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German lessons: developing industrial policy in the UK

Foreword

by Brendan Barber, TUC General Secretary

The British economy is at a crossroads. With growth stagnating and the public finances facing an unprecedented period of retrenchment the imperative of boosting British manufacturing and securing export growth is greater than it has been for decades. But even without the economic downturn of recent years questions would still persist about Britain's ability to survive and thrive in an era of globalisation. Since the end of the 1970s, Britain has moved away from its manufacturing heritage and focused instead on the service industry – financial services in particular. Whatever the benefits of success in these sectors there is concern at the decline of manufacturing, particularly the impact this has had for specific communities and regions. Many decent, well-paid jobs for skilled manufacturing workers have been lost and the economy has faced growing regional and sectoral imbalances.

The TUC believes that a strong manufacturing sector belongs at the heart of the British economy, and has for many years championed the need for the development of a comprehensive and modern industrial policy. So while we have welcomed the government's recognition of manufacturing's importance, we also know this will require a commitment to actively support its growth. This report sets out some ideas about how this might be done.

Our research was aimed at understanding the practical measures the UK could take to rebalance our economy in the years ahead. The search for expertise led to Germany, a powerhouse of the European economy and a country that has never lost sight of the value of its manufacturing sector. Through meetings with senior managers, works council members and trade union officials in leading German companies, including Volkswagen, Siemens and BMW, we tried to see how the UK could learn from German manufacturing successes.

Our conclusions are wide ranging. We call for a new manufacturing eco-system for the UK: a range of policies needed to bring the country back to its rightful place as a major manufacturing nation. Skills, investment, procurement, helping small firms to expand, finance for strategic sectors and the role of government are all identified as priority areas for action. We also recognise the need for a new economic system that brings management and workers together, rather than pushing them apart, and set out the role of modern trade unions and the value of collective bargaining and of minimum standards.

This report challenges the government to recognise the importance of industrial activism. But we know it is not just ministers, but also companies and trade unions that need to consider the role they can play in achieving change. The prize is significant: a manufacturing renaissance in a rebalanced economy, boosting our industrial strength and enhancing social justice.

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Section one

Executive summary

1.1 This paper is published at a crucial time in the history of the British, and the wider European, economies. The UK's Coalition government has embarked on a radical path of deficit reduction that its supporters argue is necessary for economic strength in the long term and its critics – the TUC is one – believe threatens to pull the rug from under our recovery from the worst economic downturn since the 1930s. The crisis in the eurozone could undermine the whole concept of economic union. If the eurozone avoids the worst, it will be in no small part due to the support of the most successful economy in Europe, Germany.

1.2 Alongside the short-term need for economic recovery, commentators continue to debate how the Great Recession came about, whether it could have been avoided, and what lessons should be learned. One lesson that seems universally accepted in the UK is that there must be a rebalancing of the economy, away from excessive reliance on financial services, towards other sectors. A renaissance for manufacturing has been discussed in that context. Moreover, even before the economic downturn, the growth of China, India and other new entrants to the world economy were prompting tough questions about how western economies would survive, and thrive, in the 21st century.

1.3 The TUC supported a rebalancing of the economy, and a greater role for manufacturing, long before the economic crisis. We have published several papers on this subject and have been keen to learn lessons from other, successful manufacturing nations. As the economic powerhouse of Europe, there were clearly lessons to be learned from Germany.

1.4 This paper has been produced in co-operation with Unite, the largest union in UK manufacturing, and IG Metall, which represents manufacturing workers in Germany. It begins by charting the key developments in industrial policy, in Germany and the UK, since 1945. It then describes the state of industrial policy in both those countries today.

1.5 Following this, we present evidence from German or German-owned British companies in Germany and the United Kingdom. Interviews have been held with senior managers and trade union officials from five companies based in Germany – Volkswagen, Siemens, ThyssenKrupp, BASF and Airbus – and four in the UK – Bentley (which is owned by Volkswagen), Siemens, BMW and Roballo Engineering (which is owned by ThyssenKrupp). Those senior managers and trade unionists were asked a range of questions about the economic downturn, competition from China, skills, industrial relations, the growth of the 'green' economy and the role of government in industrial policy.

An interview was also held with Martin Behrens, Head of the European Industrial Relations Unit at the Hans Bockler Stiftung.

1.6 This report tells their stories. The TUC believes that, through their own voices, these managers and trade unionists offer solid evidence and clear arguments for the future of industrial policy in the United Kingdom.

1.7 This report also highlights the positive role of trade unions in these companies. This is particularly important in the UK, where so much of the narrative of the media is of a negative, hostile trade unionism. Company and union voices in the pages that follow attest to strong, vibrant, challenging but ultimately positive relationships. Such relationships are valuable at any time, but during an economic crisis the likes of which we have experienced in recent years, they are of tremendous value to both company and workforce.

1.8 Following our dialogue with these companies, the TUC calls for a new manufacturing eco-system. Tinkering with policy is no longer enough. What is needed is a radical development of an interventionist manufacturing policy, bringing together a number of individual changes to make a coherent whole. These policy changes include:

- The need for an economic model that is widely seen as fair among employers and trade unions. We argue that the German Social Market Economy is culturally cherished in Germany, in much the same way that the National Health Service is culturally cherished in the UK. A version of the Social Market Economy in the United Kingdom, albeit one which reflects the UK's history and traditions, could help to unite our nation around values of equality, fairness and mutuality
- A major role for strong, well organised trade unions and strong employers' associations. In the German system, employee representatives (who are usually trade union members) have seats on Works Councils and Supervisory Boards. They often have the power to block change, but rarely do so. Differences of opinion, even conflict, are recognised and respected, safe in the knowledge that what unites management and union is stronger than what divides them. Trade unions take responsibility for the success of the company. They embrace and manage change, even change of the kind that make them feel uncertain, but bargain hard to defend their members in a changing world. This report contains examples of trade unions at their best: questioning and challenging, but always in a constructive way. It also shows how, specifically, strong unions in the Social Market model were able to support both their companies and their members when it mattered most – during a crisis the like of which the world has not seen since the 1930s. It is in the most difficult of times that our relationships are most severely tested, and the economic crisis - and the way in which unions responded in Germany - highlighted the value of the Social Market Economy in a very particular way
- The understanding that the UK must specialise in a number of targeted, high skill, high value manufacturing sectors where we are or could become

competitive in the age of globalisation. It is not credible for the UK to expect to succeed in all sectors, and skills, R&D and other areas of government support must be aimed at these key sectors. This is not about 'picking winners', but it is about making political decisions to support certain sectors, therefore enabling the development of winners within them. Siemens' work on mega-trends, which is described below, whilst originally implemented at the company level, offers a template for targeting the industrial sectors in which we might specialise

- Support for key industries in the context of tackling climate change. A good example is the need for a package of measures to support the UK's energy intensive industries, an issue that has already been addressed in Germany
- The need for urgent action on skills. Companies in Germany and the UK speak of skill shortages, but German companies start from a higher base. Apprenticeships must form the cornerstone of industrial skills, and whilst we have a number of reservations, we wish to discuss the role of University Technical Colleges with the government, on the understanding that true 'parity of esteem' is needed before anyone pursues a path to vocational education that could be seen as "second best"
- The need to grow small firms, building an economic rationale for medium-sized firms in wider industrial policy. UK policy discussion is focused on large, world-class companies, such as Rolls Royce on the one hand, and small, often micro-businesses on the other, but there is very little discourse about medium-sized companies. The German 'mittelstand', the network of thousands of medium sized firms in Germany, is often described as the 'backbone' of the German economy and acts as a supplier to larger multinationals. In the UK, small companies are seen as a good in themselves, but no more is expected of them than that they simply survive and provide for their owner or small number of employees. Their place in the wider economy is unexplored
- A procurement policy guided by the principle that every pound of taxpayers' money should contribute to jobs, skills or the strength of the British economy. government, employers and trade unions should agree on the wider aims of procurement policy, whilst recognising that contracts will always be offered on a case-by-case basis. But a procurement regime that is simply based on lowest cost, offering nothing to the long term development of the British economy, has no place if our industries are to reach new levels of competitiveness
- A recognition that nationality can be important. German companies operating in the UK, described in this report, have made a major contribution to our economy, but it is a simple fact of life that political pressures in 'parent' countries will sometimes be an issue
- An understanding that immigration policy can inhibit a company from acquiring much needed specialist skills. Of course, immigration also has the potential to depress wages, especially in the low skill service sector, and can be used as an alternative to proper education and training. Immigration should therefore be seen as positive for high skill, high value businesses, and

should be accompanied by the restoration of collective bargaining that is implicit in this paper, and the re-regulation of the labour market to ensure equal pay and fair treatment for those at the bottom end

- A recognition that informing and consulting employees, collective bargaining and minimum standards are not either/or policies, but both have a role to play in the modern workplace.

1.9 The conclusions from this report stem from the interviews undertaken with senior managers and trade union officials, but they must be approached in a wider economic context. Specifically, the TUC believes the imbalance in the world economy, between surplus countries who export more than they import (China, Germany, Japan) and countries which run persistent trade deficits (the US, but also the UK, Spain, Portugal and Italy, among others) must be addressed. Furthermore, Germany's trade surplus has been achieved at least in part on the back of wage depression to subdue domestic demand, which is not a model we advocate that the UK should follow.

1.10 This is a commonly held view. Writing in the *Financial Times* on 27th October 2011, the US President, Barack Obama, said: "…each nation must do its part to ensure that global growth is balanced and sustainable so we avoid slipping into old imbalances. For some countries, this means confronting their own fiscal challenges. For countries with large surpluses, it means taking additional steps to support growth. For export-oriented economies, it means working to boost domestic demand."[1]

1.11 This report is firmly of the view, then, that Germany must take steps to boost domestic demand and must be prepared to import as well as export.

1.12 This report also supports IG Metall's call for Germany to introduce a minimum wage. Sixty per cent of German workers are covered by collective agreements, but some workers fall by the wayside of industry negotiations. These workers do not necessarily share in the commitment to fairness and equality that is implicit in the Social Market Economy. Those workers need the support of a minimum wage and UK trade unions would be happy to offer advice and expertise to support its implementation, based on our own experience of this issue.

[1] "A firewall to stop Europe's crisis spreading", Barack Obama, *Financial Times*, 27 October 2011.

Section two

Introduction

2.1 At the time of writing, it is no exaggeration to say that many European economies are in crisis. Events in the eurozone since August 2011 threaten its very survival. The UK economy is flatlining, with stagnant growth and rising unemployment.

2.2 The UK government's raison d'etre, its overarching narrative since it was elected in 2010, has been to eliminate the UK's structural deficit over the lifetime of this Parliament. Only by deficit reduction, it argues, will economic confidence return. However, the government has come under pressure from critics who argue that it has a deficit reduction strategy, but not a growth strategy.

2.3 The economic downturn has affected all of Western Europe, but Germany remains surprisingly robust. Germany is still Europe's economic powerhouse. Its industries remain strong. Its Social Market Economy continues to emphasise both economic efficiency and social justice.

2.4 Are there lessons here for the UK? Moreover, building a successful industrial model is a fine ambition, but can it be done in such testing times? Competing with the huge market of the United States, adapting to the emergence into the world economy of major players such as China and India – and increasingly Brazil and Russia – would never have been easy. Doing so in the aftermath of the biggest economic crisis since the 1930s, some might argue, is impossible.

2.5 Impossible? The UK and Germany both have excellent industrial heritages. The UK was the cradle of the industrial revolution. British trade unions have expressed concern in recent years at the decline of UK manufacturing, yet the sector still employs 2.8 million people and in 2009 contributed £140bn in gross value added, around 12 per cent of GDP. Major manufacturers such as BAE systems, Rolls Royce, Toyota, Nissan and Diageo have important operations in the UK.

2.6 Germany was seen as Europe's powerhouse economy throughout the second half of the 20th century, mainly thanks to its industrial success. German manufacturing contributed 504.3bn euros of gross value added in 2008. Major German brands include Siemens, Volkswagen, BMW and Deutsche Bahn.

2.7 But the UK needs a step change in its manufacturing performance if it is to remain competitive in the 21st century, while Germany cannot sit on its laurels. The over reliance on financial services experienced in the UK in recent

years has left manufacturing trailing. Other countries have been faster to exploit new markets and to develop tomorrow's technologies. Germany experienced strong growth in 2011, partly driven by exports to Asia. But this is a non-traditional market for Germany and is not expected to continue. Indeed, whilst the German government forecasts growth of 2.9 per cent in 2011, it expects growth of just one per cent in 2012 and, according to Germany's leading economic institutes, it will narrowly avoid a technical recession, defined as two negative quarters of economic growth, over the coming winter.[2] This is due to struggling economies among some German export markets and underlines the case for boosting domestic consumption in Germany to balance its success in exports.

2.8 This paper is designed to explore a new model of industrial activism. By following this model, the TUC believes that Germany and the UK will be well prepared to meet the economic, industrial and environmental challenges ahead. The paper presents recommendations for the future of industrial policy, based on the knowledge gleaned from interviews with senior managers and trade union representatives at a number of major companies in the UK and in Germany. Those companies are Volkswagen, Siemens (in both Germany and the UK), Thyssenkrupp, BASF Airbus, BMW, Bentley and Roballo Engineering. An interview was also held with Martin Behrens, Head of the European Industrial Relations Unit at the Hans Bockler Stiftung

2.9 Before describing these interviews and recommendations, however, the paper reflects on the economic and industrial histories of the UK and Germany in the last 60 years.

[2] "Germany cuts economic growth forecast", BBC website, 20 October 2011. www.bbc.co.uk/news/business-15385934

Section three

Industrial policy in Germany and the UK: a brief history

Emerging from war

3.1 The UK and Germany emerged from the Second World War, exhausted, as victor and vanquished. Yet it was not long before a new geopolitics, that of the Cold War, took hold and began to dictate the pace and direction of world affairs, including the world economy. In particular, the role of the United States had an immediate influence on the immediate post war years.

3.2 As early as August 1940, Sir Kingsley Wood, the Chancellor of the Exchequer, had presented a paper to Cabinet arguing that Britain was virtually bankrupt. After the war, the new Labour government of Clement Attlee sought loans from the United States and Canada.

3.3 Marshall Aid was introduced in 1948, because by that time, the prosperity of Western Europe was seen as crucial to American defence. The UK took its share of the loan but faced difficulty again in 1949, when a recession in the US made dollar exports more difficult. A massive devaluation of sterling, from $4.03 to $2.80, was to follow, although it must be acknowledged that other European governments faced the same pressure: Austria, France, Italy, Sweden, the Netherlands and Belgium devalued at this time as well.

3.4 The Labour government also embarked on a major programme of public ownership. The Labour Party supported public ownership because they believed it would prevent unemployment, redistribute wealth, rationalise production and create better relations with industry. There was more cross party support for public ownership at the time and virtually all the industries nationalised had a history of state intervention.

3.5 A White Paper on Wages and Personal Incomes, published in February 1948, was the first of many attempts by post-war UK governments at an incomes policy. It sought to link personal incomes to increases in the volume of productivity, emphasising the need to export to allow Britain to pay its way in the world.

3.6 Beset by fears of a resurgent Germany, in March 1946, the Allies implemented a Level of Industry Plan to restrict German industrial output to one-half of pre-war levels. Of course, the uncertainty created by these measures discouraged investors from committing resources to industrial activity. In

1947, German industrial production was barely one-third of pre-war levels, below the ceilings imposed by the Level of Industry Plan.

3.7 This situation posed a dilemma for the Allies. Germany was the economic centre of Europe. It supplied the capital goods needed for the recovery and growth if its neighbours. The Level of Industry Plan limited the production of machine tools to 10 per cent of 1936 levels. Ultimately the advent of the Cold War in1946-47 catalysed a shift in US thinking. It forced even the French to acknowledge that the Allies could not afford to dismantle Germany industry.

The Golden Age

3.8 The period from 1950 to 1973 is referred to by economic historians as the 'golden age'. During this period, GDP in Western Europe grew at 4.8 per cent per year on average, and GDP per capita grew at an average of four per cent per year. This compares to figures of 2.2 per cent and 1.4 per cent between 1890 and 1913, 1.4 per cent and 0.9 per cent between 1913 and 1950, and 2.1 and 1.7 per cent between 1973 and 1994.[3]

3.9 There were three aspects to growth in the 1950s. These were: the extent of prior industrial development and the scope that remained from boosting productivity by shifting workers from agriculture to industry and services; the productivity gap and the scope for boosting incomes by converging toward technological best practice; and the extent of wartime disruption and the scope for growing rapidly by making up lost ground. Industrial modernisation, to varying degrees, required government policies to co-ordinate a range of complimentary investments.

3.10 Germany was already stocked with the relevant range of industries, from coal and steel to transportation equipment and electrical machinery. Between 1950 and 1960, German exports rose from nine per cent of national income in 1950 to 19 per cent in 1960. Investment demand was high throughout Europe, aiding German firms specialising in the production of capital goods. As Germany's expanding industrial sector began diversifying into the production of consumer goods, private consumption surged across Europe, reflecting rising incomes and in turn helping to sustain the growth of German exports. Investment ran at nearly 25 per cent of GDP, well in excess of the Western European average.

3.11 Germany's unions were now organised along industrial lines, national in scope and associated through an umbrella body, the Deutscher Gewerkshaftsbund, or DGB. A de-facto co-ordination of wage negotiations began to take place: the metal workers went first, formulating their demands with an eye towards the anticipated reaction of other unions. The DGB provided a forum for discussions among union leaders, and its researchers

[3] Feinstein, Temin and Toniolo, quoted in "The Golden Age of European Growth Reconsidered", Peter Temin, Dept of Economics, Massachusetts Institute of Technology, *European Review of Economic History*, 2002.

provided economic analyses to help frame the annual wage round. This enabled the metalworkers to pick a level of wage increases appropriate for the economy as a whole and encouraged other unions to follow.

3.12 By contrast, British economic performance in the 1950s was disappointing. This was partly explicable by pre-existing conditions: Britain had been quick to restore full capacity utilisation after the war; with per capital GDP relatively high in 1950, there was less scope for growing rapidly by catching up to the technological leader; and there was also less scope for boosting productivity by shifting labour to industry from agriculture.

Amateurism in British industry

3.13 During the 1950s, there was a concern that British industry was failing to attract enough young people of high calibre. It was also believed that managers were badly trained compared with their rivals abroad, and that there was too little upward mobility from the shop floor. On the shop floor itself, there was not enough technical training. The American management expert, Dr David Granick, called Britain "the home of the amateur". He stressed that professionalism was a serious charge against an individual in British industry. British managing directors did not think there was any special experience which was useful to a future managing director, though marketing was favoured by some. Neither foreign experience, nor legal or technological training, were considered essentials. Much of this contrasted with top management in the United States, Japan and West Germany.

The integration of Europe

3.14 The formation of the European Economic Community in 1958 and then the completion within a decade of a customs union encompassing France, Germany, Italy and the Benelux countries was a vastly important development for Europe. Britain, with its historic links to the Commonwealth and the Empire, was hesitant, but was eventually forced to acknowledge that its future lay with Europe. The European Free Trade Association was formed by Britain and six smaller European countries – Austria, Denmark, Norway, Portugal, Sweden and Switzerland – in 1960, but all except Portugal traded more with Common Market countries than with their fellow members. Britain applied for EEC membership in 1961, but was rebuffed by President de Gaulle. It was another 12 years before Britain joined the Common Market.

3.15 A structural change peculiar to Germany was the creation of the Bundesbank in 1957. The Bundesbank was the first central bank to be given full operational independence. This form of central bank has since been referred to as the 'Bundesbank model', distinguishing it from, for example, the New Zealand model, which has a goal, in this case an inflation target, which is set by government.

German growth in the 1960s

3.16 As growth had soared to exceptional heights in Germany during the period of post-war reconstruction, there was only one way to go by the 1960s, yet even then, Germany's economic growth was impressive. At nearly five per cent per annum, German GDP growth had actually fallen by more than one-third of the heights scaled in the 1950s, but nearly five per cent still exceeded the Western European average. Germany reassumed its traditional role as supplier of machine tools and other producer goods to the rest of Europe. Investment goods now accounted for more than half of all German exports. Germany's specialism in producer durables in a period when capital formation was booming also helps to explain how the country was in such a strong balance-of-payments position. At home, buoyant export markets and wage moderation encouraged investment. The German investment-GDP ratio rose again, from 22 per cent in the 1950s to 24 per cent in the 1960s.

3.17 This situation could not last, in Germany or in wider Europe. By the end of the 1960s, the special conditions that had made ample supplies of labour available to the modern industrial sector – unemployed labour in European agriculture, the influx of refugees and repatriates from Europe's East and from its overseas dependencies – were largely spent. Wages began to rise faster than productivity, reducing the availability of retained earnings for capital formation.

Britain's balance of payments problems

3.18 British governments in the 1960s had a tendency to run the economy under high pressure of demand that spilled over into balance of payments problems as the country ran out of foreign capital as a result of high demand for imports. The solution, according to politicians from across the political spectrum, was faster growth of UK industry and in order to promote this, governments tried to stimulate demand for domestically produced goods.

3.19 But Britain had supply side problems. The fragmentation of the union movement and the confrontational attitudes of labour, management and government, made it difficult to co-ordinate wages, investment, and public spending. The country lacked institutions for imparting vocational training, making it difficult to adopt Fordist mass production technologies. Labour resisted the introduction of new technologies, fearing that the result would be redundancies rather than more employment in export-linked industries. Management was reluctant to invest in new projects for fear that unionised workers would seek immediately to capture the return in the form of higher wages.

Innovation

3.20 For European companies, competing with the United States was always difficult, and never more so than in the race for innovation. Smaller European

states concentrated on applied research relevant to their existing industrial base. Larger countries, where R&D spending tended to be government- rather than business-linked, concentrated on science-based sectors. Even so, there was no way that Europe could match the United States in the development of science-based technologies. The United States invested more in general education, especially at the postgraduate level. Its universities had closer links to industry. Its securities markets allowed investors to take bets on competing technologies. All this made the US a motor of radical innovation.

Mergers and takeovers

3.21 In January 1966, the Labour government created the Industrial Reorganisation Committee. This was designed almost as a government sponsored merchant bank, designed to encourage efficient firms to take over the less efficient, to encourage mergers and help finance them, etc.

3.22 The most notable takeovers helped by the IRC were CEC's takeover of AEI and English Electric, and the merger of Leyland Motors with the British Motor Corporation. The idea was not just to bail out ailing industries, nor simply to subsidise prestige products, as the Conservatives had done in the cases of Concorde and the ocean liner Queen Elizabeth II. It was to provide Britain with large companies which could compete effectively in international markets. Thus British Leyland, it was hoped, would be able to take on the state owned Renault, and Volkswagen, which had been developed from public funds. British Leyland, formed in 1968, continued to have troubles, resulting from inefficient plant location, overmanning and poor industrial relations, and was only saved from collapse by nationalisation in 1975 on the recommendation of the Ryder Report. The ailing computer industry was also helped, and after a series of shake-ups, International Computers Limited finally emerged as the only British computer firm.

3.23 Finally, industrial training boards were established. They were soon in operation for the road transport, hotel and catering, civil air transport and petroleum industries. Others followed.

The end of the Golden Era

3.24 Economic historians pinpoint 1973 as the year in which the Golden Era came to an end. The most obvious reason for this was the oil price shock following the outbreak of the Yom Kippur war of that year. Of course, as noted above, the ability of European economies to expand as the continent recovered from war was already coming to an end. The reliance of Europe on the Middle East for the bulk of its energy supplies made the oil price hike a serious problem.

3.25 The early 1970s also saw Britain's entry into the Common Market. Labour's Harold Wilson had started negotiations towards the end of his term

of office. His Conservative successor, Edward Heath, oversaw Britain's entry into Europe in what is regarded as his biggest achievement.

3.26 However, British industry continued to struggle. Back in office in 1974, the Labour government introduced a National Enterprise Board, as part of the Industry Act of 1975. The NEB became a state holding company to administer government shareholdings in companies, acquire additional shares and give financial assistance to businesses in trouble. Under the British Leyland Act, 1975, the NEB acquired 95 per cent of the equity of the company. Ferranti, the electronics and defence company, followed, with the NEB taking 50 per cent of the ordinary voting shares. Rolls Royce, already publicly owned, became part of the NEB empire. Chrysler, which needed a massive cash injection to avoid a total shut down and the loss of about 27,000 jobs, was assisted, although not taken over. The government also took over the ailing aerospace and shipbuilding industries after being forced to drop the nationalisation of ship repair companies to get its legislation through.

3.27 Yet, looking back now, it is clear that government intervention couldn't help if the structure of industry and supply side failures were not also addressed. Dr Frank Jones, an industrialist, calculated in 1976 that total assets per employee in UK manufacturing stood at £7,500. In Japan this figure was just over £30,000 and in West Germany about £23,000. This gap allowed the Japanese and West Germans to manufacture at two or three times UK productivity, according to Jones. Some argued too much capital had been exported over a long period. Others thought British banks could learn from Japanese banks, and from British building societies, on improving methods to ensure the financing of long-term loans to industry. British building societies operated in ways similar to foreign banks by "lending long from short-term deposits … if such a mechanism were adopted by the banks in Britain for their industrial customers … Britain would stand to reap considerable growth benefits similar to those experienced by both Japan and West Germany"[4]

3.28 Three writers who had studied German firms emphasised that compared with a UK foreman, the German Meister was better qualified and enjoyed higher status. The relatively poor prestige of professional engineers in Britain was also thought to be a cause for the failure to attract more, and more talented, applicants to university engineering courses.[5]

The rise of monetarism

3.29 May 1979 saw the shattering of the post-war UK economic consensus, when Margaret Thatcher was swept to power. Thatcher was elected on an anti-trade union ticket and continuous new pieces of employment legislation gradually stripped away many of the rights and privileges enjoyed by trade unions. The middle of her term of office also saw the Miners Strike, the most

[4] *Management Today*, December 1978
[5] Conservative Political Centre, *The Engineering Profession: a National Investment*, July 1978

significant industrial dispute since the General Strike of 1926. For almost exactly a year, the National Union of Mineworkers took on the Thatcher government in a bid, ultimately unsuccessful, to end a pit closure programme. Many mines closed, thousands of miners lost their jobs and the emotional scars of the strike continue to exist in mining communities to this day.

3.30 But Margaret Thatcher's endorsement of a monetarist economic policy was even more distinctive. The post war consensus, based on a largely Keynesian philosophy that sought demand management and was committed to full employment, was overturned in favour of a philosophy based on low inflation achieved by controlling the money supply. The main economic proponents of this approach were Milton Friedman and Frederick Hayek. The Thatcherite experiment was also tried in the United States under President Ronald Reagan, but marked a decisive shift between the Anglo Saxon economic model and the social partnership model of most of mainland Europe, a shift that continues to be evident today.

3.31 Speaking in the House of Commons on 10th July 1980, the former Chancellor of the Exchequer and veteran Labour politician, Denis Healey, said: "British industry is staggering under a savage squeeze coming from four directions at once – high inflation, high interest rates, high exchange rates and low demand. This is a perfect recipe for industrial collapse, and the recipe is working." Healey continued:

3.32 The governments of every one of our major competitors have been giving direct physical help to their own industries to assist them to make … structural adjustments as rapidly and smoothly as possible… The German government, for example, are giving massive support to the coal, railway and steel industries. The average subsidy per tonne to the German coal industry is £14 compared to £1 in Britain…

3.33 The French government have just embarked on a major programme of support for their telecommunications industry, particularly in viewdata. They are to put three terminals into each of the 20 million houses that they expect to take new telephones over the next 12 years. Japan has already spent £1,000 million in direct support for its electronics industry, £500 million of which has gone to the microprocessor industry… I wish [the Secretary of State for Industry] would travel to Paris at some time and get a little bit of Gallic pepper in his veins, and then make sure that we support our industries in the way that France is supporting hers. All contracts for the supply of this enormous number of new terminals for the French viewdata system, which is costing £3,000 million a year over the next 12 years, are to go exclusively to French suppliers. We should like to see the right hon. Gentleman take a leaf out of the French book.

Helmut Schmidt and Helmut Kohl

3.34 Helmut Schmidt became West German Chancellor when the oil shock was really beginning to hurt. West Germany's GDP fell by 1.4 per cent in 1975, the sharpest fall since the founding of the Federal Republic of Germany. Growth resumed in 1976 and whilst it did not reach the heights of the Golden Era, it was considered acceptable after the turbulence of the previous years. Schmidt became known as a Macher (achiever) and his party won re-election in 1976. Schmidt's success also led to him claiming he had built Modell Deutschland (the German model).

3.35 But the economy staggered through the next few years. Expansion in 1979 and 1980 helped Schmidt to win re-election in 1980, but the upturn was uneven. In 1982, Schmidt's coalition government collapsed after the Free Democratic Party withdrew to join a coalition led by Helmut Kohl, the leader of the CDU/CSU.

3.36 Kohl began to reduce the government's role in the economy. He sought to reduce the federal deficit by cutting expenditure as well as taxes, to reduce government restrictions and regulations, and to improve the flexibility and performance of the labour market. He also carried out a number of privatisation measures, selling almost DM10 million in shares of companies including Volkswagen and Lufthansa. The state role in the West German economy declined from 52 per cent to 46 per cent of GDP between 1982 and 1990, according to Bundesbank statistics.

German reunification

3.37 On 1st July 1990, the two German economies became one. This was a massive economic and social experiment, as the capitalist economy of the west joined with the socialist planned economy of the east. In fact, both concentrated on industrial production, especially machine tools, chemicals, automobiles and precision manufactures. But the poor productivity of the former East German economy proved a very difficult challenge to overcome.

3.38 East German production costs had been very high. The conversion rates of the East German Mark to its West German counterpart often kept those costs high, as did the early wage negotiations, which resulted in wages far above productivity levels. Western German firms found it easier and cheaper to serve their new eastern German markets by expanding western facilities, rather than building facilities in the east. Inadequate infrastructure was another problem that dissuaded potential investors from eastern Germany.

3.39 Unification moved ahead slowly. The economy of eastern Germany went into a slump immediately after unification. Within a year, the number of unemployed people rose above three million. Industrial production in eastern Germany fell to less than half the previous rate: one estimate suggested that, in 1991, the entire production of eastern Germany amounted to less than eight

per cent of that in western Germany. The western German economy, by contrast, experienced a mini boom. Western German GDP grew at a rate of 4.6 per cent for 1990, reflecting the new demand from eastern Germany. Employment rose during the year, from 28.0 million to 28.7 million, but the number of registered unemployed in western Germany only declined by about 300,000, showing that at least half of the new jobs in western Germany had been taken by people who had moved to or were commuting from eastern Germany. The result was that western Germany had a vast new market and a growth of over one per cent of its workforce, as sharp an increase as in the days of the economic miracle.

3.40 New eastern firms were usually subsidiaries of western firms, and they followed western ownership and management patterns: bank participation became customary, so banks installed their representatives on the boards of the new firms and assumed some supervisory functions. government funds were used essentially for two purposes: infrastructure investment projects (roads, bridges, rail) and income maintenance (unemployment benefit, social security and other social costs). The infrastructure projects sustained employment levels and the income maintenance programmes sustained income, but neither had an early growth payoff.

3.41 The Bundesbank become worried about these developments. The sudden financial shifts between east and west led to a jump in money supply. Large expenditures in eastern Europe led to government deficits. Rapid growth in the west was potentially inflationary. Short term interest rates were raised sharply in 1991 and 1992, slowing growth in western Germany from 4.2 per cent in the first quarter of 1991 to 0.8 per cent in the last quarter of 1992. The eastern German growth rate was 6.1 per cent during 1992, well below the 7-10 per cent that had been anticipated for the region.

3.42 The economy registered a negative growth rate of -1.2 per cent in 1993, before lower short-term interest rates for over a year led back to positive growth. The political project of German reunification had exacted a high price in economic terms.

New Labour

3.43 'We were elected as New Labour and we will govern as New Labour', said the incoming British Prime Minister, Tony Blair, on election night, 1997. Blair had been elected following the unhappy tenure of John Major, who had confounded opinion polls to be re-elected in April 1992, only to suffer a run on the pound and the suspension of the UK from the European Exchange Rate Mechanism the following September.

3.44 Blair's New Labour philosophy meant that many of the changes introduced by Margaret Thatcher were here to stay. Blair adopted a policy of minimum standards, so reforms such as the National Minimum Wage

prevented wages being undercut to poverty levels, but the bulk of Thatcher's trade union legislation was not repealed.

3.45 The New Labour government also adopted a largely laissez faire approach to industrial policy. Trade union hopes of social partnership bodies, bringing together companies, unions and government to consider economic, social or political developments – which are common across Europe – were dashed as the government feared the creation of new style Neddies[6], given the association in the public's mind of corporatism with the failed industry policies of the 1970s. Task specific bodies, such as the Low Pay Commission or the Manufacturing Forum, included trade union representatives, but overarching economic policy forums were not established.

3.46 The language of industrial policy had become the language of "picking winners". governments, we were told, were not good at assessing which industries were likely to succeed and which were likely to fail as the market did a much better job of identifying growth sectors. In fact, the UK had become increasingly dependent on financial services and the City of London for its economic success. Traditional industries, such as manufacturing, often felt overlooked.

3.47 One of the ironies of the late twentieth century in the UK was that despite John Major's ERM debacle his government bequeathed a benign economic environment to its successor. By the time of his Pre Budget Report of 2006, the Chancellor of the Exchequer, Gordon Brown, reported that economic growth had been positive for 38 consecutive quarters and looked forward to more growth in the following year.

Agenda 2010

3.48 During the 1980s, the free market economic order promoted by Margaret Thatcher in the UK and Ronald Reagan in the United States became known as the Anglo-Saxon model. It was distinguished from the European Social Model, which believed in a greater role for government in promoting economic success and social solidarity.

3.49 In truth, there was not one European Social Model, with approaches to economic policy in the Nordic countries, for example, having important differences with those of the Southern Europeans. Nevertheless, a view developed in Europe that Anglo Saxon economies were more responsive to change and, in the age of globalisation, the European model was in danger of leaving European nations behind. Technological and demographic developments encouraged this view further. Germany's economic model, with its high labour costs, was sometimes described as 'sclerotic'.

[6] Neddy was the acronym used for the National Economic Development Council (NEDC), set up by a Conservative Chancellor, Selwyn Lloyd, in 1962, and which brought government, industry and unions together to consider economic issues.

3.50 In the early part of the 21st Century, the German Chancellor, Gerhard Schroder, put forward a series of reforms aimed at reforming the German social system and labour market. There were three main areas of focus for Agenda 2010: the economy, the system of social security and Germany's position in the world market.

3.51 Agenda 2010 included a 25 per cent reduction in the basic rate of income tax. A series of changes to the labour market, known as Hartz I-IV, beginning in 2003 and ending in 2005, affected unemployment benefits and job centres in Germany, and the very nature of the German system of social security. Hartz IV, in particular, was generally considered to be the largest cut in the German system of social security since the Second World War - though it still left German benefits for unemployed people substantially more generous than Jobseeker's Allowance, their UK equivalent.

3.52 There was cross party support for Agenda 2010 but, paradoxically, it split the German Social Democratic Party (SPD), of which Shroeder was leader. The German trade union federation, the DGB, which was historically interwoven with the SPD, led the opposition to Agenda 2010 outside parliament.

3.53 Immediately after the Agenda 2010 reforms were implemented, German unemployment increased, but joblessness began to fall in the medium to longer term. Its supporters claim that Agenda 2010 succeeded in reducing unemployment in Germany. To its detractors, however, it promoted social inequality. A study conducted by the Freidrich Ebert Foundation in late 2006 argued that four per cent of Germans in West Germany, and 20 per cent in East Germany, lived in "precarious" socio-economic conditions.[7]

3.54 The debate over Agenda 2010 is the closest Germany has come to mirroring the debate over the rise of free market economics in the UK.

The Great Recession

3.55 2007 saw the emergence of what has come to be known as the Great Recession. Put simply, the world suffered the most extreme downturn in living memory, second only to the Great Depression.

3.56 The details of the downturn and its consequences have been set out many times. What is interesting from the perspective of this paper is the government response. The UK Prime Minister, Gordon Brown, along with the German Chancellor, Angela Merkel and other world leaders moved quickly to rescue the world economy. Fiscal stimulus programmes were put into effect in major countries. In the UK, this focused on tax cuts for consumers, but also on investment in infrastructure, as the economics of Keynes came swiftly back into fashion and politicians moved to shore up demand. A car scrappage scheme was popular and helped sustain the automobile industry. This meant that

[7] *Gesellshaft in Reformprozess*, Rita Muller-Hilmer, July 2006.

buyers of new cars could claim £2,000 towards the cost of a new vehicle in exchange for scrapping an old one. A budget of £300m was initially set aside for this programme, which ran until March 2010.

3.57 One interesting detail of UK politics at this time was the return of Peter Mandelson, a close confidante of Tony Blair. In his role as Business Secretary, Mandelson introduced the most interventionist industrial policy since the 1970s. 'New Industry, New Jobs' set out key strategic industrial sectors and aligned government policy with supporting the growth of those sectors. 'New Industry, New Jobs' included a Low Carbon Industrial Strategy, as well as support for growing technologies, such as composites. A small amount of government money (£950m in total) was matched by a co-ordinated government effort to support the 'New Industry, New Jobs' initiative.

3.58 One major difference between the British and German fiscal stimuli was that Germany introduced a short-time working subsidy. Trade unions in the UK called for such a subsidy, but the UK government rejected this idea. Germany is considered to have been successful in keeping down unemployment through this measure. At its peak in May 2009, 1.5 million workers were working reduced hours, with support from the German government. BMW, for example, had up to 24,000 employees on its short time working scheme at one point.

3.59 It is impossible to prove a negative, but most economists agree that without the fiscal stimulus in the UK, Germany and across the world, the global economy may have faced an even more severe downturn, perhaps mirroring the situation of the 1930s.

3.60 Both the UK and Germany resumed economic growth in 2010. Germany's growth has been remarkable, - 4.7 per cent in 2009 having been replaced by a rate of 3.7 per cent in 2010.

3.61 Germany's economic model is dependent on exports, so its fortunes remain tied with economic recovery across the world. Indeed, problems in the eurozone are partly to blame for lower German growth in 2011 and projected very low growth in 2012. As noted above, it is a widely held view among economic commentators that Germany must modify its export-led model, being prepared to import more and to boost domestic demand (and therefore the wages of German workers). The economic stability that this export-led model has delivered for Germany is clear for all to see, but it has come at a price, both to German workers and to the wider global economy.

3.62 The UK economy grew in 2010, but critics feared that this figure was boosted by the previous government's stimulus package. Sure enough, following the beginning of the Coalition government's programme of spending cuts, the UK economy grew by just 0.5 per cent over the year from September 2010 to September 2011.

Summary

3.63 The second half of the twentieth century saw Germany become the economic powerhouse of Europe. Germany remains the strongest economy in Europe to this day. In fact, post-war Germany was building on a longer industrial tradition in that country. Germany's incredible economic growth in the fifties and sixties partly reflects the low base from which it started that period, but also its industrial heritage. Germany has also enjoyed high investment, a long-termist culture, a recognition of the value of professionalism, and an industrial relations system that allows for difference, but promotes consensus.

3.64 It is these lessons that this report seeks to learn. However, what is clear from the report is that, historically, the UK and Germany do not have vastly differing political, economic and industrial cultures. Free market economics, either in its 'blue blooded' Thatcher or Cameron forms, or in its Blair and Brown varieties, have been with us for thirty years, but for thirty years before that, the UK adhered to a greater balance between social justice and economic growth, understanding that this balance could only be achieved if political choices were made to support specific industrial sectors.

3.65 Supporters of free market economics are quick to condemn the failures of the 1960s and the 1970s in the UK (the story of British Leyland is a favourite when this issue is raised), while being slow to recognise its successes (such as the role of government in saving Rolls Royce, now one of the most successful companies in the world). Moreover, there are serious lessons about the supply side in British industry in the 1950s, 1960s and 1970s, especially in skills and professionalism, that may explain why industrial policy is often believed to have 'failed' in the UK, but to have 'succeeded' in Germany, during these years.

3.66 So where do we go from here? Specifically, how do we create an economy that combines economic success and social solidarity? That is the question that this report seeks to answer.

Section four

Industry policy in the UK and Germany today

United Kingdom

4.1 The UK's Coalition government is not in favour of an activist approach to industrial policy. Whether this is because of its focus on deficit reduction, which limits the amount of money available to support such an approach, or is the result of an ideological attitude to government intervention, is unclear. In truth, it is probably a mixture of the two. Either way, there is no successor to the 'New Industry, New Jobs' approach of the previous Labour government.

4.2 The policy community in the UK had expected a Growth White Paper to be published, either in conjunction with or shortly after the Comprehensive Spending Review (CSR) of 20th October 2010. The CSR was the flagship announcement of the government in 2010, encapsulating its top priority of reducing the UK's fiscal deficit. Critics argued that taking such a large amount of spending out of the economy without a corresponding growth strategy was risky. In the event, there was no White Paper, but a Growth Review was published in November 2010.

Spending Review

4.3 The Comprehensive Spending Review committed £200m a year by 2014-15 to support manufacturing and business development, with a focus on supporting potential high growth companies and the commercialisation of technologies. Giving evidence to the Business, Innovation and Skills Select Committee, the Business Secretary, Vince Cable, said that money would be spread three ways: to support the Manufacturing Advisory Service; to provide funding for growth hubs, to support growing companies; and to support Technology and Innovation Centres.[8]

4.4 The creation of a network of Technology and Innovation Centres (TICs), to help commercialise new and emerging technologies, was a flagship government announcement. These TICs will be based on the German Fraunhofer model.

4.5 The Fraunhofer Gesellschaft brings together public and private funds: pure research, as practiced at universities, is almost 100 per cent funded by

[8] *Comprehensive Spending Review*, BIS Select Committee, 26 October 2010.

government, whereas industrial research and development, up to prototype level, is largely funded by industry. There are more than 80 research units, including 60 Fraunhofer Institutes, at different locations in Germany. 1.65bn euros, 1.40 billion euros of which is generated through contract research, is available for annual research through Franhofer Gesellshaft in Germany. In the UK, there will be far fewer institutes and, with £200m of public funding over five years, a much smaller budget.

4.6 October 2010 also saw the publication of a 'National Infrastructure Plan', the government's strategy to "unlock" some £200 billion of public and private sector investment over the five years from 2010 to 2015, incentivising private companies to deliver the infrastructure the UK needs for the 21st Century. Critics, including the TUC, are concerned that this is a huge amount of money to "unlock" from the private sector without greater government support and fear that it cannot succeed, leaving the UK trying to compete internationally with inadequate infrastructure.

4.7 The government is also committed to the setting up of a Green Investment Bank, a commitment that appears in the Coalition Agreement. Budget 2011 confirmed £3bn of capital support but with borrowing powers delayed until 2015 and even then to be contingent upon debt falling as a percentage of GDP. The TUC has long supported the principle of a Green Investment Bank, although we believe that the initial capitalisation is insufficient and the limit on borrowing powers should be lifted to help drive the major investments required for a low carbon economy. Our support for the government's initiative may also be qualified by the nature of the government owned assets that will be sold off to capitalise the bank.

4.8 The Local government White Paper, *Local Growth: Realising Every Place's Potential*, was published on 28th October 2010. This set out details of the proposed Regional Growth Fund, which is worth £1.4bn from 2011 to 2014 and (despite its value totalling only one third of the amount previously available to the UK's network of Regional Development Agencies under the previous government) has been welcomed by trade unions and business:

4.9 The Regional Growth Fund will be used to encourage private sector enterprise, create sustainable private sector jobs and help places currently reliant upon the public sector make the transition to sustainable private sector led growth. It will complement, without duplicating, other rebalancing interventions, such as access to finance, banking reform, the work programme and other mechanisms to promote sustainable growth, including the Green Investment Bank.

4.10 The Spending Review also included specific measures to support the wind energy industry.

Growth Review

4.11 *The Path to Strong, Sustainable and Balanced Growth* was published alongside the Autumn Statement in November 2010. This announced a rolling Growth Review to consider structural reforms and how to tackle barriers to growth in different sectors. The government's approach to growth, as set out in this document, is based on four pillars:

- providing stability for business
- making markets more dynamic by removing barriers to growth
- focusing the government's own activities on providing the conditions for private sector growth and investment
- ensuring that strong growth is fairly shared and sustainable in the long-term.

4.12 The review said the government would promote greater access to finance, introducing a new bank-led £1.5bn 'Business Growth Fund'. It would also attempt to introduce so-called 'better regulation', with a "one in, one out" system of business regulation.

Advanced manufacturing

4.13 'Advanced manufacturing' was one of six specific industrial sectors chosen for consideration in the first phase of the growth review. The consultation on advanced manufacturing was published in December 2010.

4.14 The government describes the characteristics of advanced manufacturing as being: intensive in the use of capital and knowledge; requiring long-term investment decisions to develop processes and buy equipment (that can take more than a year to manufacture); using high levels of technology and R&D and intangible investments (training, improvements to business process) to support innovation; requiring a flexible workforce with strong specialist skills in the areas of science, technology, engineering and mathematics and design; and competing in international and domestic markets.

4.15 Examples of successful UK advanced manufacturing sectors include: aerospace; life sciences; automotive; pharmaceuticals; chemicals; food and drink; and construction products, materials and systems.

4.16 The government's stated goals for advanced manufacturing, over the next 10 years, are to:

- grow manufacturing in the UK
- make the UK Europe's leading exporter of high value goods and related services
- increase the proportion of the workforce seeking, and capable of, a career in manufacturing.

4.17 The government has identified the following barriers to advanced manufacturing growth:

- innovation and knowledge transfer
- accessing skills and training
- access to finance
- exporting
- regulatory issues
- energy costs and security of supply.

The Plan for Growth

4.18 The *Plan for Growth*, published alongside the Budget in March 2011, set out four overarching ambitions. These were to:

- create the most competitive tax system in the G20
- make the UK one of the best places in Europe to start, finance and grow a business
- encourage investment and exports as a route to a more balanced economy
- create a more educated workforce that is the most flexible in Europe.

4.19 The *Plan for Growth* also set out a number of 'actions' to encourage growth in the advanced manufacturing sector, following consultations as part of the growth review:

- extending the capital allowances short life asset regime for plant and machinery from four years to eight years, from April 2011, more closely aligning tax and economic depreciation
- expanding the University Technical Colleges (UTCs) programme, to establish at least 24 new colleges by 2014
- launching a high value manufacturing Technology and Innovation Centre
- funding nine new university-based centres for Innovative Manufacturing by 2012
- funding a programme of new Manufacturing Fellowships
- bringing forward the launch of the new enhanced Manufacturing Advisory Service with an additional £7 million to deliver its services over the next three years
- a £74 million programme of targeted support to help smaller employers access Advanced Level and Higher Apprenticeships
- supporting the development of a new degree-equivalent Higher Level Apprenticeship which will include incorporating engineering status and professional recognition for successful apprentices when they graduate

- a strengthened strategy for promoted STEM [Science, Technology, Engineering and Mathematics] skills
- a high profile industry showcase alongside the 2012 Olympic and Paralympic Games and roll out of a programme of 'Made in Britain' exhibitions
- promoting a new international prize in engineering, working with private sector partners to create an endowment to support such a prize.

Manufacturing Advisory Service

4.20 The *Plan for Growth* announced that the government had committed £50 million over three years from April 2012, to provide an enhanced Manufacturing Advisory Service, tailored to suit the needs of individual businesses and the local economic environment.

4.21 In October 2011 the government announced that the MAS would become nationally rather than regionally provided, and that it would specifically focus on SME growth.

Technology and Innovation Centres and other announcements

4.22 In October 2011, the Department for Business, Innovation and Skills announced a £170m package to drive future growth. The package included:

- £140m over six years to fund a high value manufacturing Technology and Innovation Centre, formed from seven research and technology facilities from across the country
- a competition of nearly £18m run by the Technology Strategy Board to fund products inspired through new discoveries and breakthroughs, such as advanced materials, biosciences and nanoscale technologies. The funding for this competition comes from TSB (£15m) and the Scottish Executive (£2.75m)
- a £15m competition for investment into research and development of low carbon vehicles, to be run by TSB and the Office for Low Emission Vehicles and funded through these organisations
- the launch of 'See Inside Manufacturing', a new initiative piloted by the automotive sector, where the sector "opens their doors to students and young people to help change the perception of careers in the sector and attract the next generation of engineers and technicians".

4.23 The government has also announced its intention to increase the proportion of tax revenues from environmental taxes. In August 2011, the government outlined a range of policies to support the green economy in its report, 'Enabling the Transition', and has established a high level, tripartite Green Economy Council to advise government on its strategy.

Autumn Statement 2011

4.24 Alongside the Autumn Statement of November 2011, the government published actions from the second phase of its growth review, its National Infrastructure Plan and an update on every measure announced in *The Plan for Growth*.

4.25 Elements of the second phase of the growth review included:

- creating a £20bn National Loan Guarantee Scheme, to lower the cost of loans to small businesses, and a £1bn Business Finance Partnership, which will lend to mid-sized businesses and SMEs in the UK through non-bank channels
- increasing the Regional Growth Fund by a further £1bn
- providing £45m of support to UK firms wishing to export, doubling from 25,000 to 50,000 the number of SMEs supported and making similar support available to mid-sized businesses
- making 100 per cent capital allowances available in six Enterprise Zones (Black Country, Humber, Liverpool, North Eastern, Sheffield and Tees Valley)
- making available around £250m from 2013 to support energy intensive industries manage the costs of electricity, including increasing the relief from the climate change levy on electricity for Climate Change Agreement participants to 90 per cent
- an additional £200m for science capital investment.

4.26 The National Infrastructure Plan included a new approach to financing infrastructure, by leveraging £20bn of private investment from pension funds.

4.27 Alongside the Autumn Statement, the government announced that it will invest as UK Green Investments (UKGI) in green infrastructure projects from April 2012, ahead of obtaining state aid approval for the Green Investment Bank. Non domestic energy efficiency will be one of the priority sectors for UKGI, which will make available up to £100m in the next financial year for commercial and industrial energy efficiency projects.

4.28 On 17th November 2011, the Prime Minister, Deputy Prime Minister and Leader of the Opposition launched a new £1m Queen Elizabeth Prize for Engineering, which has been endowed by a range of private sector partners and will be awarded bi-annually, starting in Spring 2013, by the Royal Academy.

4.29 On procurement, the Minister for the Cabinet Office announced on 21st November 2011 a package of measures, including: publishing £50bn of potential business online; making it 40 per cent faster to do business with government, and collaborating with business at a much earlier stage in the procurement process.

Germany

4.30 It is, perhaps, a misnomer to speak of German industrial policy, because of the central position of industry in the German economy: the entirety of German economic policy is geared around the strengthening of its industry. World renowned major corporations, such as Siemens, Volkswagen, Allianz, SAP and BASF, which are listed on the German share index (DAX) are supplemented by tens of thousands of small and medium-sized enterprises (employing up to 500 people) in manufacturing. These are the 'mittelstand', they are regarded as the backbone of the German economy and they provide the majority of apprenticeships for young people. In Germany, five million people work in industrial companies.

4.31 There are, however, a number of features of German industrial policy, loosely termed, that should be borne in mind. First, Germany currently spends around 2.6 per cent of its GDP, clearly above the EU average of 1.9 per cent (2008) on research and development. Together with the federal states and business, the Federal government is planning to increase spending on R&D to three per cent of GDP by 2015.

4.32 Second, Germany enjoys broad commitment to the Social Market Economy. This is less a distinctive government policy, more a generally shared attitude, yet it relies on support from government to make it work. According to the 'Facts about Germany' handbook from the German Embassy in London:

4.33 Germany is a social market economy, in other words: The state guarantees the free play of entrepreneurial forces, while at the same time endeavouring to maintain the balance … The social partnership of trade unions and employer associations is enshrined in the institutional settlement of conflicts as outlined in the collective labour law. The Basic Law guarantees employers and trade unions independence in negotiating wages, and they accordingly have the right themselves to select the working conditions.

4.34 Third, co-determination, a concept which goes back to the 19th century, ensures the right of workers to participate in the management of the companies they work for. Known as Mitbestimmung, the modern law on co-determination is found principally in the Mitbestimmungsgesetz of 1976. The law allows workers to elect representatives (usually trade union representatives) for almost half of the supervisory board of directors. The legislation is separate from the main German company law Act for public companies, the Aktiengesetz. It applies to public and private companies, so long as there are over 2,000 employees. For companies with 500-2,000 employees, one third of the supervisory board must be elected.

Wage moderation

4.35 More controversially, critics argue that wage moderation has been a major feature of German economic policy in recent years. According to this

view, Germany has enjoyed a competitive advantage by keeping wages low as part of an export-driven industrial policy.

4.36 Germany's export success is undoubted. Germany was the world's largest exporter until 2010, when it relinquished this position to China. It is also true that German wages have remained low, although the reasons for that are disputed.

4.37 Martin Behrens is Head of the European Industrial Relations Unit at the Hans Bockler Stiftung, the research body financed by employee representatives on Supervisory Boards. Martin describes criticism around German suppression of wages as a "hot debate". He believes that German workers have faced real wage losses for at least ten years, but there is no single reason for this. German union density is now below 20 per cent of the active working population, although 60 per cent of workers are covered by collective bargaining. In some instances, German wages are lower than they would otherwise be because unions do not have the negotiating strength to improve them.

4.38 Martin says: "Some critics from the unions' left say this is part of an economic model which is not sustainable because it is an export driven model and it is a lack of solidarity vis-a-vis workers in other European countries…. On the other hand, some of the union representatives who signed these collective agreements which are accused of wage moderation say, 'Do you really say that we as a union voluntarily leaving the bargaining table with money still being on top of that table … is this a story you want to tell us?" In other words, Martin believes that wage moderation is often more a reflection of the fact that unions do not have the bargaining power than some believe them to have.

Section five

Evidence from Germany

5.1 The following section presents evidence gained from interviews with senior managers, trade union officials and works council members in five German companies: Volkswagen; Siemens; ThyssenKrupp; BASF; and Airbus. Interviews were carried out between June and October 2011. They covered a range of issues, including the economic downturn, the rise of Brazil, Russia, India and China, skills, industrial relations and the role of government in supporting industry.

Volkswagen

5.2 Volkswagen AG is one of the largest automotive manufacturers in the world. It has a total of 65 plants, 13 of which are in Germany. As of 31st December 2010, it employed 168,000 people in Germany and 215,000 elsewhere in the world. In 2010, it had a turnover of 126.9bn euros and made a profit of 7.1bn euros. In September 2010, the number of employees in vocational training across the Volkswagen Group exceeded 10,000 for the first time. Its brands, apart from Volkswagen itself, include Audi, Skoda, Seat and Bentley. Examples of Volkswagen cars include the Polo, Golf, Passat and the iconic Beetle.

5.3 Volkswagen's intention is to be the biggest motor company in the world, an intention it believes to be realistic. It plans that this will be achieved partly through acquisition, such as the integration of Porsche, but also through organic growth. This year, VW has increased its production by 1.2 million cars, equivalent to the total output of Audi.

5.4 The two biggest immediate industrial challenges facing firms in the UK are recovering from the economic downturn and competition from the BRIC (Brazil, Russia, India and China) economies. Neither of these challenges have caused significant problems for Volkswagen.

5.5 Martin Rosik, VW's Human Resources Manager, sees globalisation as an opportunity, not a threat: "The Chinese market is important. The South American markets, the BRIC in general. We are in Brazil already. We have had a factory in the US and we have gone back there now. We were one of the first car producers that went to China. We have two big joint venture partners. We are doubling our factory capacities and have strong growth in Russia."

5.6 Mr Rosik adds: "But the other thing is new cars for segments of the market we were not in before, for example the pick-up truck Amarok. This is promising a growth of 100,000 to 150,000 cars per year in a market we are

not in yet. So growing markets, recovering in old markets like the US and attacking new segments of the market that we are not in yet. Small cars are another segment that we attack right now and adjust to local needs. So if there is a piece of technology that is needed in Germany but we could leave out in India, that could allow a competitive price at the level of technology that is needed in India."

'The Platform Strategy'

5.7 Central to Volkswagen's productivity levels is the Platform Strategy. This allows large sections of the generic make-up of several cars to be produced on one production line, with additional parts then added to give each car its distinctive characteristics. Martin Rosik says: "the basic part you perhaps buy five million times, but by buying additional parts and modules you can put it into a big number of different models. If you are able to have shared parts for 50 per cent of the car, it is still a different car, very much a different car, but it is an extraordinary advantage in pricing." Such economies of scale assist VW's competitiveness: "It is a big problem for BMW, because Audi [BMW's competitor car] has the big Volkswagen company behind it, and has shared parts with Volkswagen, Skoda, Seat and so on, and able to have shared parts."

5.8 The Platform Strategy links with the Volkswagen Weg ('Volkswagen Way'). According to management, the Volkswagen Weg combines a high degree of standardisation with a significant amount of independence for teams and individual workers. Dr Frederic Speidel is a full-time IG Metall official who works at Volkswagen in Wolfsburg. Dr Spiedel says: "The Volkswagen Way was introduced in 2005. It is influenced by the Toyota Production System, but also by Audi, which belongs to the VW group but has a very autonomous way of dealing with issues like production." Before the Volkswagen Weg, VW was comparatively unproductive, needing perhaps twice as many hours to build a Golf as Toyota needed to build a Corrolla. One senior manager had ideas around selling parts of Volkswagen and even perhaps ending car production in Germany, an idea described as "the horror scenario" from a trade union perspective. Such ideas were not pursued, but some, less radical suggestions were.

5.9 Volkswagen enjoys excellent industrial relations, but the Platform Strategy has caused tensions. Dr Speidel says, "The Works Council and IG Metall agreed to improve processes, but did not accept a pure adaptation of the Toyota Production System. We did not agree with 100% standardisation, we said this way was not compatible with co-determination. To us it was very frightening." A new phase of the Platform Strategy, called the 'modular transverse toolkit', is due to begin in 2012. It will be possible to build more than 40 models on such a platform. Dr Speidel says, "IG Metall is looking at this with concern and will try to regulate this introduction. We will say yes, but at the same time you have to guarantee all the existing jobs in Wolfsburg."

Industrial relations at Volkswagen

5.10 The Works Council and Supervisory Board at Volkswagen are both very important, even by the standards of German industrial relations. Because of its size, there are 65 Works Council reps (62 of which are IG Metall members) and 20 members of the Supervisory Board, 10 from management and 10 employee representatives. Any decision needs a majority, meaning that there must be at least one Works Council member to vote for it. However, if there is no majority for a decision after a first round of consultation, a second round takes place. At the end of the second round, the Chairman has two votes, meaning management's proposal can be pursued. In practice, decisions are rarely taken on that basis. Furthermore, the state of Lower Saxony is a shareholder in Volkswagen, giving it two management seats on the Supervisory Board. Given that Volkswagen has five plants in Lower Saxony, the state's interest is often in employment issues, making it likely to be sympathetic to union concerns. Finally, major decisions like the opening of new plants or the delocation of plants require two thirds majorities, so can be blocked by trade unions.

5.11 In practice, this changes the way both management and trade unions operate. If management want to make changes to increase the success of the company, they have to ensure that they convince the Works Council that this is their intention and the changes proposed are likely to be successful. From a union perspective, the power to say no may be there, but it must be exercised judiciously, otherwise the company may simply end up being unproductive and unprofitable. The outcome is that major decisions affecting the fortunes of the company are discussed and major decisions taken before votes come to pass.

5.12 Martin Rosik says: "From my point of view, co-determination does not make it more difficult to take important decisions, but it depends on the way this kind of influence is used by the labour representatives and the company. There is a big common sense that competitiveness and labour welfare are directly linked to each other." Mr Rosik adds: "Labour representatives expect the company to be competitive, they force the company to be competitive, and take care of the interests of their members. Here you don't have the classic understanding of what is whose role in this game. It's a question of how the unions use their influence. They use it in a way that is not combative, it is handled in an aggressive way if necessary, but it is co-operative. If you have a conversation on a matter of importance, and you have a partner and you discuss with this partner, if he only gives you the answers you expect to hear, you wouldn't ask him anymore."

Skills

5.13 Skills are a big issue for German companies. There is widespread support for Germany's 'Dual System' of training provision (discussed below), but world class companies compete for the best talent. Volkswagen realise that

young engineers or technicians, especially the most talented, have other companies to choose from and need to find ways to attract them. The falling birth rate also means that fewer young trainees will come through in future years.

5.14 The number of teenagers coming to Volkswagen is regulated by a collective agreement, which has existed since 2005. The last five years has seen the growth of a vocational training system that includes academic elements, called the Dual Academic System. 1,250 young people start their vocational training at Volkswagen in Wolfsburg each year, of which about 150 are academic trainees. Volkswagen understands the need to upgrade its vocational training system.

5.15 Dr Speidel says: "There is a high demand for vocational trainees in Volkswagen and Volkswagen tries to anticipate this development. We will have a demographic situation in 10 years and there we might have a shortage of young vocational trainees and in order to anticipate this shortage, VW has said every year we will employ 1,250 trainees. There is always an issue of how to find and to keep good engineers here. Volkswagen is competing with Siemens, the other car makers, with other regions in Germany which seem more attractive to young academics. This is a challenge for Volkswagen, to be able to get the best qualified people from universities and polytechnics, not so much vocational trainees. Vocational trainees, we might get 10,000 applications and one tenth can start here, but it is a bit different with the high potentials."

The economic crisis

5.16 The economic crisis did not cause major problems for Volkswagen. What is more, it has reaffirmed the importance of traditional industries in the German consciousness. Thymian Bussemer of Volkswagen's Industrial Relations Department, says: "According to the standards of the EU25, Germany's public budget is quite OK, and it is in the traditional industries where all the jobs have come up. This is a really major shift. Before the crisis, the overall mindset was to say that the traditional industries were almost over, but now we have a heavy return to the politics of appreciating industrial policy. We are an industrialised country and we will remain that way for several decades."

5.17 Martin Rosik says: "With the crisis, we went back to Keynes. It was a perfect example of a Keynesian economy, what we did in the last two years. At the moment, we face the most difficult part of Keynes, which is to recover the deficit spending. The surprising thing is that it works, from my point of view. In Germany, if you look at the unemployment rate, it's crazy but it needed a worldwide bank crisis to recover the German unemployment rate. This worldwide crisis led to more or less worldwide co-operative policies, demand increase policies, and obviously it works. Unemployment is below three million

and it is years since we had that. The tendency is that it will be better this year."

5.18 Dr Speidel says: "In 2008-9, we were alarmed, the whole of Germany, because demand crashed within a couple of days. The machine tool industry in southern Germany was in a disastrous state. The luxury car companies, such as Mercedes and BMW were in a very bad way at this time. The Grand Coalition allowed a lot of good direct communication between trade unions and the government. We were able to bring in our politics, our ideas, our trade union concerns. We could provoke the government to introduce two very good things in order to maintain employment, to inhibit a huge wave of collective redundancies." Germany's social market model provided the country with an important means to respond to, and mitigate the impacts of, the global financial crisis.

5.19 Dr Speidel continued: "The law on short time working, which was limited to six months, was extended so that companies could have short time work for 18 months. It was eventually extended to two years. Mercedes had over one year of short time work. VW only had one week. Demand did not go down because of the second measure, which was state subsidy for old cars. A subsidy of 2500 euros if you got rid of your old car. VW added an ecological subsidy, making this up to 5,000 euros. This was about 25 per cent of the cost of the car."

5.20 In addition to these two measures, Dr Speidel believes support programmes elsewhere in the world came to Germany's aid: "Other countries like the US, other countries in Europe were intervening in the crisis and these programmes were very important in keeping demand in Germany alive. It was not only German virtue which saved the industry, but also Keynesian politics worldwide."

5.21 Relations between the German SPD and trade unions had cooled under the Chancellorship of the reformist Gerhard Schroeder between 1998 and 2005 and Dr Speidel believes that, ironically, this strengthened the unions during the crisis as it meant both sides had an incentive to work hard to rebuild their relationship and show each other they could work together: "One year after this time, we would have had a liberal-conservative government and we wouldn't have been half as influential on the government. That was a very good window of opportunity … When the crisis happened, the SPD had a very bad conscience towards the labour movement, so this was a good opportunity for the SPD to show the workforce, 'We are still your advocates'. In fact, for resolving the crisis, it was good that we had this problematic past."

The environmental agenda

5.22 The other major challenge for the motor industry is the 'green' agenda. This could be interpreted simply as a fall in demand for cars, as people try more and more to use public transport. Or it could be seen as the race to build

green cars. From the perspective of industry more generally, there is also the issue of using green, or greener, production techniques.

5.23 Martin Rosik believes it is of growing importance to try to be the greenest carmaker. He says: "That is related to the development of the public mindset. Only in the last five years have we made changes that increase fuel consumption by 10, 15, 20 percent. There you can see we were not focused on this development before, but with the changing mindset this became our focus and obviously there is a lot of opportunity, even to help with conventional motors adjusted to new means."

5.24 The Volkswagen Passat is built at the company's factory in Emden. This has introduced a range of green energy processes, of which the company is very proud. Indeed, the plant hopes to achieve CO2 neutral status for its production processes. It's most recent project began at the end of 2009, when an "energy forest" was planted across a previously unused area of the plant, covering 400,000 square metres. The forest, in which fast growing trees are planted, is designed to be harvested every three to five years and in the future, environmentally friendly heat will be generated from this biomass. For each year the forest is harvested and for every hectare cleared, the biomass from the trees will replace the need to use some 5,000 litres of heating oil, saving up to 18 tonnes of CO_2 emissions in the process.

5.25 Volkswagen Emden has also been home to one of Lower Saxony's largest photovoltaic plants since 2007, when the investor and operator KP-Solar installed 2,300 solar modules on the roof, covering a total area of 3,000 square metres. These solar modules generate 350 megawatt hours of power every year, the equivalent of the annual power consumption of 100 four-person households. The modules also help to save over 187 tonnes of CO2.

5.26 Meanwhile, the world's most powerful wind turbine was recently installed at Emden. This has a nominal capacity of six kilowatt hours, equivalent to the energy requirements of around 5,000 private households. This latest turbine brings the number of wind turbines at Emden to eleven.

5.27 IG Metall recognises the green challenge, and the positive attitude of the company towards it, but questions whether enough is being done. Controversially, the pressure to be environmentally friendly has raised the question of whether Volkswagen should diversify away from cars. Dr Speidel says: "Volkswagen tries to see the environmental agenda as an opportunity, a challenge. Volkswagen knows that it can only grow with a strategy which is aware of the ecological question and introduces ecological concerns into the company strategy. The engine policy is relatively innovative in that respect, other things have been introduced, but it is still not enough and the deciders among the Works Council know that."

5.28 Dr Speidel adds: "We need to add to the classic field of building cars. There is a huge debate on going into new products, it is controversial. The

Head of the Company has said we should be very careful, past experience shows that companies which diversify do not succeed, we must be the best car maker. This is the rhetoric. We would say we have to be the greenest car maker. But if you look behind their publicity, what is there? We still have the problem of CO2 emissions, which will be regulated by Europe. The ecological question is omnipresent."

5.29 "I would say we are still at the beginning of bringing this question into the company. Electric cars, smaller engines, but there are still a lot of uncertainties towards electric cars, we still don't have a battery to make this a mass strategy. VW would say we need several types of engines for the next 10, 20, 30 years, every region needs its special car type."

The role of government

5.30 Having survived, even thrived, during the economic downturn, it is unsurprising that managers at Volkswagen do not seek greater government intervention to support industry. They have no need. They are critical of the role of the US government in stepping in to support General Motors, believing that the economic downturn was used as an excuse to do so. Martin Rosik says: "government should not repair the mistakes of management, as an economist I would say this is where industry has to learn the lessons. There you can discuss the US and look at General Motors, where the state stepped in. It's worth discussing whether they should have let them down."

5.31 Interestingly, Thymian Bussemer, believes the government has a role in supporting the Social Market Economy: "This is very strong in Germany, which means that there is a very close interaction between enterprise, especially big ones, the welfare state, the unions. We saw that in the crisis. The main contribution of the German state is to provide stable industrial relations and to provide the welfare state which linked up with the companies."

Siemens

5.32 Siemens is an integrated technology company and is one of the best-known engineering companies in the world. It has a presence in 190 countries across the globe. 336,000 Siemens employees work in 1,640 locations around the world, including 176 Research and Development facilities. One of the largest private sector companies in Germany, Siemens employed 128,400 people there in November 2010. Siemens in Germany had revenue of 11.4bn euros during the fiscal year 2010. New orders totalled 11.9bn.

5.33 Siemens in Germany was not badly affected by the economic downturn, partly because of unrelated activities taking place just before. Siemens was reducing jobs and costs, transforming its processes, so in the words of Harald Kern of the Siemens Works Council at its Nuremberg plant, "We were prepared for something completely unprepared". Short term businesses were

affected and some jobs were lost in Siemens plants outside of Germany and outside of growth markets, such as China, India, Russia etc. The company in Germany was prepared to use the government's short time working policy if necessary, but then saw orders coming in, making this unnecessary.

5.34 Siemens has a policy of time accounts, so during very busy times, employees can credit hours rather than being paid more. Then, when work levels are much lower, employees can work less hours, with their credited hours making up the difference. A local agreement was reached at Siemens' Nuremberg plant, allowing for the building up accounts for a long period of crisis. It was planned to exhaust the accounts before resorting to the short time working scheme. In fact, large accounts turned out to be unnecessary in Nuremberg.

Siemens and the BRICs

5.35 The other great challenge for western companies, the rise of the BRIC economies, is seen as both an opportunity and a threat by Harald Kern. Harald says, "Siemens offers the German art of engineering," before adding, "China is buying certain products today, but Siemens has to ask what they will be buying in three or four years. Then we are able to have a decent living for our colleagues". Guenter Drindle, the Head of the Factory, agrees, arguing that Siemens is more and more a global player. Its factories in Russia and China are very important. A factory like Nuremberg has the task of supporting those factories. Drindle says: "Sure, work will go from Germany to countries like Russia and China, but in every order we have a chance to bring a little part back here. It is more important to be the technology leader, to develop knowledge here."

5.36 Harald Kern sees the future of Siemens in cities. The company is involved in technology clusters. Globalisation and the infrastructure needs of great cities all over the world are seen by Siemens as influencing the future of its business. Certain technologies, for example electromobility or the question of the smart grid (seen by many as the future of IT), which will mean that every individual is able to communicate all over the planet: "The future will be the systems, meaning, for example, the grid, or your household, are able to communicate with each other, this is the next step, so something like intelligent products, these are the technology clusters that we are interested in."

5.37 Kern develops this theme further: "There are mega-trends, one of those are the cities of the future, those mega-cities, are becoming more obvious. Have a look at London, for example. We try to answer the question, what will London look like in 2020 or 2025? What are the major things that need to change in a city like that? For Siemens, that is a kind of a headline, a possibility to develop business. All those things that are changing, regarding infrastructure, smart grid, locally engineered energy sources, waste water, I can go up the list, this is the business of Siemens. You have to grasp it in the right

way because it is becoming more and more important. The questions are the same but the answers are different, depending on where you are. It is different if you are in London than if you are in Mexico, for example."

5.38 Like Volkswagen, a great challenge for Siemens is to attract the best young talent. The Nuremberg plant has about 200 apprentices, although it trains apprentices for other companies or other parts of Siemens (around 50 apprentices are trained specifically to work at the Nuremberg plant). It also has a special department on site whose job is to maintain contacts with different universities and research institutes. Contact with students is important, in order to attract them to the company. The main industry competitor is Alsthom, although geographically, the main competitors in Bavaria for highly skilled and talented young workers are Audi and BMW.

5.39 As with Volkswagen, Siemens has introduced a production system based on the Toyota model. This system covers the whole of Siemens in Germany and is regulated by the Works Council. The Works Council recognises the difficulty of change in a company like Siemens, given the number of people it affects and the cost it implies. The Works Council also understands the importance of productivity and competitiveness to company success and, therefore, jobs. Harald Kern says, "Productivity and things which change the cost basis are the question for the future or our colleagues. Responsibility for this is management's, but needless to say we influence it." Kern adds, "We see on the side of the Works Council that we have to improve the situation because if we lose that possibility, we lose our model as a lean factory. If you [implement the production system] in the right way, there is more space for employees. It depends that the employees are very involved in the system, they accept it and they work with the system. It is also the main problem to convince the people to do this. There is a general fear of change. Always a problem, for everyone, change." This can be the fear that productivity will lead to job losses.

5.40 Both Harald Kern and Guenter Drindle speak favourably of industrial relations at Siemens in Nuremberg. Drindle, like Martin Rosik at Volkswagen, sees the Works Council as a route to meaningful dialogue which, ultimately, strengthens the company: "You have to know what your team are thinking. There are always some situations that your team members are discussing on the shop floor and with the Works Councils they can discuss these with members of management. It is important to share these opinions, to share thinking."

5.41 Paradoxically, both management and unions recognise that there is a "conflict of interest" between their two positions, but it is this recognition, and the understanding of the legitimate interests of the other, that makes the relationship work. Harald Kern says: "Someone has to deal with the interests of the company, in terms of the management, and on the other side in terms of the employees. This is a conflict; the question is how do you handle the

conflict. If you have respect you resolve in personal ways, these are basics, the question is do you have a language in common? I think when I look over the other side of the Channel, this is the beginning of your problem, because you don't have a language with each other. If you have a conflict, you have to speak about the same thing, mean the same thing when you talk about it. You have to be crystal clear. You have to be at eye-level with each other and say, OK, this is our point of view, this is your point of view."

Siemens in Germany and in Europe

5.42 Harald Kern believes that Europe will have to work more closely together if companies like Siemens are to continue being successful. Harald says: "Our problem is the internal market in Germany. I don't think we would have a chance as a single country, in five or ten years, Germany's productivity is due to the situation that we are so highly networked into the European system… Our success is a European success." He also believes that it is important for companies to remain well linked into global markets: "if we want to cope with some big players like China and the US and India, our globalised economy is based so much on networking with each other we cannot say we don't bother with what is going on in China."

The 'green' economy

5.43 Guenter Drindle argues that the green economy is providing opportunities for Siemens. At Nuremberg, the company is producing motors and equipment for electric cars and for hybrid buses. Harald Kern says that Siemens' major idea is to become a green company. In his words: "Green means everything that has to do with energy efficiency. The question from the client is always: What is the reason I should pay something or should I buy something from Siemens? In your product you have more than just what you sell. We have high efficient turbines, we have our own wind generators, we have solar panelling, so the answer [to the question of whether the "greening" of industry is important] is yes, yes, yes."

5.44 The German government is co-ordinating discussions between unions, employers, the government and universities, to address the implications of policy decisions such as the electrification of cars and the closing down of nuclear plants. Of course, this creates winners and losers and powerful companies, from the energy and automotive sectors, which are important to the German economy, are making their voices heard. Siemens is in the strange position – "between the bark and the tree trunk", as Harald puts it – where if electrification and denuclearisation go ahead, this creates opportunities for Siemens' products, while companies currently operating in those sectors are also Siemens' clients.

The 'Mittelstand'

5.45 Harald Kern argues against deindustrialisation, saying that an industrial base is vital for a strong service sector and this is something that Germany got right: "That was quite a struggle between the trade unions, the government and the employers, but there is also an understanding that you have a middle class economy that is very important in Germany, these are the small[er] companies and I think this is something that is [different] in the UK, they don't have that kind of role. This is something we thought about. I don't think things should be the same everywhere, there should be space for individual historical structures."

5.46 Harald believes the UK made major mistakes by de-industrialising in the 1980s and allowing finance to play such a central role in the economy. So what should be done? "The first thing a government has to do is to say we have a problem. I haven't heard that [in the UK] yet… The first step would be to say that something is wrong, we need industry, we need the backbone of the small[er] companies over the country. Where are the people who are making the investments, who are innovating, who are developing the companies of the twenty-second century, in the UK? … Globalisation is nothing new, the big difference is the globalisation of financial markets and their interests in easy and very big margins."

Lessons for Germany

5.47 So what could Germany do better? Identifying a common problem between Germany and the UK, Harald Kern laments the privatisation of energy: "We also have the problem that we privatised the energy sector over 20-30 years ago and as a result there is no money put into the networks, the grid. You have the same situation in the UK."

5.48 Harald is also aware of Germany's export led industrial policy and its consequent low wages, although he argues that this is more of a problem for unorganised workers: "We have a situation where we are the focus of our European colleagues, and because of that, in the last two or three years we have [earned] a bit more, so we don't have a problem where we have general agreements, our problem is where we don't have agreements and so we have contract workers. That was the working market that was rising very fast in the last two years. In those low wage areas we have jobs where people cannot get a living out of it. This means they get money from the government, so in the end the employer gets cheap workforces. For me it is quite funny, because these are the same people who believe in the forces of the market, but they make a market of their own and I don't think this is either fair or very positive."

5.49 Harald would also like to see better co-operation between universities and industry across the eurozone: "German universities are very old fashioned and I think co-operation might be an answer to a lot of problems we have, to

get more people interested and getting something like a push into the innovation system. Within the eurozone university system, there is a chance for work students, when they study they have some time in a factory in an industrial area. This is something young people are carrying for themselves. A programme to take those things forward, so that when the people are just qualified, it might be possible to work with universities so that one year they get a break to improve their knowledge and then get the back into industry to operate on certain projects, this is an area where we could improve."

Thyssenkrupp

5.50 Thyssenkrupp is an integrated materials and technology group. Among its products are steel and stainless steel, and elevator and components technologies, including for the automotive industry and marine systems. In the 2009-2010 fiscal year, Thyssenkrupp generated sales of more than 42bn euros.

5.51 Headquartered in Essen, the company employs 178,000 people worldwide, in around 80 countries. Just over one-third of Thyssenkrupp's total workforce, around 66,000 people, work in Germany. Thyssenkrupp employs another 40,000 people elsewhere in Europe (35,000 of them in EU Member States), while the remainder of its employees, totalling 72,000 people, work outside of Europe. These include 20,000 employees in Brazil, 18,000 in the US and 12,000 in China. In the words of Norbert Kluge, the co-ordinator of Thyssenkrupp's European Works Council, "it is more or less a German-European company, going Far East and America".

5.52 In the tradition of the German Social Market Economy, Thyssenkrupp is governed by a Supervisory Board comprising 20 members, 10 being from management, one being a representative of executive staff, and the other nine being employee representatives. Among the latter, there are three trade union officials from outside the company and six Works Council members. On the current Supervisory Board, all Works Council members are also trade unionists, a trade union aim that has been achieved. One of the full time trade union officers, Bertin Eichler, is Vice Chairman of the Supervisory Board. What is more, nobody could become the Labour Director at Thyssenkrupp without the support of IG Metall. This means that the he or she will have close relationships among the trade unions and, indeed, the current Labour Director, Ralph Labonte, has worked for the company, at a corporate level, for a long time, but originally was a trade union officer. He has never lost his contact with the union.

5.53 There are more than 104 members of the European Works Council, covering about two-thirds of Thyssenkrupp employees (i.e. those based in Europe). Half of these are German and half are from elsewhere in Europe. There are 45 members of the Group Works Council in Germany. There are seven business area Works Councils, then there are local Works Councils, 230 across Germany as a whole, within the various Thyssenkrupp businesses, from

a one-person council to 35 person committees. Once a year, there is a meeting of 350 senior Works Council members, 250 from Germany and another 100 from European Works Councils.

Responding to the economic downturn

5.54 Like other countries, Thyssenkrupp was hit by the downturn, but the company began to find flexible ways to deal with the crisis without resorting to redundancies. Thyssenkrupp's components technology branch is a big supplier to Germany's automotive sector, so its prospects were tied up with those of the motor industry. Pressure was put on politicians to respond flexibly to the situation. Norbert Kluge says, "There was the great big coalition between the Christian Democrats and the Social Democrats, and the Labour Minister was a Social Democrat, and we made them aware simply that they needed the highest interpretation of the German labour market rules to help these people." Such help included protection of wages, as well as initiatives around skills training, which Norbert believes were successful: "I think this is why you read in the newspapers everyday that German industry came out of the crisis better than others."

Globalisation

5.55 Globalisation, particularly the entry of China, India, Brazil and Russia into the world economy, is seen as an important new source of market growth by management at Thyssenkrupp. Charlotte Platzkoster, the co-ordinator of the Group Works Council at Thyssenkrupp, says: "India and China… this is the growth market and this is what the Executive Board always tells us." Such an attitude has an obvious effect on the company in Germany. Charlotte says: "All the investment money goes to these states and, of course, this means a kind of threat for us because they invest in Brazil and China in huge new companies and less investments are made in Germany … we can't compare with Brazil, the plant they have is brand new, they have the best standards in technology… so this is the threat, not globalisation and growth in those markets in general."

5.56 Under a more adversarial approach to industrial relations, such a situation might make trade unions defensive, but in the German Social Market Economy model, employee representatives try to judge such developments from the point of view of both the health of the company and the need to protect the interests of the workforce. Norbert Kluge says the Works Council members recognise that Thyssenkrupp can only remain competitive in the world, in its niche area, if it gets bigger. Thyssenkrupp is the seventh biggest steel producer in the world, but for a company with its ambitions, this is not good enough. So the Works Council members unanimously backed the investment in Brazil, putting aside any doubts and concerns about this decision in support of a better global company perspective. But they used their bargaining power to argue that, in return, some reassurance was needed for

German workers. They sought agreement that an investment of 1.7bn euros could be made in Brazil, provided that an investment was also made in the German steel plants, to make them fit for the future.

5.57 In fact, problems with the Brazil investment, coupled with the timing of the economic downturn, meant that the German investment has not happened. The amount of money needed to make the Brazil plant competitive rose, finally costing Thyssenkrupp 5.8bn euros. What is more, retrenchment at the time of the downturn meant that, with such a large investment in Brazil, there was no money left for Germany. This led to great criticism of management from employee representatives and the situation is still ongoing, with employee representatives arguing that, before any more money is invested abroad, the agreement to invest in Germany should be honoured.

5.58 More generally, components technology must travel with the industries it serves. Prospects for growth in the automotive sector are in the Far East and America; expectations of growth in Europe are modest by comparison. This means that components must be produced in the same country as the motor cars in which they are used. This is true for the main clients of Thyssenkrupp components technology, which are the German premium car manufacturers, BMW, Mercedes, even Volkswagen and Audi. It means Thyssenkrupp must go with them, to China, to Malaysia, to the US, to Brazil.

Apprenticeships and the shortage of young people

5.59 Thyssenkrupp has about 1,600 apprentices in Germany, with more in other countries. However, in the German steel plants, the company has what Charlotte Platzkoster describes as "a huge demographic problem and it will get bigger within the next years". One problem is that different sections of the business are not considered to be adept enough at learning from the success of others in attracting or retaining talent. Another is that the steel sector, a major part of the Thyssenkrupp business, is considered by potential new entrants to be dirty, compared to other industries. Charlotte says: "I think some of them think, 'Why should I do an industrial job, where I get dirty, where the temperatures are from 10,000 degrees to minus something, and its loud, why should I do that if they don't pay me that much, because there is demographic change and I could probably get another job, which is more easy?'" Norbert Kluge believes the company should offer longer term contracts to attract young workers into less glamorous industries.

Structural change within Thyssenkrupp

5.60 A new Chief Executive, Heinrich Hiesinger, formerly of Siemens, is set to restructure Thyssenkrupp, selling some units and seeking strategic partners for others, with a view to cutting debt and investing in emerging markets. Under his plans, Thyssenkrupp would sell one-fifth of its businesses, covering 35,000 employees worldwide. Again, this has led to difficult discussions on the

Supervisory Board. Some employees feel that if there is no money to invest, they would fare better in another company, but there is inevitable uncertainty. Charlotte says: "We just see that a company wants to get rid of activity to gain money, to satisfy the shareholders, and we don't know what is going to happen now, especially within Germany and Europe." Norbert also believes this is a decision designed to satisfy the shareholders: "I think the idea behind here, I heard it very often said that Thyssenkrupp will change into a provider of technology, of engineering, maybe of materials, but it is not any longer the idea to be an industrial manufacturer, it's a provider, this is something the investors will eat."

The green challenge

5.61 The Works Council believes Thyssenkrupp should be doing more to enter into green markets, such as wind energy. It sees an opportunity for Thyssenkrupp's marine division to move into the building of ships to service offshore wind parks. The company could also build platforms, not just ships. In an echo of arguments put forward by energy intensive industries in the UK, the Works Council believes that whilst the production of steel may not be green, the end product is sustainable. For example, materials now used in motor cars allow the car to be used for 10-15 years, which was unthinkable previously. The Works Council argues that producing this kind of material is a success of Thyssenkrupp. Europe is introducing carbon taxes which may push the production of products such as steel outside of the EU, to countries where there are no such pressures on energy intensive companies. This phenomenon, known as 'carbon leakage', is a threat in Germany as well as in the UK.

Industrial policy

5.62 Thyssenkrupp is based in the region (Lander) of North Rhine Westphalia, where politicians understand the importance of core industrial sectors such as steel. This means that the Lander government supports the company to a far greater extent than some other, Berlin based politicians. Charlotte says: "I think the discussion … in other parts of Germany would be completely different, where they don't have that much industrial production, they don't see that it is a working place and they just see that it is dirty."

5.63 In particular, the fact that Germany pursues the most ambitious environmental standards in Europe, while at the same time its breathtaking recovery from the economic downturn, based on traditional industries, has led to conflicting priorities. Norbert makes the case for traditional industries: "You can see a kind of recovery of industries because of the crisis, the fact of Germany, like … France and Poland, these are big European countries with a certain [type] of industries, yet they served better out of the crisis. We are not like UK, or like, Netherlands or so on, maybe this is something we should foster, we should be more careful about…"

BASF

5.64 BASF is a world-leading chemical company. Its products range from chemicals, plastics, performance products and agricultural products, to oil and gas. The BASF Group employs 109,000 people worldwide, 50,800 of whom work in Germany and 69,800 in Europe as a whole. It has subsidiaries in more than 80 countries, including the United Kingdom. In 2010, BASF posted sales of 63.9 billion euros and income from operations of 7.8 billion euros.

5.65 The world's largest chemical complex, and the site of BASF's global headquarters, is in Ludwigshafen. 33,000 people work for BASF SE in Ludwigshafen, making it the largest employer in the Rhine-Neckar metropolitan region. BASF SE is the largest company in the BASF group and holds all the shares, directly or indirectly, of all the companies that belong to the group. In 2010, BASF SE bounced back strongly from the economic downturn, with sales growing by 47 per cent, to 20,741 million euros compared with the previous year.

5.66 BASF operates six Verbund sites. This concept is designed to intelligently link production facilities, energy flow, logistics and infrastructure. This allows the company to increase production yields, reduce logistics costs and save resources and energy. A significant feature of the Verbund concept is the Know-How Verbund, in which BASF employees worldwide can share knowledge.

5.67 In common with all large companies in Germany, BASF SE operates a Supervisory Board. This is made up of twelve members. Lord Green, Minister of State for Trade and Investment in the UK, was a member of the BASF SE Supervisory Board until he took up his Ministerial position at the beginning of 2011. It is common for Executives from other countries to serve on Supervisory Boards in Germany and Lord Green served in his capacity as Group Chairman of HSBC Holdings plc.

The economic downturn

5.68 BASF makes a contribution to many industries, while not necessarily being known for any one in particular. BASF products can be found in products as diverse as motor cars, sun tan lotion and even Coca Cola. Many people struggle to identify exactly what the company does.

5.69 Consequently, BASF's fortunes during the economic downturn varied according to the sector that its products were supplied for. Thomas Peter, a full-time Works Council member based at BASF SE in Ludwigshafen, says that the problems of the automotive industry during the downturn were well known, but healthcare, personal hygiene products and agriculture saw fewer problems.

5.70 Nobody lost a job at BASF during the downturn. There was some short time working, with government funding to make up wage falls, as happened elsewhere in Germany. Thomas believes this is a key reason that Germany exited the crisis more quickly than other countries. German companies did not lose key workers, who sustained the plants. Some workers went to different plants to their usual workplace and some went into the supply chain, but jobs were not lost.

5.71 The Works Council at BASF has also worked to ensure that job security was maintained. Sonja Daum, who is also employed by the Works Council in Ludwigshafen, describes the agreement that was reached between management and the company at BASF SE, an agreement which will run for five years, until 2015:

5.72 It's a political contract, a political agreement, about qualifications, about training programmes, about learning programmes, about health and safety. It is very important for the employees, because [under the terms of the agreement] it is not possible to give a dismissal to employees because of economic problems. Only if the economic problems are at a very high level, then they can give a dismissal. But if they have a normal economic situation, a good situation or a more-or-less good situation, it's not possible until 2015 to give the employees a dismissal because of the economic problem. If they want to organise this site in another way, [that is considered to be] an economic topic and so it is not possible to give a dismissal to the employees, so it is a very important political agreement for the employees.

5.73 This negotiation takes place every five years. A key objective of the Works Council will be to enshrine this agreement into any new contract.

The growth of the BRICs

5.74 Between 2011 and 2015, BASF is planning investments of 12.6bn euros, and is active in growth markets in order to continue to grow profitably. BASF has a Verbund site in Nanjing, China, which is a 50:50 joint venture with the China Petroleum and Chemical Company, Sinopec. 1,560 employees work at BASF in Nanjing. As in the companies described elsewhere in this report, BASF workers in Germany fear that plants in growing markets will take work from Germany, although 90% of the products produced in Nanjing are currently produced for the Chinese market. Indeed, Thomas describes China's market as "like a sponge", adding that products made at Ludwigshafen are for the European market.

Skills

5.75 In common with other major German companies, BASF competes for skilled workers. The company speaks of a "war of talents". BASF is currently training over 2,400 young people in more than 60 occupations in 16 countries.

In 2010, 1115 young people started apprenticeships and traineeships at German Group companies and in the BASF Training Verbund.

5.76 Like the companies mentioned above, BASF faces competition for talent from local rivals, in this case from Porsche. Thomas Peter says it is hard to attract an engineer to a chemical company. The company needs engineers, administrators, marketing, financial and legal skills, and whilst the company is attractive to those wishing to work in the chemical sector, engineers are often more attracted to Porsche. The fact that BASF does not make a final product that is easily recognisable also makes things difficult. Sonia Daum says, "Nobody knows what product BASF makes. If you drive a car, there is something from BASF inside. If you drink Coca-Cola, there is something from BASF inside". But the lack of a recognisable final product mans that people do not relate to the company in the way that they relate to Porsche.

Chemicals and the green challenge

5.77 A further challenge for the company is that lack of green credentials enjoyed by the chemical industry. The sector is a high intensive energy industry and BASF has its own energy infrastructure. This means it is not taxed at as high a rate as a private individual: Thomas Peter says he pays about five times as much to light his home as BASF pay for its energy, adding that if BASF had to pay the same price, Ludwigshafen would be "dead". This example provides an important insight into the way the German government is willing to lift the energy cost burden on its energy intensive industries. European developments relating to the price of carbon affect BASF, because the carbon use from chemicals is also high. However, in an argument reminiscent of the case of high intensive energy industries in the UK, Thomas says: "Chemicals are not green, they come from oil normally. No one wants to have chemicals, it is the name of chemicals, but we cannot live without them." Thomas cites the role of foam for home insulation and the role of chemicals in the making of lighter cars. Thomas argues that chemicals can improve the built environment, but they are still seen negatively. As in the UK, energy intensive companies such as BASF provide vital inputs that can support the transition to a low carbon economy.

5.78 Thomas believes that one way to start to address this would be to develop a greater understanding of chemical processes at school. He argues that people think of chemicals as being dangerous in a way they do not think of motor cars as being dangerous, even though thousands of people die in motor accidents every year. This does not lead for calls for cars to be abolished, but it does lead to a quest for ever-safer cars, and he feels this attitude should be applied to the chemicals sector.

Political priorities

5.79 Both Sonja Daum and Thomas Peter believe that companies struggle with the changing priorities of government. Companies wish to invest in the long-term, but shifting political priorities, which have implications for business, makes it difficult to do this.

Airbus

5.80 Airbus is a leading aircraft manufacturer, the largest in a family of companies owned by EADS, a global operator in the aerospace and defence sectors. Airbus's products include the single-aisle A320, the wide body, long range A330/A340, the A400M military aircraft, the next generation A350 and the ultra-long range, double-decker A380. Airbus is directed from Toulouse, France, although Paris and Munich are the headquarters of EADS, Airbus's parent company, according to Siegfried Balduin, IG Metall's co-ordinator for Germany's aerospace industry. The company has four founder nations: the UK, Germany, France and Spain. Between 30 and 40 per cent of Airbus's employees and workshare are situated in Germany and the same percentage are situated in France. This balance is very important, politically, for both countries. The UK and Spain have smaller shares (although the UK's share is still impressive: 10,000 people work for Airbus in the UK and a further 100,000 jobs are supported through its supply chain).

5.81 According to Siegfried Balduin, "The history of Airbus is a history of the competition with Boeing". More specifically, there are three factors that affect Airbus's success. The first of these is the state of the world economy in general. Passenger volume is very precisely affected by changes in global economic fortunes. The second is the exchange rate between the dollar and the euro, which is, in Siegfreid's words, "a dramatic issue all the time", since 95 per cent of the company's business is handled in dollars. The third factor is the quality of the product.

5.82 The impact of the economic downturn was less than the company expected. Cost cutting efficiency programmes were implemented, but there were no redundancies.

The rise of the BRICs

5.83 Siegfried describes the entry of Brazil, Russia, India and China into the world economy as "no real danger for both Boeing and Airbus in the next years. In the longer term everybody knows China will come. We have no doubt because they have the means and resources. China, Russia and Brazil will compete with their new products directly against the single aisle family of Airbus, but it takes an industry like aerospace a long time to build up confidence and competence. In the meantime, Airbus has a factory in China, it has invested in a partnership with China and there is an assembly line in

China… It's always a risky issue but it was a strategy. This is the whole vision of EADS, they want to follow the new market and that means you cannot deliver old ones from Europe. You have to build up facilities that are near to the countries and customers. That is the globalised perspective."

5.84 Siegfried remains confident that the future aerospace sector will be big enough to accommodate Airbus's European operations, even if its major growth area is outside Europe: "The market share will be lower in the future but in a framework or environment of growth. It must not become a risk for employment… It could be a problem if management does not invest enough in the future of the engineering and production facilities in Europe. Our strategy is okay, we told them all the time you can invest worldwide, no problem, but it must be clear that we have guarantees for the European core sites. There is no doubt that we cannot accept another strategy, if you have a worldwide strategy you have to safeguard the jobs here and the core competences."

5.85 This shows once again the strategy adopted by IG Metall, whether in the automotive, the steel, the chemical or the aerospace sectors: there will be huge industrial growth in China, but this is not to be opposed. It is to be supported, as part of a strategy to grow world-class companies. However, in return for union support, the companies in question must commit to some support for industry in the core German sites.

Skills

5.86 Like other German companies, Airbus experiences skill shortages. These are particularly acute with regard to specialist skills and, as mentioned by other companies within this report, link to a wider pattern of demographic change. Siegfried says: "Skill shortages are a general problem. In Germany, we have around 16-17,000 employees inside Airbus. The number is rising because the production numbers are rising and they have problems, particularly in engineering. In engineering there is a clear shortage of special skills. That is a real challenge for the whole industry in Germany. The shortage of highly qualified people and we have an age problem. We call it a demographic bomb."

5.87 IG Metall is trying to support skill development at Airbus, with a particular emphasis on the personal development of employees: "They are starting to expand the numbers of apprentices. They are starting new initiatives in cooperation with universities and public authorities at the regional and local level, to make the study in aircraft engineering more attractive … As a union we are trying to start also initiatives to help that development coming forward because it's interesting to us, it will be a real practical factor in the personal development. What is the perspective for the people in the next years, how can we help them to improve their skills to get better competencies and chances for their personal careers? That is an issue we are discussing with our

representatives of the factories and it's a very important both for the management and us and that is subsidised by the government…"

The Airbus Supervisory Board

5.88 With 16,000 employees in Germany, Airbus has a Supervisory Board of 16 people, eight of whom are employee representatives. Of those eight, two are from IG Metall (one of whom is Siegfried Balduin), five are representatives of the workforce at Airbus and the last one, according to co-determination law, is a representative of senior management elected by all employees. At present, of the five workforce representatives, all are IG Metall members.

The role of government

5.89 Siegfried sees a clear role for government, working with companies, to support the development of industry. He says: "They subsidise special programmes, development programmes for new technologies. Future problems, the greening of industry, there are a lot of activities, partly funded by the government, partly funded by Airbus… You could say yes, the general way in Germany is to support strategic industries by funding new developments in key issues. That is one side. The second one is on the regional level, they do the same. They have special programmes to bind that company and strengthen the industry in their regions. Sometimes there is a support on the local level too. Then there is the European level, there are European programmes and generally a lot of special projects."

5.90 Who decides what industry is strategic and what industry isn't? "There's a political debate and clearing process. Decision-making processes are the result of interests of activities, but in general the government elaborates programmes to secure the industrial future of Germany: What are the strategic industries? What are their strategic targets? What do they want to support for the future? Under that umbrella there are starting programmes to stimulate activities and developments in that area. There is no doubt [that] there is no conflict about the role of the aircraft or aerospace industry in Germany and Europe."

5.91 This is, of course, very different to the Anglo Saxon approach, which is to support the general conditions in which industry operates, but to allow the market to decide which industries will grow and which will not. Siegfried says: "We haven't followed the radical ways of neo-liberal thinking, which says the market knows what's going on and what's best for the future. That was never the majority here in Germany. The political majority. It wasn't the position of management either. The tradition is that it's private sector [led], of course, but there is a sense of co-operation and an active role of the state on a different level in improving the general conditions, the framework, the environment for the development of that industry …"

5.92 Does this mean that Germany 'picks winners'? If so, where would this leave an entrepreneur that wanted to start a business in a non-chosen sector? Siegfried says: "In the last 20 years, it's a start-up philosophy. The founder initiatives, building up technology parks, I think you find it everywhere in Germany. It's not a centralised strategy, it's not the federal government, it's the local and regional idea to build up small silicon valleys and to look at what is strategically interesting… I think that's like a permanent competition here in Germany and it's a highly developed structure between research institutes, independent research structures, strategically orientated and they are looking for new trends and ways to help new industries coming forward. You will find this kind of technology park in the cities or regions, they help these start-ups over the first years of their development."

5.93 He continued: "I think that's not new. I think in England you find that too. Maybe the kind of structure which has taken a lot of decades to be developed, there's a research infrastructure, a development of industrial clusters in different regions, combined with facilities of research and development that may be specific for Germany and now in the last two decades this cluster-building in the regions with specific orientation to different, new industries, you could say. Germany was all the time industry-orientated. They haven't changed the mindset so much to services. There's a tradition to strengthen industry in every kind."

Long-termism

5.94 Siegfried also attests to the long-termist culture that continues to exist in Germany: "The German tradition is to say we have to strengthen the longer term perspective and with our influence in the supervisory boards … we are always trying to counterpart the purely short-term perspective. When we are looking for long-term investments, long-term perspective, what are the core competencies? Where is the industry going? What do you need to have a chance in the future? That is our philosophy, our practical philosophy and we try all the time to help our members in the works council to understand that perspective and organise that process in their environment. It's a core issue of our policy. It's a part of the German mindset. The management, okay they are changing all the time. They are realising that financial markets are stronger than in the past and they try to cope with that requirement. That is a permanent challenge. It's one reason that Germany compared with the USA or maybe the UK as well, that we are not so affected now by the actual crisis because the industrial base is a little bit stronger."

Daimler and Airbus

5.95 Airbus's parent company, EADS, is unusual in its ownership structure. The French government currently owns a 15 per cent stake in EADS, while the French media group Lagardere owns a further 7.5 per cent. Until recently, this was matched by Daimler's ownership of 15 per cent, plus 7.5 percent held by

some private and public institutions under the industrial leadership of Daimler. The German government did not own a direct stake, but had a strong interest to keep the balance between France and Germany to prevent jobs and influence moving abroad. However, Daimler announced that it wishes to sell 7.5 per cent of EADS, as a next step. After a year-long search for a private investor, the German state-owned bank, the KfW, bought Daimler's share of EADS, a purchase that will become effective next year.

5.96 The fact that Germany and France owns an equal stake in EADS is considered to be politically essential. On 6th September 2011, the Financial Times reported: "France and Germany believe that these shareholdings are vital to protecting their industrial interests. They argue that EADS, with its defence and space operations, is of national strategic interest. Thus both sides insist that management and shareholdings must be equally shared."[9]

5.97 Speaking before the KfW bought Daimler's share of EADS, Siegfried Balduin argued that IG Metall was opposed to Daimler selling a part of its stake in the company: "We don't like it because Daimler is an anchor in our perspective and we don't think Daimler needs the money. They have a lot of cash in their books, but it's their strategic decision." Siegfried continued: "It is a political debate at the moment in Germany, because the Free Democrats, one part of the government, prefers a private solution and that means they don't want to accept state ownership. The problem is there's no private investor who is interested to take that share."

5.98 In a UK context, Daimler would sell its stake, to a non-British company if necessary, but Siegfried says in the case of EADS and its special background it must not happen: "You have to secure that position, otherwise you get political turmoil... You cannot give up a strategic company, a strategic industry. If you define that as a strategic industry then you cannot leave it without safeguarding your national interests i.e. because it's a political problem. If France left as well then it's another situation. But we don't see any signals that the French government will leave or sell their shares. Not at all. I don't believe it."

5.99 How much is EADS a special case? Would the KfW step in to buy any other strategic company in similar circumstances? Siegfried says: "The normal position of the government is that it's not their job to keep private companies from their decisions." But some companies are national symbols: Daimler is one. Siemens is another. "If Siemens decided to say our future would be in London, that would be a great conflict, because that's a contradiction to the interest of the people."

[9] "Let EADS fly solo", *Financial Times*, 6 September 2011.

Section six

Evidence from the United Kingdom

6.1 The following section presents evidence gained from interviews with senior managers and trade union officials in four British companies: Bentley; Siemens; BMW; and Roballo Engineering. All of these companies have German parent organisations. Interviews were carried out between July and September 2011. Again, they covered a range of issues, including the economic downturn, the rise of Brazil, Russia, India and China, skills, industrial relations and the role of government in supporting industry.

Bentley Motors

6.2 Bentley, the iconic British motor manufacturer, employs around 4,000 people worldwide. Founded in 1919, the company's manufacturing headquarters are based in Crewe, Cheshire, its home since 1946. In 1998, the company was bought by Volkswagen AG, who invested £500m in improving the factory and supporting future production development. The company sold just over 10,000 cars throughout the world in 2007.

The economic downturn

6.3 2007 was, of course, the year that the economic downturn hit the world and this hit a Bentley that was growing in confidence. Following its investment from VW, Bentley's increase in production had been profound: the company went from building 1,000 cars to 10,000 cars in the space of just two years. This had led to significant recruitment as well as the introduction of a nightshift. But in August 2008, in the words of Leonie Williams, Bentley's Head of Personnel Manufacturing and Skill Development, "It all started to fall off a cliff". With a significant percentage of the company's volume sold in the United States, the first country to experience the adverse global economic downturn, Bentley felt the impact straight away.

6.4 The company went back to one shift but, by the end of 2008, had lost a significant number of UK employees. However, Bentley also had a time banking agreement, which meant that if there was no work, employees could go home on full pay but their time was debited, to be paid back when work returned. Leonie Williams says: "We sat down with the trade unions and between us I think we did a very good job, but we had to make some very difficult decisions that impacted on our workforce. Those decisions were really

made with the utmost conviction that we were doing the best for the business and the long-term security of not only our business but also our associates."

6.5 In fact, whilst Volkswagen also had a time banking agreement, Bentley introduced theirs first. Leonie says: "Our key objective was to protect the income of our employees, but at the same time, all employees knew they had to pay those hours back to the company, so when they worked overtime in the future they would not get paid, it would be deducted from their time bank."

6.6 Stuart Davis, a Unite rep at Bentley, praises the efforts of the union and management to develop the time banking system: "I think at the time we introduced it we were pioneers in the motor industry … I wasn't on the negotiating body then, but the people who were, they [described the way it was achieved as] 'close the doors, we've got this problem and we are not going out of the room until it is sorted'. The lads came up with this and each time it is run it saves jobs, it saves money."

6.7 Leonie continues: "We had seven weeks of time banking, we also fixed a week's holiday from associates' flexible holiday entitlement and we closed early at Christmas, everyone had a ten per cent pay cut, that was from the board right the way through, it was either ten per cent or another 300 jobs. Some associates found that very difficult to accept, but from a company and a trade union perspective, we believed our priority was to protect jobs."

6.8 The ten per cent pay cut hit the workforce very hard. An overtime culture also meant that, with time banking, workers lost more money as future, longer working weeks were rewarded with basic pay. What is more, Bentley Motors combines various functions, including manufacturing, engineering, marketing, styling and design, quality, purchasing and logistics, all on one site, and whilst some areas were short of work, others were not. Leonie says, "While manufacturing had a reduced workload, engineering were busy designing the next generation and we all accepted that we needed the new product to be ready to respond when the upturn came." Stuart adds: "We are quite unique in the motor industry like that, so manufacturing, it was obvious they were going to get hit straight away. It caused problems then and it still does now, because they see people coming in for five days a week and working, they saw people doing overtime, it was very difficult, it was hard. I myself work in maintenance, so my department was in for seven days a week, but then you are representing people on the line, they were in for three days, it was very difficult."

6.9 Volkswagen supported the company throughout. Leonie says: "The feedback we got from VW was that we were doing everything that we could to support ourselves and therefore VW would do everything that they could to support us."

The rise of the BRICS

6.10 Whereas the rise of China, India and other large manufacturing nations is seen by many as a threat, for Bentley it is an opportunity. Bentley's competitors are other luxury motor manufacturers such as Aston Martin, Ferrari, Rolls-Royce and top-end Mercedes. No Chinese company is manufacturing such cars and Bentley, following its heavy focus on the US, is keen to capitalise. Leonie says: "We are opening a number of dealerships in China over the next three years, we'll open a regional sales office in Beijing and we are looking to employ about 50 people in that office to support the dealer network that we are introducing. We've also got dealerships now in India, Russia and other emerging markets."

6.11 Will production stay in the UK? Leonie says it is the objective of the UK company to retain manufacturing in Crewe, although she accepts that as part of Volkswagen, wider group decisions could have an influence, especially under specific circumstances: "When we made 10,000 cars, VW had opened a factory in Dresden called the Glass Factory; it was a showcase factory that had been significantly financed by the German government to build the Phaeton. The volumes fell short and the factory had significant capacity. During 2007 Bentley could not produce the full volumes and VW arranged with Bentley that they would take some of our volume and build it in Dresden. This was very difficult for us but we had to understand the fact that we are part of a bigger organisation, we know production can be moved in that respect, but in terms of the full manufacturing of a Bentley, I would like to think it would always be done here."

Skills

6.12 Bentley recruits apprentices, as well as having a graduate scheme, industrial placements and summer placements. The company currently takes on 20 apprentices a year, but is looking to increase that by 50, to 70 a year, next year. This will mean that, on a full year programme, Bentley will have over 200 apprentices at any one time, which is a reflection of significant, planned volume growth, based on a proposed third model line. Leonie says: "We still have to present the business case for the third model to be built here and it is important that we plan to develop our workforce to ensure that we have the right people with the right skills at the right time to develop the new product here, we are planning that now."

6.13 Bentley works with Loughborough, Cranfield and Keele Universities, as well as local colleges. The company is also looking to strengthen links with international universities. Technology clusters are also important and, again, Bentley looks to work with other Volkswagen brands, in particular Audi and Porsche.

Industrial relations

6.14 A Bentley Company Council includes members of senior management and senior shop stewards. Leonie says "The people on it are the decision makers, they are the ones that make things happen, so it is a key group from an employer and an employee perspective." She describes the members of the Company Council as "a very good bunch of 14 people who have worked together for more than 10 years, there is a relationship there that has been built up over time and that is very, very important." The company has about 30 local stewards, who elect the senior stewards every two years.

6.15 Stuart Davis agrees that relations are good: "We have a good working relationship, it would be wrong to say otherwise, we have regular dialogue with the company, on lots of levels." This includes a weekly meeting of two trade unionists, Leonie Williams and another human resources manager, known as "two-on-twos", as well as company councils and policy reviews. Four times a year, the full company council meets, including all 30 local stewards.

6.16 In a significant move by Volkswagen, Bentley has been asked to develop a model of co-determination, similar to that which exists in Germany. After discussions with the various bodies in Bentley, including the company council, a proposal will be presented to VW. However, this will be co-determination in a UK context. Leonie says: "What we have done is, and we have been very clear about this, we have written to VW describing our intention to achieve co-determination, but we will do this in the context and the framework of the UK environment. It is important that it fits within our culture."

6.17 Stuart believes co-determination could lead to information being shared more quickly on occasions: "If anything, sometimes, if there is a criticism, it's only minor, we get information, sometimes you think I could have just done with that a little bit earlier, and can I really influence that, and that's a difficulty sometimes, and you sit back and think, has that decision already been made, and with the facts, we could work a little bit better like that."

6.18 Of course, in spite of good relationships, difficulties occur. Leonie and Stuart both admit that the ten per cent pay cut was a huge challenge. When the difficulties caused by the economic downturn had passed, according to Leonie, "we knew that our associates had been through a lot and we wanted to acknowledge that through a pay deal which was 4.75 per cent, but it wasn't enough. We had demonstrations in front of the factory, we had some very tough negotiations, but that's the way things go and I think we have to acknowledge that the workforce were very sore about what happened to them". Stuart agrees it was difficult to carry the workforce, who rejected company offers twice. They were eventually forced to confront the fact that if they continued to reject the deal, they would have to take industrial action.

The 4.75 per cent agreement lasted for one year and further negotiations will happen again soon.

The role of government

6.19 Leonie would like government to be more proactive in its support for skills, as well as helping smaller businesses that could (and perhaps should) form a greater part of the supply chain.

6.20 On skills, Leonie says: "From an apprenticeship perspective, we are now being asked to fund a lot more than we were asked to fund before, there is a lot of government support for apprenticeships but more of the funding is now the responsibility of the employer. I can appreciate that from one perspective, but if government want to increase UK manufacturing output and have a successful UK manufacturing industry that's sustainable, then it is a partnership, it shouldn't be all one way. We have an adult apprenticeship programme, the funding that we've had for that has now been withdrawn but we've made a commitment that fifty per cent of our workforce will be skilled, by 2015 and we will carry on and deliver on our commitment, but smaller local employers, how do they find the resources to do that?"

6.21 Stuart is sceptical about government claims to support manufacturing: "Manufacturing doesn't appear to be high on this government's agenda at all. They say it does, but when you know what's gone down, at Bombardier at Derby, we've got a Bombardier plant across the road, that's had nothing. They say manufacturing matters, but they don't seem to prove it, or put their money where their mouth is…"

The role of Volkswagen

6.22 Bentley is a company with a British heritage, but is now a daughter company of Volkswagen. To what extent is that positive and is there any way in which it is negative?

6.23 Most obviously, the £500m pledged to modernise Bentley is believed to have saved the company, quite literally. More specifically, VW's investment modernised Bentley. Stuart Davis says: "I don't know whether it is a Volkswagen culture, but something has changed, definitely something has changed. Going back [to the] Rolls Royce days, just the manufacturing side of it, it was very, very slow, everything was half-built, the car was physically pushed down the line to the next station, and Volkswagen put in massive amounts of money and automated the line. Generally, people are more buoyant with it now. Just the money that goes in, you can't not be positive."

6.24 The downside risk is that VW will want to bring work, and jobs, back to Germany. This could, of course, be compounded by political pressures to do so. Leonie Williams says: "We have to justify to Volkswagen everything that we do, they don't just give out a blank cheque and sign it for us.

Siemens

6.25 As noted above, Siemens is an integrated technology company employing 336,000 people around the world. It has had a presence in the UK since 1843 and currently employs 16,000 people here, including about 6,000 in the manufacturing sector. Last year's revenues were £4.1 billion. Siemens has offices throughout the UK, with its headquarters in Frimley, Surrey and factories in Cannock, Congleton, Manchester, Poole, Hebburn, Newcastle-upon-Tyne, Lincoln, Wollaton and Eynsham.

6.26 Siemens operates in four main sectors: Infrastructure and Cities, Health Care, Energy and Industry. It designs and manufactures products and systems ranging from traffic control systems, and building technologies in Infrastructure and Cities to the superconducting magnets used in medical scanners in the Health Care Sector. In the Energy Sector Siemens manufactures gas turbines but also supplies products and services for the rapidly growing wind energy companies. Finally in the Industry Sector Siemens provides the drives and programmable controllers that are behind many of the UK's manufacturing plants. All of the above examples are manufactured or assembled in UK and with more manufacturing planned for the coming years turnover is split more or less evenly between product and service.

The recession of 2008

6.27 Siemens in the UK has benefited from a global corporate strategy that led to the company being well-positioned when the downturn happened. As noted in the section on Germany above, Siemens is focused on future global economic and social challenges, so-called 'mega-trends'. Energy supply, climate change, the future of healthcare and the growth of mega-cities are four such mega-trends the company has identified. About sixty per cent of the world's population will live in very large cities that need to be safe, have transportation systems and traffic control systems, and these have increasingly been the focus of the company.

6.28 Toby Peyton-Jones, Siemens Director of Human Resources in the UK and across North West Europe, says: "These markets are where the government is facing these problems and just because we are in a tough economic climate, it doesn't mean they can stop addressing them." Before the credit crunch, Siemens ran a cost cutting exercise, protecting front line activities but cutting central functions. Toby says: "We took these actions twelve months in advance of the downturn. That means although we have not had a painless experience we have had three very good years. It has been tough, tight and we don't think we are out of the woods at all, in terms of sluggish economic growth, but overall, I think, we are in good shape."

6.29 Of course, different parts of the business face different challenges. Siemens Traffic Control Systems is based in Poole, Dorset. This part of the

business is in an unusual position in that the economic downturn has not particularly affected it, but may affect it in the next two years. This is because the company sells traffic control systems to local authorities, who are experiencing steep spending cuts now and must decide how to prioritise their existing budgets. As well as traffic control systems, the company makes systems, predominantly for motorways, which it sells to the Highways Agency. Again, this work could come under pressure as spending cuts hit.

Globalisation

6.30 The rise of the BRIC economies are seen by Siemens as both an opportunity and a threat. The company has moved from a position where the majority of its turnover and its employees were based in Germany to one where they are more evenly dispersed across its global sites. Siemens has had a presence in China for over 100 years, but has hugely reinforced its presence in the last 20 years. A similar situation exists with other markets, such as Brazil, Russia and the United States. Most of the revenues for Siemens come from outside Germany, although a lot of the headquarter function is still there, as is, according to Toby Peyton-Jones, "a lot of the DNA for the company, the cultural DNA".

6.31 Siemens has close relationships with the Chinese government, working with them not only on orders, but on helping them develop their government, their legislative frameworks and on education. Similarly, in the UK, the company works closely with the UK government, on topics like education, the skills development agenda, and on energy policy. Toby says: "All of these things are being what we would call a local player, fully integrated, and that means we put manufacturing, we put R&D out there, because then you can benefit from the local environment. Actually in China when you start to look at the price of a project manager, a good one, it will probably be the price of a project manager anywhere. They still have this low cost manufacturing advantage, but for Siemens that will go in a relatively short time, actually, we have world factories in UK that already compete on an equal footing with China USA or other European countries. We do very high end manufacturing and China is learning very fast, and there are things, I am sure, that we should be able to learn from them as well as them from us."

Skills

6.32 As is often the case in UK companies, the availability of skilled young people is an issue. For example, Siemens in Poole has an ageing workforce and for a long time found it difficult to recruit young people to replace those retiring. The company doesn't just look for graduates, who are needed but don't always show the same loyalty as employees who come via the apprenticeship route. Siemens seek young people with 'hunger and desire'. The company has ramped up its apprenticeship programme in recent years, but still has a lack of employees in the age group of 28 to 40.

6.33 This is one area where the UK could learn a lot from Germany. Toby Peyton-Jones says: "If you look at what's different in Germany to here, it is that they have a stable long term strategy, regarding skills and apprenticeships. That doesn't mean that the content doesn't change. But it does mean everybody knows … the frameworks for academic achievement, how these are going to be structured… our input to government has been about actually playing a long game in this topic, getting real stability and buy in from all parties, not the next flavour of the month, some short headlines and then move on…"

6.34 It is also important not to confuse two important aims, those being to develop apprentices and to address long-term unemployment. Toby stresses the importance of "not degrading the brand of apprenticeships. They should be a technical qualification that can proudly stand alongside any academic qualification". Addressing long-term unemployment is also essential, but "I'm old enough remember YTS, and trying to turn apprenticeships into some kind of YTS scheme would be a big mistake. We are of course working with the government on the long-term unemployed as well but we should take care to protect the Apprenticeship brand from erosion."

6.35 Colin Gosling, a Unite Rep at Siemens, believes we need more graduates in engineering. He argues that, with tuition fees of £9,000 per year, the government should be offering tax breaks to students applying for science and maths, or offering bursaries, to make such courses cheaper and more attractive. Toby Peyton-Jones agrees: "I would like to see a bias for students that want to go into STEM skill education. Why should it cost the same if you want to do left-handed basket weaving or if you want to do engineering? I think you should be offered a discount, because these are the areas where the country really has a skills gap that will hold back the economy if it is not addressed. I don't think that would be difficult to do and I think everyone could understand it…"

The green economy

6.36 The growing green economy offers opportunities for the company. Colin Gosling says that Siemens' energy group is investing heavily in wind turbines and, as part of its cities and infrastructure work, is involved in train transport, trams and buses. Locally in Poole, the company manufactures low voltage controllers that drive traffic lights and has recently been rated the most sustainable company in the Diversified Industrials Sector in the Dow Jones Sustainability Index.

Industrial relations

6.37 Colin Gosling said that at a local level, in Poole, relations between management and unions are very good. Colin spoke of good levels of co-operation, understanding and the sharing of information. However, none of

the German attitudes towards co-determination that exist in Siemens in Nuremberg are replicated in the UK.

6.38 Toby Peyton-Jones argues that Siemens in the UK has grown both by acquisition and organically, which means it has different businesses in different markets, with different trade union histories. The company has not seen the value of "aggregating this all up to a Siemens plc relationship", although Toby describes the company's relationship with unions as "very close and very strong."

6.39 Colin is a strong supporter of co-determination. As a member of Siemens' European Works Council, he sees its operation in practice. Colin says: "In Germany, they have co-determination, but what you also find, from a trade union background, is that (in) a lot of the Scandinavian countries, there is still a lot more national negotiations and national bargaining, so therefore people are talking to people who actually make political decisions at that level whereas, I'm afraid in the UK, I am talking to people that have got no more influence in changing my future or their own, I do find that frustrating."

6.40 Colin also believes that co-determination helps to get more people on-side: "The more people understand where you need to be going, the more people you can take on-board and the fact that people aren't suspicious and the fact that (they know they are not) just there as a means to an end, to make money for other people, and I think that does help."

6.41 Toby takes a more nuanced view of co-determination: "The advantages are that you get continuity and you get a kind of growing together, the disadvantages, and I think Germany would also say this, is they are much slower to be able to respond. One of the exciting things about the UK, it's really how you set your stall out, is one better than the other, here people will come and invest in the UK, because actually the risk when you set up is less, and the flexibility of the workforce is greater, and your ramp up is faster, the skills are there or are quickly learned, and investors will come here. Making a virtue out of being agile is a viable strategy and I think we are envied in that way, our ability to actually move people from one area, re-skill and get them working and productive in other areas, we are much, much faster. That's because people take much more responsibility for their own lives, they don't think that someone is going to do it all for them."

6.42 Toby continues: "What I like in the co-determination model is the working on a joint agenda and I think these aspects can be translated, but not maybe in their exact format, but that idea about building a common agenda with the government, building a common agenda with industry, especially where there are very aligned situations".

6.43 Colin Gosling wishes to see the UK government introduce a level playing field regarding employment rights: "We tend to be the poor man of Europe as far as industrial relations are concerned. Germany has co-

determination, France has its national legislation, but in the UK (if faced with a company closure) we are given ninety days notice and the taxpayer picks up the bill. The previous administration said we need to be flexible and if we do that it will bring work into the country, but in my experience it has proved the opposite."

6.44 Toby is concerned about bank lending, especially to SMEs, which he compares unfavourably with the situation in Germany. He believes the government is moving in the right direction, in terms of rebalancing the economy, and they are working very hard on apprenticeships and unemployment, although they need to simplify the skills structure. He is most critical of government attitudes towards immigration: "It is a very hot topic. The government has hugely missed their targets on immigration, that is purely because they never could control them. Most immigration happens because we happen to be part of the EU and they can't stop people coming in or leaving the country… Because they can't control the big numbers they are trying to control the very small numbers." This affects Siemens ability to bring employees, such as project managers or engineers, to the UK without huge bureaucracy.

Lessons for Germany

6.45 Germany is a world leader in industry, but it has not got everything right, and Toby Peyton-Jones can see one area in which Germany could learn from the UK. He says: "The UK does have in our DNA, creativity and innovation. I don't think there is another country in the world that has got the vision, the desire, the capability, that our education system and our culture brings in this area. If you are in Formula One and need a new car every race, you put your headquarters in the UK. You've got to do it. You look around Cambridge or other universities and you can see what is springing up. In terms of innovation, our flexibility of thinking, our flexibility also with skills, and in terms of our management style are all huge strengths. In Germany a strength is implementation. They set their mind on something and then they walk steadily towards it and if all the data is saying something else, they don't change their mind. In UK we will innovate on the way, we will improve our idea on the way, and it's our downfall but it's our strength. You don't see many German companies leading the mobile phone or IT markets where the innovation cycles are just too fast for the culture. So we can learn a lot from Germany about implementation but they can learn a lot from us about agility creativity originality insight and design."

BMW

6.46 The BMW Group employs about 8,000 people in the UK motor industry. It has four production plants in UK: the engine plant at Hams Hall near Birmingham, which employs around 800 people; MINI Plant Swindon,

which employs around 800 people and produces the MINI body panels and some sub-assemblies: MINI Plant Oxford, with around 3,700 employees; and Rolls-Royce Motor Cars Ltd, in Goodwood, which employs a further 850 people and is the only place where Rolls-Royce motor cars are built.

6.47 The MINI plant produced its two millionth car in August 2011. Oxford is the Heart of MINI production and currently produces four models – Hatchback, Clubman, Convertible and Coupé. It will soon begin production of the Roadster model. Around 80% of cars made in Oxford are exported. In 2010, the Countryman model was introduced, which is made in Austria.

The economic downturn

6.48 The economic downturn affected the MINI plant in a number of ways. Ironically, during an economic downturn, customers tend to want smaller cars, both in terms of the actual size of the car and in terms of its engine size. This gave a boost to the MINI, as well as other smaller models, such as the Ford Fiesta and the Vauxhall Corsa.

6.49 Chris Bond is the Unite Convenor at the MINI plant. Chris, who worked at the Oxford plant when it was owned by Rover, says of the company: "They're doing remarkably well. For 10 years… with MINI all we'd ever seen up until 2009 was a constant increase. Then the recession hit, and it caused a problem. Having said that, we recovered very quickly, not to the figures and volumes we'd had prior to 2009, but we've managed to maintain a stable workforce."

6.50 One impact of the economic downturn was the release of around 500 agency works from Plant Oxford. Chris believes that this sort of situation is unlikely to happen again.

6.51 MINI continues to benefit from its iconic status. Chris says: "When it was first mooted that they were going to relaunch the MINI, it was going to be just a trial of 120,000. Then it took off and nobody could imagine the interest. It's got better and better because it is such an iconic car. From the Sixties, when it was used by the stars, everybody wanted a Mini. It's the same today." Erich Thanner, Human Resources Director at MINI Plant Oxford, says: "It's a smart car to look at and fun to drive. It really does have that go-kart feel, the drive is exceptional."

6.52 The design of the MINI is, of course, iconic, but Erich is clear that design in itself is not enough: "Design attracts you to a product, but if the substance of the product doesn't deliver or meet your expectations, you're disappointed." But it is not just MINI. The BMW brand is also attractive. Chris Bond says: "People do want to work for BMW Group. There is that kudos. That's why we attract so many people. We get agency people coming from the four corners of Great Britain because it's such a prestigious company to work for."

Globalisation and the growth of the BRICs

6.53 As noted with Volkswagen earlier, most growth in car sales is taking place outside of Europe, and especially in emerging countries such as Brazil, Russia, India and China. Is this an opportunity or a risk for BMW Group? Erich Thanner says: "It's a chance and an opportunity. We are selling a huge amount of cars in China"

BMW's value-oriented production system

6.54 Most car companies have a modern production system that owes something to the Toyota model. BMW Group has introduced the Value Oriented Production System (VPS).

6.55 Erich says: "Some principles are quite similar, others are different because we think it doesn't quite work for us." How does VPS work? "It's about organisation of the workforce on the shop floor, working in smaller groups. We are introducing a supporting lead associate, not a manager, who is able to deal with all the daily problems .We call it core production and outside this core production we have other shells where support functions kick in, such as maintenance, planning, HR. That's one side. On the other side, we are looking at processes and make them measurable. We want to improve the processes by taking out waste and improving delivery time."

Skills

6.56 Erich Thanner believes that talented school-leavers have been put off manufacturing, believing it to be dirty. Instead, they have been attracted to financial services, insurance and business. Erich says: "We need to improve the image of manufacturing. It can be quite a challenging job and producing cars with the latest technology is an exciting challenge." The BMW Group manufacturing plants have been very active in the second half of this year in support of the Automotive Council UK's initiative, 'See inside Manufacturing'. Erich says: "We have invited careers advisors and hundreds of students from local schools/colleges to come into the plants and see first-hand that a career in manufacturing is a valid option. Many of the visitors simply did not understand what working in the automotive industry could offer them. Hopefully, we have changed perception and created an interest for future apprentices."

6.57 BMW Group has approximately 100 apprentices in the UK and the Oxford plant takes on about 30 each year. Dave Reed, a member of the trade union team at the MINI plant, says: "We take, on average, across the group in the UK, between 40-50 young people every year." Dave adds: "My biggest concern with apprentices is that they're not always guaranteed a position at the end of their training. I have a view that they should be, with the skills they've attained, or the company should do something to protect the investment

they've made in those young people." The retention rate of apprentices across the BMW Group UK manufacturing sites is 97% and this figure takes into account apprentices who decide not to continue with their apprenticeship at BMW. Chris Bond adds: "They've introduced a mature apprenticeship scheme so people are now taking up the opportunity of apprenticeships. It's for internal candidates only, but you've got people on the tracks who have the capability and are now being given the encouragement to develop, which is a good thing."

Industrial relations

6.58 How is the relationship between the management and the workforce? Chris Bond says: "It's good. I can't say it's not good. Like any relationship you're going to have ups and downs. You're not going to agree on everything. Although it can get quite heated, we always end up with a negotiated settlement. It's no good banging the table. To achieve anything in life you have to make compromises on both sides, whether it's the trade union or the company. We have adopted jointly an attitude where we're always trying to achieve a win-win situation."

6.59 Erich Thanner agrees that the relationship works well: "We have a very constructive relationship. We meet every other day almost. I think this is typical BMW Group. Not only in the UK but in Germany. This helps a lot in critical situations. I'm convinced in the long term we have similar goals"

6.60 However, both Chris and Erich note a subtle difference in the way industrial relations work in the two countries. In Germany, works council representatives are elected and then have more autonomy to make decisions than their UK counterparts. Erich says: "In Germany the legislation around the works council is much more detailed than it is in the UK. At the end of the day it puts the works council in a stronger position in comparison to our plant joint committees. If I had a negotiation about a working time shift pattern in a German plant and I reach an agreement with the works council, we sign it and it's done. In the UK, you need to ballot. This makes it sometimes more difficult in the UK to deal with topics in comparison with Germany. I don't know what's better, but it's different."

6.61 Norman Gough, a member of the trade union team, prefers the UK approach: "The main aim [in industrial relations] is to keep people in work and also keep up their wages and conditions. I don't believe it's quite like that in Germany. It seems, in a lot of cases, the negotiating body gets round the table with management, agrees something and more or less tells the workforce this is what we've agreed, this is what you're going to do. Whereas here the members have the last say. They have the vote on that. We put it to the members and that's what it's all about when you're representing a body of people. You're working for them so you have to go back to them and consult."

The green challenge

6.62 When asked if the challenge of more sustainable manufacturing was an opportunity or a threat, Erich Thanner was in no doubt: "Opportunity. First of all, you can't change it anyway. We need to face the challenge, we as humans on the earth need to deal with our environment. Being a car producer we have a definite responsibility to deal with the environment, not only related to our cars and the effect they have on the environment, it's also relevant for our production processes. This is a huge thing we are doing and its one of our major focuses here to reduce our carbon footprint."

6.63 Chris Bond agrees: "Take the electric car, the MINI was one of the first. Although it's not gone into production, for testing purposes the MINI proved the way forward is electric. We tested it, drove it, an incredible car. Within the car industry there is a way forward and development should be towards greener energy. At the moment it's expensive technology and there's a reluctance to spend that sort of money, but give it a couple of years and it will start bedding in and we'll start seeing a development."

What more should the government do to support industry in UK?

6.64 Erich Thanner highlighted a number of areas where the UK might focus in order to strengthen its industrial base. He argued that regulation should be built around basic principles as orientation marks, or guidelines, with the expectation that companies operate within those guidelines, before adding, "If a company doesn't operate within those guidelines, of course, there needs to be some action. Based on my experience, the regulations tend to be too precise." Erich also believes that more needs to be done to enhance the image of manufacturing.

6.65 Erich went on to speak about the value of middle-sized companies: "In the Germany industry we have the "Mittelstand", the medium sized companies, and especially in manufacturing they have a very important role. In Germany there is a saying that these medium-size companies are the engine of the German economy. From my observation, this is different in the UK."

Roballo Engineering Co Ltd

6.66 Roballo Engineering is a manufacturer of large diameter antifriction bearings, or Slewing Bearings. It is located in Peterlee, County Durham, is a part of the Rothe Erde group and is a member of the ThyssenKrupp organisation.

6.67 Roballo Engineering covers three business sectors: military, comprising aerospace and defence; construction, which covers excavators, mobile cranes and, more recently, renewable energy; and wind, tide and solar energy. Roballo Engineering employs 65 people in Peterlee, although the wider

ThyssenKrupp group employs 6,500 people worldwide. Raballo's turnover in the last fiscal year was £12.8 million, of which £500,000 was profit.

Recent economic events

6.68 Ray Carr, the Sales and Procurement Manager at Roballo Engineering, believes the factors affecting the company in the last three years have been fairly straightforward: "One of the biggest impacts this recession has had, has been on housing. Housing has a massive effect on our business, because 60-70% of our business is excavating equipment, the majority of which are used in some form for house building, heavy construction. It's had a big impact on us." Ray also identifies the change in government and, more specifically, "the strategic defence review (SDR), military contracts, very high value. We've been involved in military business for as long as I know and we've always had a very steady military turnover that tended to be somewhere in the region of £5 million a year just on military business. The SDR has caused some of those projects to be deferred or cancelled, which has had the net effect on our forecasting for future projects, which have been deferred or cancelled."

6.69 "The economic effect on Roballo (has been that) prior to the recession we had six days, 24 hour shifts here and people in on Sunday as well. We never had enough hours in the day to do what we needed. We had business coming out of our ears. We had our domestic markets which were really going very well. All areas, very busy. The effect was that this plant became very full. It was also assisted by our parent company's plant being full. That in turn pushed work back on to us from them because they had very little capacity to build so they were offering business to the group companies of which we are very cost effective, so we were getting quite a lot of the business. The downside is when the recession hit, the first thing that went was they pulled all that business back in, because the numbers had reduced or gone."

6.70 The result was that Roballo lost its fourth shift, which covered weekend working, together with its third night shift. Joe Peacock, the Works Manager at Roballo, says: "We didn't want to lose anybody at all. When the recession bit at its worst we should have gone down to possibly one shift, but because we didn't want to lose anybody and there was always going to be an end, we wanted to come out of the other side ready and not have to start looking for people. We ensured where we could, we kept everybody we could, and to do that, the company gave loans to its staff where people were feeling hardship. They were interest-free loans with quite a low payback over an extended period, whereas we didn't have to give them top-up on their wages, people only worked three days but they got four days pay to try and ease the situation for everybody."

6.71 The union at Roballo recognised the support they were receiving from the company. Neil Gardiner, the Unite Steward, says: "We didn't ask for a pay rise that year. We'd just lost two shifts and we understood. We have pretty

good relationships. We try to keep it fair so the manager wins a little bit and loses a bit. We didn't go in asking for anything… We could have interest free loans that people have just finished paying back now. When you were on a three day week, you could have X amount of money to make your pay up, or a four day week, then pay it back at about £10 or £20 a week throughout the year after you got back on full-time. They protected us really."

The growth of the BRICs

6.72 Roballo Engineering sees a clear opportunity with the rise of Brazil, Russia, India and China, arguing that Roballo is often more competitive than its German parent company. Ray Carr says: "The fastest emerging countries are Russia, China, Brazil and India… We've always done business with them and the fact that we're getting business back from China is testament to how we can manufacture here and testament that shows guys out there how we can build and be competitive with these countries. We compete with the Chinese... Our partners in Germany can't. They quite often come to us and ask us to compete. They've got competition from Korea or China, they can't offer a price, but we can… I keep telling the guys in Germany when they get enquiries for this product, it doesn't matter where it is, they should always consider us as a supplier. If they can compete and get the business okay, it's their market. If they can't they shouldn't shut the door. They should come to us and say do you want to price this? Nine times out of ten we can do something. We can compete."

Skills

6.73 Roballo doesn't have a big problem with skill shortages, because it is one of the highest paying employers in the area. It has lost staff to Rolls Royce, in Sunderland, in recent years, but is still able to recruit and retain skilled workers. It trains its workers to try to reach their potential and is proud that its current engineering manager began his working life as a Roballo apprentice. The company has four apprentices and is seeking two more. They are trained to a minimum of Higher National Certificate, but those who show prospects can go further. The company plans to support two of its current apprentices to degree level.

Industrial relations

6.74 Roballo has about 99 per cent union density. Both management and union agree that the relationship between them is strong. Joe Peacock says: "We have one trade union here, its very very good. We have an honest and open relationship. It hasn't always been the same in the past but nowadays for the last eight years it's been really good. If you go back there's never been a withdrawal of labour by the union from this company. The door's always open if they want to talk about anything, they can talk to us whenever they like."

6.75 Neil Gardiner agrees: "Yes it's not like the old fashioned, Arthur Scargill union. We try and get the best terms and conditions you can get for yourselves… Obviously I have disagreements with people and they have disagreements with me and the way we see things and the way to go forward but you've just got to get over it…."

6.76 Joe Peacock adds: "The unions have got a lot more moderate and smarter than they used to be. The first sign of any problem it used to be, 'we'll withdraw our labour'. It doesn't work. You've got to talk to people and I think that's why we get on so well with our union, because we are prepared to talk. There are times when it comes to the point where you can do all the talking you want and it's not going to make any difference, but you can maybe go to arbitration. In the main you can talk to them…I know our union guys are always talking to either the local people or the TUC on general policy in the area or the country. It does make it easier for them and for us."

The role of government

6.77 Management at Roballo Engineering believe a short-time working scheme would have been of benefit during the economic downturn.

6.78 Joe Peacock says: "The company, what profit it was making, which wasn't a lot at the time, it was ploughing back into its people, by paying them an extra day's pay to try and ease their problems and giving them top-ups. The company was using its own money to try and keep everybody in a job. The Italian labour laws are different. I think they're entitled to 90% of their wages if they're on short time. I understand it's something similar in Germany… I like to think that some assistance should be given for UK manufacture. Everyone knows there's always a start and end to a recession. Do the government really want all these fellas drawing income off the government, when they could easily keep that benefit by keeping them employed by the company…?

6.79 He continued: "Are there ways the government could have helped but didn't? The likelihood is we lost a third of our workforce and the other two thirds went on to short time working. Really by rights this company should have gone down to one shift and lost another 20-30 people. So the company decided we can't do that, we'll keep them and pay them what we can. Anybody who goes on unemployment benefit will get £49 a week. We're in a redundancy situation here. We're on short-time working. We're going to try and keep these people, can we have tax relief for these people and ourselves? Could the government not have paid half the unemployment benefit towards us keeping those people on? The government would have saved money in benefit it didn't pay and it would have helped the company to keep more people on. These are the things a government should be looking to try and do what they can to help people."

Section seven

Conclusions

A new manufacturing eco-system

7.1 The TUC, unapologetically, seeks a renaissance for British manufacturing. If we are to move forward, government, industry and unions must agree between them what a renaissance for manufacturing actually means. Do we expect to have a much smaller share of manufacturing, given the growth of China and India? Has the decline of recent decades been inevitable? Or is there an agenda for manufacturing that is bold, recognising that, whilst we may never again be the "workshop of the world", a strong manufacturing sector, across a variety of high skill, high value industries, is both achievable and desirable?

7.2 Trade unions have, for many years, campaigned against job losses in manufacturing, but this paper goes further. We not only want to see jobs maintained, we wish to see new ones created. We believe there are manufacturing sectors based on high skills and high value, most obviously but not exclusively in environmental technology, where the UK can become a world leader.

7.3 What is clear from the interviews described above is that the rise of China and India are as big or as small a threat as we wish them to be. There is nothing "inevitable" about high-skilled jobs moving to China and India. Globalisation is changing the world and, as internationalists, trade unions wish to see growing wealth in many countries entering into the world economy. But with a growing Chinese middle class, this country is a marvellous export opportunity for British business, so long as our attitude is not defeatist. The German companies quoted in this report were quick to describe China as an opportunity, rather than a threat.

7.4 However, this paper believes that if a renaissance in UK manufacturing is to occur, it is necessary to develop a new manufacturing eco-system. Individual initiatives will not be enough. Instead, based on the research presented above, this paper recommends a number of separate, but inter-linked, actions which, taken together, can lead to renewed manufacturing success.

A new industrial philosophy

An acknowledgement of the UK position

7.5 The UK de-industrialised in the 1980s and, as the UK's reliance on financial services at the time of the economic downturn demonstrates, this has left a gap in our economic profile that is not experienced by our major competitors. We could blame this politician or that government, although such apportioning of blame wouldn't achieve much. Instead, if we are to turn this situation around, we must acknowledge the scale of the problem.

7.6 Addressing the Society of Motor Manufacturers and Traders on 8th June 2011, the Business Secretary, Vince Cable, recognised that in the UK, manufacturing as a percentage of the economy fell from just over 18 per cent in 1990 to around 11 per cent in 2009. In fact, in 1970 it was more than thirty per cent, according to the economist Roger Bootle.[10] Cable acknowledges that the UK's fall is the most rapid of any developed economy and this is the UK's problem. Some of this decline is due to international demographics, but it is not accurate to dismiss it all as being the result of changes in the world economy. Put simply, government policies allowed this to happen and, if we want a manufacturing renaissance, government policies will be crucial in leading the way.

7.7 Harald Kern of the Siemens Works Council in Nuremberg made this point: "The first thing a government has to do is to say we have a problem. I haven't heard that [in the UK] yet… The first step would be to say that something is wrong, we need industry."

7.8 Modern day economic policy discussion is dominated by the attitude of the markets rather than on the potential that governments have to influence and support market behaviour. The TUC believes, in fact, that this can militate against long term investment, especially in less-traditional industries. However, it is true that investors put their money where they expect the best returns and this is why, if we wish investors to put their money into a revived British manufacturing sector, they must be convinced that we are determined to create that sector. It is important, therefore, to be realistic about the scale of the challenge we face, but also to communicate the genuine political ambition to meet that challenge.

Picking winners or spotting trends? A new industrial philosophy

7.9 If we are to seek a greater focus, including a greater political focus, on manufacturing, we need to be clear about what areas of manufacturing, in particular, we expect to grow. This breaks with the Thatcher-Major-Blair-Brown consensus on the supremacy of the market, but it is necessary. To argue

[10] www.telegraph.co.uk/finance/comment/rogerbootle/7604386/British-manufacturing-is-bigger-than-you-think-and-its-likely-to-grow.html

that all manufacturing sectors are of equal value is simply not credible. To argue that the UK can become a world leader in all sectors even less so. What is more, we must align our abilities and our potentials with long-term world trends if we are to succeed.

7.10 Of course, one of the major arguments used against industrial policy in the UK, over decades, has been that it is not the role of the government to 'pick winners'. The TUC, by contrast, has argued that industrial policy should focus on those industries where the UK is or could become a world leader in the future. So how much of this is picking winners and how much of it is spotting trends to which our industrial capabilities are aligned?

7.11 Siemens, in both Germany and the UK, spoke to us of 'mega-trends'. These could be geographical, biological or ecological, but whatever category we put them in, they are going to happen. For example, the global population is going to rise and that will have consequences. As it does, more and more people will live in large cities, which has implications for they way those cities are designed.

7.12 As Harald Kern put it: "Have a look at London, for example. We try to answer the question, what will London look like in 2020 or 2025? What are the major things that need to change in a city like that? For Siemens, that is a kind of a headline, a possibility to develop business. All those things that are changing, regarding infrastructure, smart grid, locally engineered energy sources, waste water, I can go up the list, this is the business of Siemens."

7.13 This does not mean that Siemens can predict micro-detail about the future. It does mean that it can assess where economic, political, social, technological and ecological developments are taking us and use this assessment to develop its business.

7.14 This is surely the correct approach. We cannot predict micro-detail, but we can identify trends that are inevitable. Siemens is one of the most successful engineering companies in the world and much of its recent success has been predicated on identifying future engineering needs and using its excellence to meet them.

7.15 What would this mean for policy? It would mean that government, assisted by experts, should try to combine an analysis of world trends that could impact on the demands placed on industry over the coming ten, twenty or thirty years. The government should commission research into how those trends will change demands from industry and align this with an assessment of the industries in which the UK has or could have comparative advantage. Those are the industries on which government must focus. That might have implications for tax policies, or policies to support skills or R&D in those sectors.

7.16 A balance must be struck between supporting strategic sectors and creating an environment where other sectors might continue to grow. Germany

focuses particularly on the automotive and ICT sectors, for example, but this doesn't mean that other industries or entrepreneurs cannot get help to develop in Germany. However, what is clear is that a focus on strategic sectors is a political decision in Germany. The fact that the UK may have done this badly in the past is not a reason to refuse to recognise its value, indeed its essential place, in the industrial policy of tomorrow.

7.17 The UK government's decision to create a Green Economy Council and its commitment to developing green economic growth, for example with the Green Investment Bank (albeit poorly capitalised), is actually a good example of this approach. There are a number of clear manufacturing opportunities linked to our climate change commitments, from low emission vehicles and wind turbine manufacture, to emerging proposals in support of our own energy intensive industries. It is the job of government to get behind these opportunities, particularly by developing an industrial strategy for the energy intensive sectors.

Capitalising on the trends: A strategic investment bank

7.18 The industries of the future will need to be funded and, whilst some of that funding could come from traditional high-street banks, experience shows that some key sectors, especially those that are not in tried and tested, 'safe-bet' industries, cannot get development capital. The UK's major international competitors have strategic investment banks, whether based on a model such as Germany's KfW or France's Fonds Strategique D'Investissiment. As described above, the Coalition government is committed to establishing a Green Investment Bank, specifically to focus on growing environmentally friendly industrial sectors. The TUC has long supported the development of a Green Investment Bank, although we are critical of some aspects of the current government's proposal. Nevertheless, the question of how to fund future strategic sectors, that are not particularly associated with low-carbon growth, is one that must be grappled with.

7.19 A strategic investment bank could make use of existing government holdings in the banking industry. There is a clear need to leverage additional investment in a wider range of sectors and to help reduce our dependence on property and finance. A strategic investment bank would be able to raise large amounts of money on the commercial markets, backed by a smaller capital base provided by government. It could be set up on a commercial basis, to be run by an independent board, with all stakeholders represented, including trade unions, subject to a remit to generate a long-term return, based on investment in British business in a diverse range of sectors and in infrastructure.

7.20 This paper calls for a strategic investment bank. The TUC has previously supported the establishment of a UK investment bank developed on

the French model[11], whereby the bank takes a minority share in companies in which it invests. We still see the attractiveness of this model, but we seek the widest consensus on the shape, scale and operating status of a UK investment bank.

7.21 It is UK government policy to establish a Green Investment Bank and it is possible that such a bank could form part of a wider Strategic Investment Bank, so long as the development of green industries was safeguarded as part of its remit. However, if we are to compete with countries such as France and Germany, a bank that can lend to strategic industries, in the long term, is essential.

Growing SMEs: A UK Mittelstand?

7.22 An interesting dimension to an industrial renaissance would be the necessity, or otherwise, of a tier of middle sized companies to act as suppliers to the kind of large companies that feature in this report.

7.23 When manufacturing is discussed in the UK, the companies that are often used as examples of Britain at its best include Rolls Royce, BAE Systems, Nissan and Toyota. In Germany, examples would include the companies interviewed for this report, e.g. Volkswagen, Siemens, etc. Additionally, in the UK, public policy is focused massively on small companies. Indeed, it could be argued that small firms receive a disproportionate amount of political attention. What is more, whilst small companies may be a good in themselves, they are assigned little role in a wider economic strategy. A man or woman starting their own micro-business need only provide for themselves and their family. This is deemed to be a good thing and a sign of healthy capitalism. Yet growing small companies into medium sized enterprises, which might employ more people and provide the components and parts that larger companies might need, is seldom part of the narrative.

7.24 In Germany, by contrast, the 'mittelstand', the network of medium sized companies that act as suppliers to large firms, is central. Erich Thanner of BMW told us: "In German industry we have the "Mittelstand", the medium sized companies, and especially in manufacturing they have a very important role. In Germany there is a saying that these medium-size companies are the engine of the German economy. From my observation, this is different in the UK."

7.25 In fact, this issue is a high priority for the Automotive Council, which published 'Growing the Automotive Supply Chain: The Road Forward' in March 2011. This reports that the supply chain represents about 40 per cent of the retail price of a passenger car, which means that vehicle manufacturers buy in 60-75 per cent of the value from the component supply chain.

[11] *Developing UK Industrial Policy: Lessons from France*, December 2009

7.26 Growing small firms is also the focus of the CBI report, 'Future Champions: unlocking growth in the UK's medium-sized businesses', published in October 2011. The TUC welcomes this report. We fully agree with the comments of the CBI Director General, John Cridland, when he says, "I want the UK to have its own version of the German "Mittelstand" - a backbone of medium-sized firms which export, innovate and generate growth."

7.27 We are interested in the CBI's observation that many medium sized companies lack the confidence to grow. Linked to this, and described in the CBI report, is that medium sized firms often "don't have the same identity that much larger and smaller firms enjoy". It may well be true that small companies do not have the confidence to grow, but we are not convinced that policy makers in the UK have had the ambition for them to grow either. We need a stronger narrative about the need to grow small firms, and the role of medium sized firms in the UK.

7.28 The CBI suggests a number of credits, reliefs and incentives for small firms to grow, and whilst the TUC is sceptical that lowering business taxation (which in some way or another is so often the default position of the business lobby) will have the intended impacts, we agree that these should be examined. However, more interesting, in our view, is the suggestion that the Department of Business and the CBI encourage large companies to work with medium sized firms in their supply chain, to impart best practice in leadership, innovation, recruitment, exporting and financing, to strengthen that supply chain. So they should, and trade unions working in those large companies should also be part of this process.

7.29 For the TUC, this last point is vital. In our view, it is important to ask the question: why do we need to grow small firms? Growing them may be a good in itself, but there is a better reason. An industrial economy, with large, strong, world class companies, underpinned by a platform of medium sized supply companies, offers us the opportunity to rival the leading industrialised nations in the world. That is a prize worth striving for.

7.30 Yet this debate must be tempered in reality. The majority of small companies fail in the first five years. That is rarely acknowledged, but it is true. First, then, we must consider those companies that succeed, and ask why they succeed. Second, we must consider what type of companies we particularly need to grow to support a rebalanced UK economy and what we need to do to grow them. It will undoubtedly be true that some companies work best as small firms while others will reach their potential by growing into medium sized companies.

7.31 *Government must consider how it supports the growth of small firms into strategic medium sized enterprises*. Germany enjoys more devolved government than the UK and some support may be available at regional and local level. There could be a role for some of the money available to the Green Investment Bank and any strategic investment fund to be administered locally

or regionally. Structures would need to be established or adapted to make that possible. *The TUC offers no final word on this subject at this point, but we do believe it is an area where more work is necessary.*

7.32 Finally, in the UK the 'big six' high street banks account for 90% of the sector, whilst in Germany such banks have a market share of just 12.5%. There is evidence that Germany's more diverse and more regionally focused banking sector favours small and medium sized firms, has led to a higher level of economic development in the regions and supports more sustainable, long term business decision-making. If we do wish to grow more small firms into medium sized companies, it might be an idea to examine the case for regional banks.

The case for a social market economy

7.33 In so many respects, this report highlights the value of a social market economy, a role for strong trade unions and a positive approach to industrial relations. A social market economy would also imply a strong role for employers' organisations.

7.34 This report covers some of the best companies in Germany and the UK and it is surely no coincidence that these companies are able to provide excellent examples of unions working positively with employers. This is perhaps no surprise in Germany, where the Social Market model encourages dialogue, but in a UK context, where the role of trade unions is so often portrayed negatively, it is worth highlighting.

7.35 So the Bentley Company Council, in the words of the company's Head of Personnel, is made up of "the ones that makes things happen" and "a very good bunch of 14 people who have worked together for more than 10 years". Siemens UK has a relationship with its unions that is "very close and very strong", according to its HR Director. BMW has "a very constructive relationship" with its unions. Roballo Engineering, with 99 per cent union density, enjoys "an honest and open relationship".

7.36 Thymian Bussemer, from the Industrial Relations Department at Volkswagen, told us: "This [the Social Market Economy] is very strong in Germany, which means that there is a very close interaction between enterprise, especially big ones, the welfare state, the unions. We saw that in the crisis. The main contribution of the German state is to provide stable industrial relations and to provide the welfare state which linked up with the companies."

7.37 Many other interviewees attested to the value of the German model in helping their companies through the crisis. This is especially important, given that it is during the most difficult times that relationships are tested. In particular, the strong, independent employees' voice, exercised through the Works Council and through Supervisory Boards, were emphasised.

7.38 Martin Rosik of Volkswagen wanted to be challenged by employee representatives: "If you have a conversation on a matter of importance, and … you discuss with [your] partner, if he only gives you the answers you expect to hear, you wouldn't ask him anymore." Harald Kern of Siemens spoke the language of conflict of interest, which would immediately ring alarm bells in a UK context, but is simply an expression of the truth that sometimes the immediate interests of management and those of the workforce are not the same. Indeed, Harald believed that the inability of the UK to grasp this concept puts us at a disadvantage: "This is a conflict; the question is how do you handle the conflict… do you have a language in common, I think when I look over the other side of the Channel, this is the beginning of your problem, because you don't have a language with each other. If you have a conflict, you have to speak about the same thing, mean the same thing when you talk about it. You have to be crystal clear."

7.39 But if German management and unions are comfortable in recognising their conflicts, this is because they are also aware of their strong common interests. Paradoxically, by acknowledging conflict, they are able to put aside traditional roles when these are in the interests of both sides. Witness Martin Rosik again: "Labour representatives expect the company to be competitive, they force the company to be competitive, and take care of the interests of their members. Here you don't have the classic understanding of what is whose role in this game. It's a question of how the unions use their influence. They use it in a way that is not combative, it is handled in an aggressive way if necessary, but it is co-operative."

7.40 Of course, the German co-determination system is not perfect: the example of Thyssenkrupp's investment in Brazil, agreed to by the Supervisory Board on condition that investment would also be made in Germany, the latter of which is still not forthcoming, shows that that it can fail. The temptation to see this model as some kind of modern day nirvana must be resisted. Even so, it has many qualities that are preferable to the situation in the UK, where management and unions too often try to speak as if they have one agenda, because it is not acceptable to do otherwise, whilst papering over their differences.

7.41 Some in the UK are sceptical of the German approach. Toby Peyton-Jones of Siemens UK sees a paternalism in co-determination that he believes works against self-reliance: "The advantages [of co-determination] are that you get continuity and you get a kind of growing together, the disadvantages, and I think Germany would also say this, is they are much slower to be able to respond… making a virtue out of being agile is also a viable strategy and …our ability to actually move people from one area, reskill and get them working and productive in other areas, we are much, much faster. That's because people take much more responsibility for their own lives, they don't think that someone is going to do it all for them."

7.42 Norman Gough, a Unite rep at BMW, also believes the British approach to be more democratic: “It seems in a lot of cases [in Germany] the negotiating body gets round the table with management, agrees something and more or less tells the workforce this is what we've agreed, this is what you're going to do. Whereas here the members have the last say. They have the vote on that.”

7.43 The German model may be about to be tested in the UK, as Bentley are to set up a co-determination system, albeit in a UK style. The TUC will be very interested to see how this works. More generally, this report believes that in those companies where unions are strong and relationships with management are secure, co-determination offers a new, exciting way of operating, that could have valuable results for the members we represent.

7.44 Germany's Social Market Economy is culturally cherished, in a way that perhaps the National Health Service is culturally cherished in the UK, because it safeguards a high degree of equality and fairness among the population. The TUC believes there are valuable lessons for such a model in the UK, but that cannot be done without strong unions. In turn, strong unions require employer trust in our motives. Co-determination, whilst empowering unions, empower them for a different way of operating. This report encourages policy-makers to consider the value, and the possible drawbacks, that such a model could offer the UK economy and society. It could, for example, provide one means of reducing the UK's growing problem of employment polarisation (the 'hollowing out' of middle income jobs).

Nationality

7.45 The importance or otherwise of “British” companies has long been a subject of debate. The TUC has tended to be pragmatic about this. We have seen foreign companies taking over UK firms and investing heavily in them, improving their competitiveness and their potential to create and maintain jobs. Volkswagen’s acquisition of Bentley is a good example of this. The investment of £500m that modernised Bentley was vital to the company’s success and some workers at the company believe they owe their jobs to Volkswagen’s investment. As Unite’s rep, Stuart Davis, said, “Just the money that goes in, you can’t not be positive,” and it is hard to disagree with this.

7.46 Of course, if a foreign takeover of a UK company leads to asset stripping or other activity which devalues the company, the TUC is much more hostile in its response.

7.47 On balance, on the evidence presented in this report, the role of German companies operating in the UK is very positive, but there was sometimes a sense of companies looking over their shoulders. We heard that this can lead to managers in the UK feeling under pressure, fearing that, it they are no longer deemed to be sufficiently competitive, work will be transferred to German plants.

7.48 Whether we like it or not, there is political pressure on companies to create jobs and wealth in their home countries. It is unrealistic to believe that a UK plant owned by a German parent will not sometimes find itself at the centre of these tensions. This fact simply goes to demonstrate that ownership and nationality is important, not for jingoistic reasons, but for reasons that are both patriotic and practical. Patriotic because citizens are proud of the major companies of their country; practical because "British" companies based in the UK will not be subject to political pressures from another country. None of this is to decry the excellent UK daughter plants of German parents described in this report. Nor is it to criticise those parent companies. It is simply a fact of political and industrial life and it needs to be acknowledged realistically.

7.49 The situation regarding Daimler's decision to sell its stake in Airbus, and the fact that the German government, via the KfW, has now bought that stake, is a fascinating one. The Free Democrats, the junior partner in the German government, wanted a private sector solution, but there was not one to be found. Airbus is considered to be so strategic that the government has bought Daimler's stake.

7.50 The TUC believes that, in such circumstances, this is the correct decision and, once again, it highlights a difference of attitude between Germany and the UK. In recent years, the UK has come to believe in the free market at any cost; Germany believes in the free market, but accompanied state support and appropriate regulation improve its functioning, and allow the government to recognise strategic interests where the government will take a role. In such circumstances, the free market can be suspended. *The TUC calls on the UK to follow this approach, recognising the UK's strategic industrial interests and balancing them with its commitment to the free market.*

Political certainty

7.51 It sounds trite to call for political certainty. In a democracy, governments change from time to time and it is quite right that policies will change with them. Sometimes, as with the election of Clement Attlee in 1945 or Margaret Thatcher in 1979, elections bring not just a change of government, but also a radical change of political philosophy. Moreover, political change does not just affect democratic political systems. China has gone through huge political change in recent decades. And, of course, change happens. The world is changing rapidly, irrespective of political events.

7.52 Yet respondents spoke to us of political certainty. Sonja Daum and Thomas Peter of BASF felt that companies struggle with the changing priorities of government. They said that companies wish to invest in the long-term, but shifting political priorities, which have implications for business, makes it difficult to do this. In the chemical sector, especially given the prevalence of 'green' economic issues in Germany, this is an important issue.

7.53 In a world of change, absolute certainty is impossible, but governments can try to cushion change. government must keep talking to business (and unions). Consensus, not always possible in a world of Punch and Judy politics, is nevertheless desirable, at least on some issues. This report has highlighted how the German Social Market Economy is defended and nurtured by all sides of German politics. This provides a huge advantage to business.

7.54 What is more, whilst certainty may be impossible, sudden, avoidable change makes life incredibly difficult for some companies, even whole industries. A good example is the announcement in the UK in October 2011 that feed-in tariffs to support the burgeoning solar industry are to be more than halved. The industry had always expected the tariff to be revised in line with falling installation and running costs, but by failing to give people and organisations time to plan ahead and adapt, this announcement has caused major problems for the sector.

Creativity

7.55 Whilst this report seeks to make recommendations for change, it is also important to acknowledge what we do well. Toby Peyton-Jones of Siemens referred to the UK's creative instincts. He said: "UK does have in our DNA, creativity and innovation. I don't think there is another country in the world that has got the vision, the desire, the capability, that our education system and our culture brings… In terms of innovation , our flexibility of thinking, our flexibility also with skills, and in terms of our management style."

7.56 This report sets out a number of changes that we wish to see, but those changes should be introduced in such a way that this creative potential of the UK is recognised and nurtured. Industrial policy should support this potential.

Policies to support a new industrial philosophy

Skills

7.57 The battle to attract and retain skilled workers is a constant issue in discussions about industry. There is no magic bullet and it is clear from this report that Germany struggles with this too.

7.58 Germany's situation is different, in the sense that attracting people into industry in the first place is less of a problem. In the UK, talented young people have wanted to go, or have been lured, into finance and business, with industry being seen as a lesser option. Germany, by contrast, enjoys a situation where a career in industry is seen as attractive and exciting.

7.59 Germany also has the dual vocational training system. This forms the core of vocational training, which usually lasts for three years. Every young person who has completed full-time compulsory education has access to dual vocational training. A characteristic of this training path, which some 53 per

cent of young people in a cohort complete, is two places of learning: the company and the vocational training school. Successful completion provides recognition or employment as a qualified skilled employee.

7.60 The dual system has many admirers and for good reason: it has formed a major part of Germany's skills regime and has helped to deliver the industrial success that Germany has enjoyed over decades. That does not mean, of course, that it doesn't face challenges of its own. Critics argue that it must link better with universities, it must embrace new growth areas of the economy, and it must increase the participation of migrant companies in training.

7.61 The problem of industrial skills plainly cannot be seen in isolation. As noted above, the UK has been through a process of deindustrialisation and young people will need to know that companies, and government, are serious about industry if they are to consider careers there in any great numbers.

7.62 The TUC has been critical that UK government attempts to boost manufacturing have focused so much on the image of the sector, under both Labour and Coalition Administrations, believing there are more pressing, long-term problems, but that does not mean that image has no part to play. Charlotte Platzkoster of Thyssenkrupp in Germany spoke of an attitude among young people that said, 'Why should I do an industrial job, where I get dirty… because there is demographic change and I could probably get another job, which is more easy?'" Thomas Peter of BASF spoke of the problems of attracting talent into an industry which is seen as dirty in both the physical and environmentally friendly senses. Clearly a greater understanding of how industry really works among young people is necessary.

7.63 Of course, pay and other rewards are an issue. Roballo Engineering, whilst feeling the heat of competition from Rolls Royce, can attract young talent because it can offer good wages. Norbert Kluge of Thyssenkrupp in Germany argued for longer term contracts to attract young people.

7.64 The funding of apprenticeships has always been a partnership. government makes a contribution, as do employers, and apprentices earn a lower, trainee wage during their apprenticeship. Some employers expressed concern at government cuts to apprentice programmes. Leonie Williams of Bentley said: "… We are now being asked to fund a lot more than we were asked to fund before, there is a lot of government support for apprenticeships but more of the funding is now the responsibility of the employer… We have an adult apprenticeship programme, the funding that we've had for that has now been withdrawn but we've made a commitment that fifty per cent of our workforce will be skilled, by 2015 and we will carry on and deliver on our commitment, but smaller local employers, how do they find the resources to do that?"

7.65 TUC support for high quality apprenticeships is almost as old as the TUC itself. We are currently trying to drive forward this agenda on two fronts:

7.66 Helping unions to build on their acknowledged strengths in supporting and protecting apprenticeships at work and in negotiating a greater take-up of trainees among a wider pool of employers;

7.67 Pressing government to introduce measures to tackle some key policy challenges, in particular to improve quality of training, equality of access and employer demand.

7.68 Apprenticeships must be addressed in terms of quality and quantity. According to the OECD, in the dual system German-speaking countries (Austria, Germany and Switzerland) at least 40 per cent of school leavers are taken on by employers in three year apprenticeships leading to a recognised qualification. In England, only six per cent of 16- to 18-year olds were in apprenticeships in 2010 and apprenticeships last on average just over one year.[12]

7.69 Apprenticeships must be high-quality, holistic career development opportunities and should not be viewed simply as a means of subsidising employers to deliver occupation-specific training.

7.70 The challenge facing policymakers is that it is difficult to impose an apprenticeship quality standard across sectors in a wholly voluntaristic skills system and in the absence of a social partnership approach. This fact reinforces the need for more widespread collective bargaining that is a feature of this report.

7.71 Procurement policy can be used to drive apprenticeships, as it was under the 'Policy Through Procurement Action Plan' pursued by the previous Labour government. Other incentives could also be considered to encourage employers to invest more. For example, employers could be required to include a short summary of their training provision in annual reports to better inform customers, employees and shareholders. The government could also review the current arrangements for tax relief for work-related training. Unionlearn, the TUC's learning arm, estimated in a recent policy paper that the total cost of this relief to the Exchequer is in the region of £5bn per annum, with little available data on how it is being used by those employers who qualify for it. This relief could be much more effectively targeted, for example, to give much greater priority to accredited training, such as apprenticeships.

7.72 Another concern is that in the UK, about two-thirds of trainees are engaged in level 2 training, and it appears that two-thirds of them do not progress to a level 3 apprenticeship. A person who trains for a level 2 qualification, followed by a level 3 qualification and then a long term career in the sector in which he or she trained is the exception rather than the rule.

[12] Quoted in "Challenges and Change: Apprenticeships in German-Speaking Europe", Hilary Steedman, in *Rethinking Apprenticeships*, IPPR, 2011.

7.73 The Coalition government has made a welcome commitment to tackling barriers to progression and to increase opportunities for people to achieve a level 3 apprenticeship and to progress to higher education. The TUC believes that all apprentices who have the aptitude and desire to progress should be given the opportunity to do so.

7.74 Many small and medium sized enterprises (SMEs) feel that they lack the capacity to take on apprentices. Collaboration is the answer to this. The TUC supports the model of Group Training Agencies (GTA), which allow apprentices to be directly employed by the SME but within a 'pooled training' resource. The GTA model offers a valuable vehicle for supporting groups of employers to come together, often with union support, to develop high-quality apprenticeships. Of course, the German practice of large companies often training more apprentices than they need and then allowing, even encouraging, members of their supply chain to take on their excess apprentices is another model to be considered, especially in a co-determination model, where union representatives can ensure the quality of the jobs those excess apprentices are going on to.

University Technical Colleges

7.75 A major recent development in education in the UK is the establishment of University Technical Colleges (UTCs). These are designed to offer 14-19 year-olds the opportunity to take a technically oriented course of study at a specialist college. That college will be sponsored by a university, often in partnership with a college of further education. It should offer a clear progression route into either higher education or further learning at work. Under the proposals, students would study technical subjects, alongside English, maths, science and IT. Technical studies might include engineering, product design, health sciences, construction and building support services, land and environmental services, and food technology.

7.76 There are already two UTCs open and three more have been approved. Another 24 are expected to open by 2014, with a further 100 predicted by the former Secretary of State for Education, Lord Baker, to be opened by the time of the next General Election.

7.77 The TUC welcomes both the recognition that much more focus needs to be given to vocational skills and that some pupils are ill-served by the education system in its current form. Of course, in the current political environment, we are concerned at the funding of education generally, and would be doubly concerned if money was diverted either from current schools or from colleges of further education to pay for UTCs. There is an obvious further fear that UTCs become seen as "second best". Until there is genuine 'parity of esteem' between academic and vocational qualifications, this will always be a concern. The TUC would oppose any return to selection, be it at 11 or at 14 and any two track system.

7.78 In fact, if that were to happen, employer trust in UTCs would be lost quickly. Toby Peyton-Jones of Siemens was surely correct in the warning he gave about the potential misuse of apprenticeships, in an attempt, however laudable, to address long-term unemployment. Toby stressed the importance of "not degrading the brand" of apprenticeships, adding that they "should be a technical qualification that can proudly stand alongside any academic qualification". In our view, this fear also applies to UTCs.

7.79 Trade unions are sceptical about any governance system drawing on the academy model, as is currently the case with UTCs. However, we also recognise the value that UTCs could bring and, if introduced properly and carefully, we believe that all of the above objections could be avoided. We would welcome a dialogue with the government on this issue. There is a clear value in the concept of UTCs that could be exploited, if they are introduced in a way that is properly funded and is not divisive.

The image of manufacturing

7.80 Too much of manufacturing has an image problem. It is too often seen as dirty. There is too little understanding of what it actually does. For some companies, this is more difficult than for others. Client facing companies, in particular, have more brand recognition. Most people know what Volkswagen and Bentley make. Siemens and Thyssenkrupp are recognisable if people look for their products. Roballo Engineering is a middle sized company that is a player in its local area, even if it is not widely known nationally in the UK. Most people will have heard of BASF, but may not have any idea what it actually makes. BMW, on the other hand, have it relatively easy. Not only is its name well-known, but its product is so attractive that engineers compete to work for it.

7.81 Some companies will always be more attractive than others. BASF competes for local talent with Porsche, a company whose brand recognition would be difficult for anybody to compete with. Yet a greater understanding of the reality of manufacturing would be very helpful. Of course, showing manufacturing in a positive light does not mean being dishonest about its role and its potential. As noted above, the UK has deindustrialised over 30 years, so politicians telling people of its great success is more likely to make them cynical about politicians than enthusiastic about manufacturing. Instead, the UK's pockets of success should be highlighted as a sign of potential, but we should be realistic about our current problems.

7.82 The TUC supports efforts to highlight the positive impact of manufacturing, as part of a wider strategic renaissance for manufacturing. But a stand-alone image of manufacturing campaign would be seen as a gimmick. Moreover, in the quality press, especially in their business pages, there are often reports of manufacturing excellence. Instead, there should be a campaign in schools. Business leaders should be encouraged to visit schools to talk about

manufacturing. This should be a long-term project. If the other measures recommended in this report are implemented, we would expect to see an improvement in the prospects of UK manufacturing over time, and for this to be reported. It will take years of patient work, but gradually the image of UK manufacturing can be rebuilt.

Procurement

7.83 There are serious problems with the implementation of public procurement policy in the UK. The TUC has campaigned for a more intelligent procurement strategy for many years and we are pleased that this issue, in particular, is one in which there is very little difference between our views and those of employers, both individual companies and employers' organisations. Put simply, across industry there is a view that the UK's attitude to procurement is a wasted opportunity for British business.

7.84 Specifically, there is a concern that we do not make procurement work for the benefit of our economy or industry. The controversy over the decision not to give the contract to supply trains for the Thameslink project to Bombardier of Derby has put the issue of how procurement supports British industry in the political spotlight.

7.85 There is also a lack of trust that European procurement rules are applied consistently across Europe. It is believed that 'the French will always buy French and the Germans will always buy German', while Britain naively opens up its markets to companies from across the European Union. One manager told us: "If we'd been Germany, Spain, USA, the help they get from the government into these markets is a lot more than we do in the UK. The demand for local content in other countries is a lot more than in ours. I've been to other countries where they're demanding up to 80% local content in things like this. We don't." Whether that is truth or perception, it is an argument that those working in manufacturing make time and time again about procurement rules.

7.86 What certainly seems to be true is that other countries push procurement law to the limit, whereas the UK tends to assume that certain procurement practices would fall foul of the law, so they never check. Not only does this mean that other countries are able to promote their own industries as far as possible, giving them an advantage, it also sends a message that other governments are prepared to fight harder for their industries than the UK government is.

7.87 The economic context in which we find ourselves makes this issue more important than ever. government spending cuts mean that, in those areas where public money is being spent, it is essential to achieve value for that money. But for as long as value for money is interpreted as being synonymous with low cost, we will never be able to make procurement work for us in the way that other countries seem to.

7.88 The TUC sets this simple test for the future of procurement policy. In our view, every pound of taxpayer's money spent on procuring goods and services must do something that can be demonstrated to support the development of a modern, high-skill, high-value economy in the UK. We are no more specific than that. The company delivering the contract need not necessarily be a British company – we are not talking about "British jobs for British workers" – and there may even be scenarios in which the production in question does not take place in the UK. But it cannot be beyond the wit of government that procurement policy, in a single European market, is made to work for the UK economy and wider society in an intelligent way. government should meet with industry and unions to define the guidelines within which support for the British economy can be measured. We recognise that this policy must be implemented on a case-by-case basis, but this must be the guiding principle behind procurement policy.

7.89 Separately, the UK should call for an inquiry, at EU level, into the way in which procurement policy is implemented across the single market. At the moment, too many employers have no confidence that all companies and countries are playing by the same rules. If we are serious about an open market in Europe, there must be one set of rules. Politicians will have lost their moral authority to argue against protectionism unless this problem is dealt with, once and for all.

Immigration

7.90 Employers spoke of immigration rules, which they believe can sometimes stop them from recruiting highly specialist staff from outside of the EU.

7.91 Toby Peyton-Jones of Siemens told us: "The government has hugely missed their targets on immigration, that is purely because they never could control them. Most immigration happens because we happen to be part of the EU and they can't stop people coming in or leaving the country… Because they can't control the big numbers they are trying to control the very small numbers."

7.92 Immigration is a complex social and political, as well as economic, issue. Economically, as Toby says, it can help to boost economic growth, innovation and productivity. But it also has the potential unless adequately managed to depress wages or reduce wage growth, resulting in exploitation and undercutting. And it can sometimes be an alternative to proper education and training arrangements, as well as operating as a brain drain from developing countries. Immigration should therefore be seen as positive for high skill, high value businesses, but must be accompanied by the restoration of collective bargaining that is implicit in this paper, the re-regulation of the labour market to ensure equal pay and fair treatment for all, and the development of more responsive education and training provision.

Employment law in Germany and the UK

7.93 There was evidence of some UK companies owned by German plants being benchmarked against German plants and also evidence of lower costs of making people redundant in the UK, as a result of poor employment protection here and stronger German employment law. German law makes many demands on companies and management and there were reports that, by comparison, the UK has more of a 'hire and fire' mentality. Put simply, it would be cheaper to close a company in the UK than it would in Germany. Moreover, it is recognised that the German government is more active in supporting industry than is their UK equivalent, leaving a feeling that British plants are trying to compete with one hand tied behind their backs.

7.94 The TUC is highly critical of the path of deregulation undertaken by British governments since 1979. That path has stripped away employees' rights, but there is no corresponding evidence that it has boosted economic performance or job creation. Indeed, the Labour governments from 1997 to 2010 introduced a limited number of measures – the National Minimum Wage, statutory recognition rights for trade unions and improved maternity and paternity leave – which have brought greater workforce protection, with no accompanying fall in economic performance during that time.

7.95 Furthermore, a review of domestic and international evidence, described in the TUC Touchstone Pamphlet 'The Red Tape Delusion', found, among other things:

7.96 That trade unions have no significant negative consequences for labour market outcomes, and have positive effects in promoting workplace cohesion and social justice;

7.97 And that co-ordinated and responsible bargaining systems are associated with lower unemployment while under the right conditions social corporatism works.

7.98 The successful companies described in this paper provide further evidence that proper employment protection does not hamper corporate performance. The UK has much lower employment protection than many of our competitors, but there are few signs that this is a force for good.

Short-time working in an economic downturn

7.99 We hope that the economic downturn is behind us, but it is important that lessons are learnt. The single most important lesson that emerges from this report is the value of a short-time working programme. The TUC called for such a programme at the time and our call is vindicated by the evidence set out here.

7.100 Speaking of IG Metall's influence over the German SPD, which was part of the government at the time, Frederich Spiegel of Volkswagen told us,

"We were able to bring in our politics, our ideas, our trade union concerns… The law on short time working, which was limited to six months, was extended so that companies could have short time work for 18 months. It was eventually extended to two years." Regarding the protection of wages, in the words or Norbert Kluge of Thyssenkrupp, "I think this is why you read in the newspapers everyday that German industry came out of the crisis better than others."

7.101 UK companies had no such support and Joe Peacock at Roballo Engineering put it best: "The company, what profit it was making, which wasn't a lot at the time, it was ploughing back into its people, by paying them an extra day's pay to try and ease their problems and giving them top ups… The Italian labour laws are different. I think they're entitled to 90% of their wages if they're on short time. I understand it's something similar in Germany… I like to think that some assistance should be given for UK manufacture. Everyone knows there's always a start and end to a recession. Do the government really want all these fellas drawing income off the government, when they could easily keep that benefit by keeping them employed by the company…?"

7.102 The TUC urges political parties in the UK to learn from this experience. If we find ourselves back into recession in the months or years ahead, a short time working subsidy could be the single most important area of support the government could give to British business.

Collective bargaining and minimum standards...

7.103 Collective bargaining, involving strong trade unions, and legal protection are sometimes seen as either/or options. In fact, both have their place and should even reinforce each other. Trade unions must always bear in mind that, whilst they are elected to defend and enhance the position of their members, they cannot be oblivious to the situation facing other workers. As part of its response to the downturn, one company reported above used temporary and agency workers to supplement the core workforce, a response that was supported by the Works Council. More positively, IG Metall reached a pilot agreement last year, providing temporary workers with the same standards as permanent workers. The union recognised that this agreement did not cover many workers, but it was an indication of its thinking moving forward. Nevertheless, there is always a case for minimum standards to underpin whatever is achieved by trade union negotiators.

... and strong employer organisations

7.104 For collective bargaining to work in a Social Market Economy, it is also necessary to have strong employer organisations. Unions are not representative if they do not have strength in numbers and the same is true for employers' organisations.

7.105 Martin Behrens of the Hans Bockler Stiftung said: "The union can only be strong if they have, in the German system, a strong employers' association sitting at the bargaining table, which would be able to satisfy their demands. If nobody is showing up to negotiate or if somebody is showing up who is not capable to bring these agreed terms and conditions to his constituency, what [can we] do as a union?" The alternative would be to negotiate with each company individually."

7.106 For this reason, the TUC calls for a response from employers' organisations, such as the CBI and the EEF, to our belief in a role for co-determination as part of a new economic model. How do employers believe we could make a co-determination system work in the UK? What would they wish to see from trade unions if that were to happen?

A minimum wage in Germany

7.107 *Finally, this paper supports the calls from our trade union colleagues in Germany for a minimum wage in that country*. About 20 per cent of German workers are trade union members, but about sixty per cent are covered by collectively agreed terms and conditions. As in so many other countries, those that are not include some of the most vulnerable in society. Those workers particularly need the protection of a minimum wage.

7.108 But a minimum wage must be introduced in such a way that it underpins and supports collective bargaining, rather than undermining it. For many years, UK unions were concerned that minimum wages might become a substitute for bargaining and German unions have also had that concern. Martin Behrens of the Hans Bockler Stiftung says: "If we put the strategy in terms of what we expect from it … it's not to say that voluntary collective interest representation by unions and employers is to be replaced by state initiatives … it is not that we put a minimum wage to set a standard which in the old days was negotiated by the unions, but … you are just raising the floor and building an incentive for employers to come back to the bargaining table. They [employers] would say: 'We would have to pay eight euros anyway, so why don't we talk to the unions and see if there is any more rational wage system we can agree on'. It is the prize they would get from defecting from that system."

7.109 Introduced in this way, a minimum wage could reinforce collective bargaining in Germany, as well as preventing downward pressure on wages and providing greater protection to temporary staff, and the TUC supports the view of the DGB and IG Metall, both of whom believe it is time such a minimum wage was forthcoming.

Trades Union Congress
Congress House
Great Russell Street
London WC1B 3LS

www.tuc.org.uk

contact:
Tim Page
020 7467 1202
tpage@tuc.org.uk

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