shaheen, F., Vardakoulias, O. & Mohun-Himmelweit, J. (2013). Raising the benchmark: The role of public services in tackling the squeeze on pay. London: NEF.
2. Adjusted wage share is labour compensation adjusted for self-employed income calculated as a ratio to GDP at factor cost; see Box 1 for more information.
3. Annual macro-economic database of the European Commission's Directorate General for Economic and Financial Affairs (DG ECFIN) (2015, 10 June) [webpage]. Retrieved from http://ec.europa.eu/economy_finance/db_indicators/ameco/index_en.htm
4. EU15 refers to the 15 member countries in the European Union prior to the accession of ten candidate countries on 1 May 2004. OECD (2007, 24 July). Glossary of statistical terms [webpage]. Retrieved from <https://stats.oecd.org/glossary/detail.asp?ID=6805>
5. Onaran, Ö. & Galanis, G. (2012). Is aggregate demand wage-led or profit-led? National and global effect. , 40, pp. 5f. Retrieved from http://www.ilo.org/wcmsp5/groups/public/---ed_protect/---protrav/---travail/documents/publication/wcms_192121.pdf
6. ILO (2014). World of work report: Developing with jobs. Revised ed. Geneva: International Labour Organization, p. 155. Retrieved from http://www.ilo.org/wcmsp5/groups/public/---dgreports/---dcomm/documents/publication/wcms_243961.pdf
7. Jäntti, M. (1997). Inequality in five countries in the 1980s: The role of demographic shifts, markets and government policies. *Economica*, 64 (255), pp. 415–440; Daudey, E. & Garcia-Penalosa, C. (2007). The personal and the factor distributions of income in a cross-section of countries. *Journal of Development Studies*, 43 (5), pp. 812–829; Wolff, E. & Zacharias, A. (2013). Class structure and economic inequality. *Cambridge Journal of Economics*, 37, pp. 1381–1406; Dafermos, Y. & Papatheodorou, C. (2011). Functional and personal income distribution in a stock-flow consistent model. Paper prepared for the 15th Conference of the Research Network Macroeconomics and Macroeconomic Policies (FMM), Berlin, 28–29 October 2011.
8. For a summary see Reed, H. & Mohun Himmelweit, J. (2012). Where have all the wages gone? Lost pay and profits outside financial services. Touchstone Extras. London: Trades Union Congress. Retrieved from https://www.tuc.org.uk/sites/default/files/tucfiles/where_have_all_the_wages_gone_touchstone_extras_2012.pdf
9. For more details about the methodology see Gollin, D. (2002). Getting income shares right. *Journal of Political Economy*, 110 (2), pp. 458–474.
10. Kristal, T. (2010). Good times, bad times: Postwar labor's share of national income in capitalist democracies. *American Sociological Review*, 75 (5), pp. 729–763. Retrieved from <https://hevr.haifa.ac.il/~soc/images/segelacdemi/talikristal/ASR2010.pdf>
11. Visser, J. (2006). Union membership statistics in 24 countries. *Monthly Labor Review*, 129 (1), pp. 38–49.
12. OECD (2015, 10 August). Trade union density [webpage]. Retrieved from https://stats.oecd.org/Index.aspx?DataSetCode=UN_DEN
13. The high union density of Sweden and Denmark has to be interpreted with care as both countries belong to the Ghent System where welfare payments are managed by trade unions, and, as such, traditionally have a much higher level of union density. For more on the Ghent system in a Swedish context, see Kjellberg, A. (2009). The Swedish Ghent system and trade unions under pressure. *Transfer*, 25 (3–4), pp. 481–504. Retrieved from <http://lup.lub.lu.se/luur/download?func=downloadFile&recordId=1510654&fileId=1510661>
14. The decline in union density is calculated as the difference in the union density between its peak and the latest available value (2013 or 2012).
15. The strong decline of union density in Ireland in the 1990s is also due to the high increase in employment, an increase that did not take place to the same extent in the UK.
16. Luxembourg is excluded from the analysis due to a lack of trade union data.
17. Ebbinghaus, B. & Visser, J. (2000). *The societies of Europe – trade unions in Western Europe since 1945*. London: Macmillan Reference Ltd, p. 62.
18. Ibid. p. 104.
19. Visser, J. (2006). p. 39.
20. The variable is adjusted for the possibility that some sectors or occupations are excluded from the right to bargain by removing such groups from the employment count before dividing the number of covered employees by the total number of dependent workers in employment.
21. Visser, J. (2013). ICTWSS: Database on institutional characteristics of trade unions, wage setting, state intervention and social pacts [webpage]. AIAS. Retrieved from <http://www.uva-aias.net/208>
22. Visser, J. (2006). p. 47.

23. The decline in bargaining coverage is calculated as the difference in bargaining coverage between its peak and the latest available value (between 2007 and 2011).
24. Bogg, A. L. (2006). Representation of employees in collective bargaining within the firm: Voluntarism in the UK. Report to the XVIIth International Congress of Comparative Law, July 2006. Netherlands Comparative Law Association. Retrieved from <http://www.ejcl.org/103/art103-3.pdf>; Brown, W., Bryson, A. & Forth, J. (2008). Competition and the retreat from collective bargaining. NIESR Discussion Paper No. 318. Retrieved from http://niesr.ac.uk/sites/default/files/publications/210808_110817.pdf
25. Worker-participation.eu (n.d.) Collective bargaining [webpage]. Retrieved from <http://www.worker-participation.eu/National-Industrial-Relations/Countries/United-Kingdom/Collective-Bargaining>
26. Ewing, K.D. & Hendy, J. (2013). *Reconstruction after the crisis: A manifesto for collective bargaining*. Liverpool: The Institute of Employment Rights & CLASS.
27. Visser, J. (2013).
28. Kenworthy, L. (2001). Wage-setting coordination scores [webpage]. Retrieved from <http://lanekenworthy.net/>
29. Kenworthy, L. (2001). Wage-setting institutions: A survey and assessment. *World Politics*, 54, pp. 57–98.
30. For example, although wages are negotiated on an industry or sectoral level in Germany, other industries might then apply the terms negotiated by one institution to another sector. This is referred to as 'pattern setting'.
31. Visser, J. (2013). Wage bargaining institutions – from crisis to crisis. *European Commission Economic Papers*, 488, p. 63.
32. Kristal, T. (2010); Argitis, G. & Pitelis, C. (2001). Monetary policy and the distribution of income: Evidence for the United States and the United Kingdom. *Journal of Post Keynesian Economics*, 23, pp. 617–638.
33. Kristal, T. (2010). p. 378.
34. ILO (2015, 10 August). Strikes and Lockouts Statistics [database]. Retrieved from http://laborsta.ilo.org/data_topic_E.html

OECD (2015, 10 August). Civilian Employment [database]. Retrieved from http://www.oecd-ilibrary.org/employment/data/labour-force-statistics/summary-tables_data-00286-en;jsessionid=6lrr4o1a1d4ql.x-oecd-live-02?isPartOf=/content/datacollection/lfs-data-en
35. Strike activity is the variable for which the data is least reliable. As strikes are recorded differently in all countries it is difficult to draw comparisons across them. For example, data for Denmark excluded all work stoppages of less than 100 work-days until 1995, while the threshold is eight hours for Sweden. This is the main reason that Denmark is excluded from the sample, although strike activity shows a declining trend there since the early 2000s.
36. Hyman, R. (2001). *Understanding European trade unionism – between market, class and society*. London: SAGE Publications, p. 68.
37. Office for National Statistics (2012, 15 August). Labour disputes – annual article, 2011. Retrieved from <http://www.ons.gov.uk/ons/rel/bus-register/labour-disputes/annual-article-2011/art---labour-disputes--annual-article-2011.html>
38. HR Magazine (2011, 5 September). Are tougher strike laws the answer? [webpage]. Retrieved from <http://www.hrmagazine.co.uk/hro/features/1020024/are-tougher-strike-laws-answer>
39. Baker, D., Glyn, A., Howell, D. & Schmitt, J. (2004). Unemployment and labour market institutions: The failure of the empirical case for deregulation. Working paper no. 43. Geneva: International Labour Office. Retrieved from http://natlex.ilo.ch/wcmsp5/groups/public/---dgreports/---integration/documents/publication/wcms_079135.pdf
40. Morgan, G. (2014). Financialization and the multinational corporation. *Transfer*, 20, pp. 183–197 at p. 184. Retrieved from <http://trs.sagepub.com/content/20/2/183.full.pdf+html>
41. Kristal, T. (2010), p. 740; Burke, J. & Epstein, G. (2001). Threat effects and the internationalization of production. Political Economy Research Institute working paper no. 15. Amherst, MA: University of Massachusetts.
42. Dustmann, C., Frattini, T. & Preston, I. (n.d.). *A study of migrant workers and the National Minimum Wage and enforcement issues that arise*. Low Pay Commission. Retrieved from <http://www.ucl.ac.uk/~uctpb21/reports/LPC.pdf>; Department for Business Innovation & Skills (2015). The impacts of migrant workers on UK businesses. BIS research paper no. 217. Retrieved from https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/406760/bis-15-153-impacts-of-migrant-workers-on-uk-business.pdf
43. Stockhammer, E. (2013). Why have wage shares fallen? Conditions of Work and Employment series no. 35. International Labour Organization; NEF/Freidrich-Ebert-Stiftung (n.d.). Inequality and financialisation: A dangerous mix. London: NEF, p. 3. Retrieved from http://b3cdn.net/nefoundation/005f379c2df9c812f1_gqm6ivky0.pdf
44. Jayadev, A. (2007). Capital account openness and the labour share of income. *Cambridge Journal of Economics*, 31 (3), pp. 423–443.
45. Morgan, G. (2014). p. 185.
46. Lazonick, W. & O'Sullivan, M. (2000). Maximizing shareholder value: a new ideology for corporate governance. *Economy and Society*, 29 (1), pp. 13–35; Langley, P. (2007). Uncertain subjects of Anglo-American financialization. *Cultural Critique*, 65, pp. 67–91.

47. Stockhammer, E. (2013).
48. The focus on technology derives directly from underlying neoclassical or New Keynesian theory, which sees income shares of labour and capital as being determined by the technological parameters of the production function. For more on this see appendix 2: A review of contesting theories
49. IMF (2007). The globalization of labor. In *World Economics Outlook*, Washington: International Monetary Fund, Chapter 5; European Commission (2007). The labour income share in the European Union. In *Employment in Europe*, Brussels: European Commission, Chapter 5; Bassanini, A. & Manfredi, T. (2012). Capital's grabbing hand? A cross-country/cross-industry analysis of the decline of the labour share. Social, employment and migration working paper no. 133. OECD; Karabarbounis, L. & Neiman, B. (2012). Declining labor shares and the global rise of corporate savings. Working paper no. 18154. NBER.
50. Stockhammer, E. (2013), especially pp. 12–15.
51. Rodrik, D. (1997). *Has globalization gone too far?* Washington, DC: Institute of International Economics; Diwan, I. (2001). Debt as sweat: Labour, financial crises, and the globalisation of capital. Washington, DC: The World Bank; Harrison, A. E. (2002). Has globalisation eroded labour's share? Some cross-country evidence. Berkley: University of California; Onaran, Ö. (2009). Wage share, globalization, and crisis: The case of manufacturing industry in Korea, Mexico, and Turkey. *International Review of Applied Economics*, 23 (2), pp. 113–114.; Jayadev, A. (2007); Rodriguez, F. & Jayadev, A. (2010). The declining labor share of income. Human development report 2010/36. United Nations Development Programme; ILO (2011). The labour share of income: Determinants and potential contribution to exiting the financial crisis. In *World of work report: Making markets work for jobs*. Geneva: ILO, Chapter 3; Kristal (2010); Stockhammer (2013).
52. Kersley, H (2015, forthcoming). Including you in a new world of work. London: NEF
53. Ebbinghaus & Visser (2000), pp. 62–64; Visser, 2006, p. 47.
54. OECD (2015). In it together: Why less inequality benefits all. Paris: OECD Publishing, p. 29. Retrieved from <http://www.oecd.org/els/soc/OECD2015-In-It-Together-Chapter1-Overview-Inequality.pdf>
55. Dellot, B. & Reed, H. (2015). *Boosting the living standards of the self-employed*. RSA Action and Research Centre, p. 14. Retrieved from <https://www.thersa.org/discover/publications-and-articles/reports/boosting-the-living-standards-of-the-self-employed/>
56. ONS (2014, 20 August). Self-employed workers in the UK – 2014. ONS, p. 1. Retrieved from http://www.ons.gov.uk/ons/dcp171776_374941.pdf
57. Dellot, B. & Reed, H. (2015), p. 12.
58. Cribb, J. & Sibiet, L. (2015, June). Mobility of public and private sector workers. IFS Briefing Note BN173. IFS., p.3. Retrieved from <http://www.ifs.org.uk/uploads/publications/bns/BN173.pdf>
59. Department for Business, Innovation, and Skills (2015, June). *Trade union membership 2014: statistical bulletin*. BIS, Table 2.4b.
60. Office for National Statistics (2014, November). *Public and private sector earnings – November 2014*. ONS, Tables 10 and 11.
61. Department for Business, Innovation, and Skills (2015, June), p. 12.
62. Stockhammer, E. (2013), especially pp. 12–15.
63. All specifications are based on panel estimation for OECD countries. The minimum estimated effect of union density on the wage share is 0.019 (ILO, 2011), the mean of the estimators is 0.181, and the maximum effect is 0.379 (Kristal, 2010).
64. Choi, M. (2001). Threat effect of foreign direct investment on labour union wage premium. Political Economy Research Institute working paper no. 27. Amherst, MA: University of Massachusetts.
65. Nunziata, L. (2005). Institutions and wage determination: A multi-country approach. *Oxford Bulletin of Economics and Statistics*, 67 (4), pp. 435–466.
66. Jaumotte, F. & Buitron, C. O. (2015). Power from the people. *Finance & Development*, 52 (1), pp. 29–31. Retrieved from <http://www.imf.org/external/pubs/ft/fandd/2015/03/jaumotte.htm>
67. Ibid. Although some economists have argued that stronger unions can lead to higher unemployment there is very little econometric evidence for this hypothesis. See also OECD (2006). Reassessing the role of policies and institutions for labour market performance: A quantitative approach. In *Employment Outlook 2006*. Paris: OECD, pp. 207–231.
68. OECD (2006).
69. The coefficient of union density in the estimations multiplied by the actual change in union density.
70. IMF (2014, October). World economic outlook: Legacies, clouds, uncertainties. World Economic and Financial Surveys. Retrieved from <http://www.imf.org/external/pubs/ft/weo/2014/02/pdf/text.pdf>; Antolin-Diaz, J., Drechsel, T. & Petrella, I. (2014). Following the trend: Tracking GDP when long-run growth is uncertain. Fulcrum Research Papers. Fulcrum Asset Management. Retrieved from https://www.fulcrumasset.com/assets/3/2586_document.pdf?1414159955

71. Onaran, Ö. & Galanis, G. (2012). Is aggregate demand wage-led or profit-led? National and global effect. ILO, Conditions of Work and Employment series, Issue 40, pp. 1–65.
72. Meadway, J. (2013). Why we need a new macroeconomic strategy. London: NEF. http://b3cdn.net/nefoundation/66609d0bb3c446660a_z6m6b6xt.pdf
73. Johnson, S. (2013, 13 October). Capital gobbles labour's share, but victory is empty. *Financial Times*. Retrieved from <http://www.ft.com/cms/s/0/63f14896-2f6c-11e3-8cb2-00144feab7de.html#axzz3i8PkaUe0>
74. This is known as the post-Keynesian/post-Kaleckian approach. The theoretical models have been formally developed by Rowthorn, R. (1981). *Demand, Real Wages and Economic Growth*. Thames Papers in Political Economy. London: Thames Polytechnic, pp.1–39; Dutt, A. (1984). Stagnation, income distribution and monopoly power. *Cambridge Journal of Economics*, 8, pp. 25–40; Taylor, L. (1985). A stagnationist model of economic growth. *Cambridge Journal of Economics*, 9, pp. 383–403; Blecker, R. (1989). International competition, income distribution and economic growth. *Cambridge Journal of Economics*, 13, pp. 395–412; and Bhaduri, A. & Marglin, S. (1990). Unemployment and the real wage: The economic basis for contesting political ideologies. *Cambridge Journal of Economics*, 14, pp. 375–93. These models synthesise ideas of Keynes, Kalecki and Marx, and while they accept the direct positive effects of higher profits on private investment and net exports as emphasised in mainstream models, they contrast these positive effects with the negative effects on consumption.
75. Labour cost per unit of output produced is the 'unit labour cost'.
76. Private investment is estimated as a function of output and the profit share; consumption is estimated as a function of adjusted profits and adjusted wages. Econometric estimations are those developed by applying a statistical model to economic data and testing hypotheses. It is roughly equivalent, in economics, to conducting laboratory experiments. To estimate the effects of distribution on net exports (exports minus imports) these studies follow a step-by-step approach: exports are estimated as a function of export and import prices, along with the GDP of the rest of the world; imports are estimated as a function of domestic prices and import prices, and GDP; domestic prices and export prices are estimated as functions of nominal unit labour costs and import prices.
77. Nominal unit labour costs.
78. Onaran, Ö. (2014). State intervention for wage-led development. Policy Paper. Centre for Labour and Social Studies. Retrieved from http://classonline.org.uk/docs/2014_Wage-led_development_-_Ozlem_Onaran.pdf
79. Onaran & Galanis (2012).
80. E.g. Onaran & Galanis (2012); Onaran, Ö. & Obst, T. (2015). Wage-led growth in the EU15 Member States: The effects of income distribution on growth, investment, trade balance, and inflation. Project report, Foundation of European Progressive Studies. Retrieved from <http://www.feps-europe.eu/en/publications/details/313>; Stockhammer, E., Onaran, Ö. & Ederer, S. (2009). Functional income distribution and aggregate demand in the Euro area. *Cambridge Journal of Economics*, 33 (1), pp. 139–159; Hein, E. & Vogel, L. (2008). Distribution and growth reconsidered – empirical results for six OECD countries. *Cambridge Journal of Economics*, 32, pp. 479–511; Naastepad, C. W. M. & Storm, S. (2006/7). OECD demand regimes (1960–2000). *Journal of Post-Keynesian Economics*, 29, pp. 213–248; Stockhammer, E. & Onaran, Ö. (2004). Accumulation, distribution and employment: A structural VAR approach to a Kaleckian macro-model. *Structural Change and Economic Dynamics*, 15, pp. 421–447; Bowles, S. & Boyer, R. (1995). Wages, aggregate demand, and employment in an open economy: An empirical investigation. In G. Epstein and H. Gintis (eds), *Macroeconomic policy after the Conservative era. Studies in investment, saving and finance*, Cambridge: Cambridge University Press, pp. 143–171.
81. Based on Onaran, Ö. & Galanis, G., (2012). Is aggregate demand wage-led or profit-led? National and global effect. ILO, *Conditions of Work and Employment Series*, Issue 40; and Onaran, Ö. and Galanis, G. (2014) 'Income distribution and aggregate demand: National and global effects', *Environment and Planning*, 46(10).
82. Onaran & Galanis (2014), Hein & Vogel (2008), Naastepad & Storm (2006/7), and Bowles & Boyer (1995) are the other studies which have tested similar models for the UK, all finding that the UK is a wage-led economy.
83. See column H, Table A.2, Appendix 3.
84. Onaran & Galanis (2012, 2014).
85. Ibid.
86. Ibid.
87. Estimations of the effect of the fall in the wage share on growth are based on the model in Onaran & Obst (2015); the fall in the wage share simulated in the three scenarios is based on the effect of the fall in union density on the wage share reported in Table 1.2. The authors are grateful to Thomas Obst for his assistance in simulating the impact of the fall in the wage share on growth.
88. Van Reenan, J. & Pessoa, J.-P. (2012). Decoupling wage and productivity growth? Myth and realities. Working paper. Resolution Foundation Commission on Living Standards.
89. ONS (2015, 28 July). Gross Domestic Product preliminary estimate, quarter 2 (Apr to June) 2015. Retrieved from <http://www.ons.gov.uk/ons/rel/gva/gross-domestic-product-preliminary-estimate/q2-2015/stb-gdp-q2.html>
90. Jackson, T. (2009). Prosperity without growth. London: Sustainable Development Commission.
91. See in particular the work of the Stiglitz-Sen-Fitoussi Commission. For an overview of approaches that look beyond GDP as a measure of progress see: NEF (2013, April). Beyond GDP: Valuing what matters and measuring natural capital (Economics in policy-making briefing 7). London: NEF. Retrieved from http://b3cdn.net/nefoundation/800a24dd60a18be7ea_vem6bnetw.pdf

92. Onaran & Galanis (2012).
93. Trade Union Advisory Committee to the OECD (TUAC) (2013). Growing more equal: A policy agenda for reducing inequality and promoting inclusive growth. Discussion paper for consultations with the OECD Liaison Committee, 11 December 2013. Paris: TUAC. Retrieved from http://www.ilo.org/actrav/WCMS_230867/lang-en/index.htm
94. Jaumotte & Buitron (2015).
95. Dünhaupt, P. (2013). The effect of financialization on labor's share of income, Working Paper, Institute for International Political Economy Berlin, Issue 17, pp. 1-25.
96. Kohler, K., Guschanski, A. and Stockhammer, E. (2015, forthcoming) 'How does financialisation affect functional income distribution? A theoretical clarification and empirical assessment', Working Paper.
97. If a firm produces in a fully competitive market with full-capacity utilisation and the production function is characterised by constant elasticities of substitution between capital and labour, the relative income shares of the productive factors are determined by their marginal productivity, which is technologically given by the employment elasticity of output.
98. European Commission (2009). Understanding labour income share dynamics in Europe. Economic Papers 379, Brussels: European Commission.
99. Kaldor, N. (1955). Alternative theories of distribution. *The Review of Economic Studies*, 23 (2), pp. 8–100.
100. Onaran, Ö. & Obst, T. (2015).
101. Ibid.

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