The Environment for Business in Germany

A commentary

C.V.J. Simpson
Simpson Associates

August 2014
Civitas: Institute for the Study of Civil Society

Christopher Simpson is Managing Director of Simpson Associates, an international engineering consultancy providing advice and support to companies in the UK, USA, Germany and other European countries on strategy, new product and process introduction, performance improvement, project management, acquisitions and other business development.

He has held directorships with major manufacturing corporations in the UK and Germany and has wide experience of working in the USA and Europe. He has in-depth knowledge of Germany and is fluent in the language. His specialist areas are advanced manufacturing and financial management. He has a first degree in engineering and is a Sloan Fellow at the London Business School.

Apart from his direct business activities, he is deputy chairman of the UK Manufacturing Excellence Awards (MX), a member of the board of MX Germany, past-chairman and current board member of the Manufacturing Division and of the Management Group at the Institution of Mechanical Engineers. He is a Liveryman of the Worshipful Company of Engineers and a Freeman of the City of London.

CIVITAS
55 Tufton Street, London SW1P 3QL
T: 020 7799 6677
E: info@civitas.org.uk

Civitas: Institute for the Study of Civil Society is an independent think tank which seeks to facilitate informed public debate. We search for solutions to social and economic problems unconstrained by the short-term priorities of political parties or conventional wisdom. As an educational charity, we also offer supplementary schooling to help children reach their full potential and we provide teaching materials and speakers for schools.

Civitas is a registered charity (no. 1085494) and a company limited by guarantee, registered in England and Wales (no. 04023541)

Contents

Preface

The adventure of discovery and participation in German industry started in the late 1960's when my company in London gave me leave of absence to work for a period of nearly two years with Maschinenfabrik Augburg Nürnberg AG (MAN). This was and indeed still is a major German industrial group, with some 55,000 employees and where Rudolf Diesel, eponymous with the diesel engine, spent his working life. I found myself employed in a design department with seven other young graduate engineers of whom there were two Germans, two Austrians, one Dutchman, one Italian and one Chinese. This was not a reflection of a particular company policy, but simply serendipity. All these colleagues have gone on to achieve distinguished careers in industry and academia in Europe and the USA.

In the intervening period, I worked for many years for the world's leading machine tool manufacturer based in Germany, and latterly for major British companies with particular responsibility for subsidiary companies in Germany; thus in all I have been engaged with British and German owned operations in the UK, the USA and in Germany. About 70 per cent of the business of my present company is conducted in Germany or for German clients.

As Chairman of the UK Manufacturing Excellence Awards (MX), (a business improvement programme offering appraisal and benchmarking to companies free of charge and operated by the Institution of Mechanical Engineers) I have a close interface with the very best of industrial companies in the UK. My engagement in establishing the Manufacturing Excellence Awards in Germany, where I sit on the board, has also provided further insight and experience with German companies.

This experience started with a Germany emerging as a prosperous nation after the traumas of the Second World War and has encompassed the grimness of East Germany, the fall of the Berlin Wall, the subsequent re-unification of Germany and now its position as a leading economic power in Europe and worldwide. All of the German colleagues with whom I have worked are of a generation that had no involvement with the horrors of the past, yet almost universally I have found acceptance of this history and a total resolution that it never should be repeated. It is thus a great pleasure to be asked by Civitas to undertake this study and take advantage of both the experience and the wide range of contacts, colleagues and friends in Germany that have developed over the years.

Apart from the analytical work, some 15 interviews and appraisals have been conducted with German companies covering a wide spectrum of industries and commerce ranging from flour millers, a restaurant group and accountants to manufacturers of commercial ovens, heavy plant and machinery, machine tools, and construction equipment (see Annex I for full list of sectors). In all cases I am hugely indebted to the owners and directors who I interviewed and for their wholesale cooperation and support. Many were willing to have their names acknowledged, but others preferred anonymity. It would be invidious to mention some and not others and thus perhaps indicate that some were of more value than others; and therefore I have elected not to name any of the companies. They know, however, who they are and have my grateful thanks and all will be receiving a copy of this report on publication.

I also have to acknowledge the support and encouragement received from many German organisations and institutions. These include:

- Deutscher Industrie und Handelskammertag in Berlin (DIH) (German Chambers of Industry and Commerce)
- Bundesverband der Deutschen Industrie (BDI) (Federal Association of German Industry)
- Bundesvereinigung der Deutschen Arbeitgeberverbände (BDA) (Confederation of German Employers' Associations)
- Industrie- und Handelskammer (IHK) (Chamber of Industry and Commerce)
- And not least Dr. Thomas Keidel at the Deutscher Sparkassen – und Giroverband (DSGV) in Berlin and his colleagues in Heilbronn and Ulm who kindly facilitated a number of the interviews

I would also wish to take this opportunity to acknowledge the role of my friend and colleague, Professor Raimund Klinkner, the Chairman of the MX Board in Germany for all his support.

None of this would of course have been possible without the initiative and support of the Civitas Think Tank under the direction of Dr. David Green. He and his colleagues have my grateful thanks.

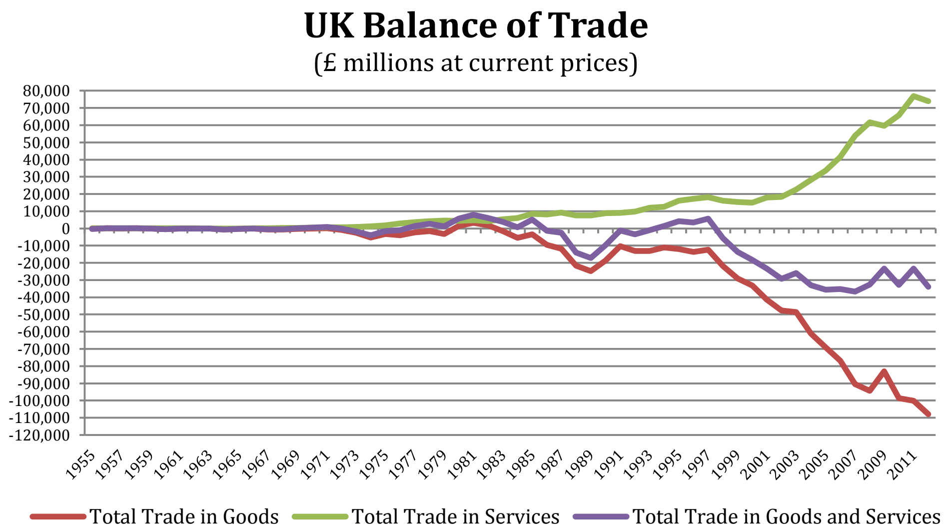
Introduction

The objective of this report is to analyse and describe the environment in which business is conducted in Germany. The main focus is on understanding the climate in which a board of a German industrial company (or chief executive or owner) operates and what forces shape their decisions particularly those related to investment in training, product and process development and in productive plant and machinery. The questions it seeks to answer are:

- Why German companies are less prone to 'short-termism' than British firms?
- Are they insulated from stock-market pressures?
- How is takeover law different?
- How are company objectives defined in law?
- Does the tax regime make a difference to their willingness to invest for the long-term?
- What is distinctive about the Mittelstand?
- Does co-determination via supervisory boards and works councils work?

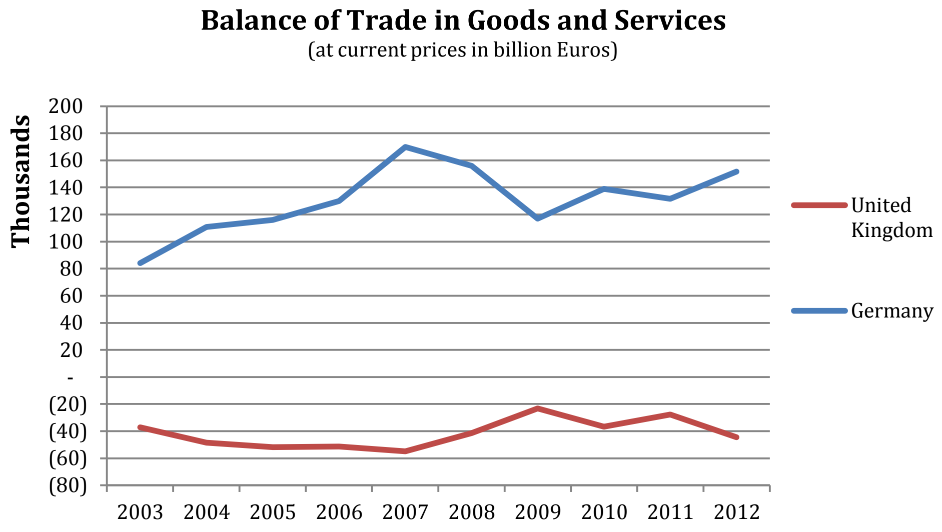
The work is based on analytical research, a series of interviews with chief executives of German companies of different sizes and sectors, and not least the experience gained from many years working in Germany.

There is at last debate in the United Kingdom regarding the necessity for rebalancing the economy by moving from the previous reliance on continued increase in consumption - largely provided by imported goods - to drive economic growth; and further, from an erroneous assumption that the country could survive economically on the strength of financial services. The most cursory review of modern economic history, ranging from the industrial revolution in the UK to the burgeoning strength of the USA in the last century and through to modern China today indicates that the foundation of these successful economies was and remains the manufacture of goods that the rest of the world wishes to buy. It is manufacture that provides the economic locomotive that in turn allows the service industries to develop. The consequence of the de-industrialisation of much of the UK in recent decades is shown in the graph below:



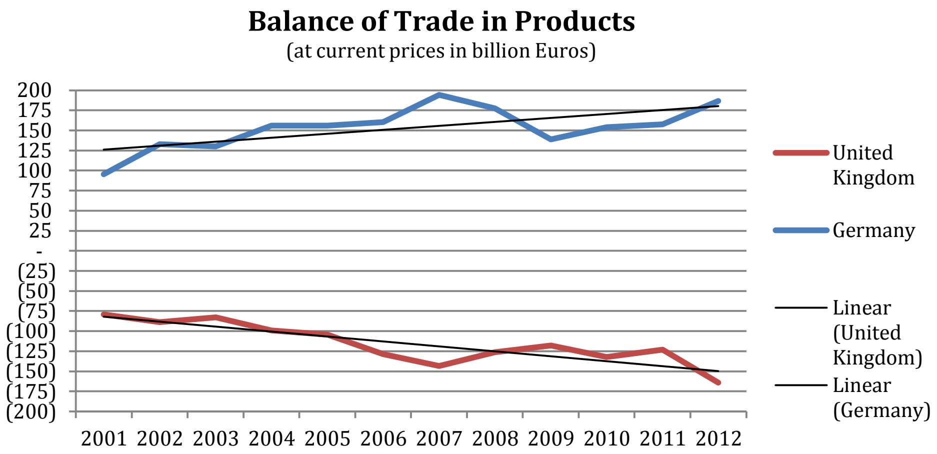
Source: ONS and SIMAS

The UK has been running a net deficit on the current account in the last 10 years of around £30 billion, which in the longer term is clearly unsustainable. This deficit has so far been covered by inward investment and the sale of assets that amount to a net £700 billion,[1] creating the illusion of a thriving economy. But in reality this has been a strategy of ‘selling the family silver’. This includes many of the blue chip manufacturing companies plus most of the utility companies. It is highly likely the contribution from the finance sector will not continue to grow at the rates seen in recent years and indeed with increasing regulation could decline. And there are relatively few assets left to sell off to compensate through the capital account. This situation is in stark contrast to Germany, as is illustrated in a more detailed graph below covering the last ten years:



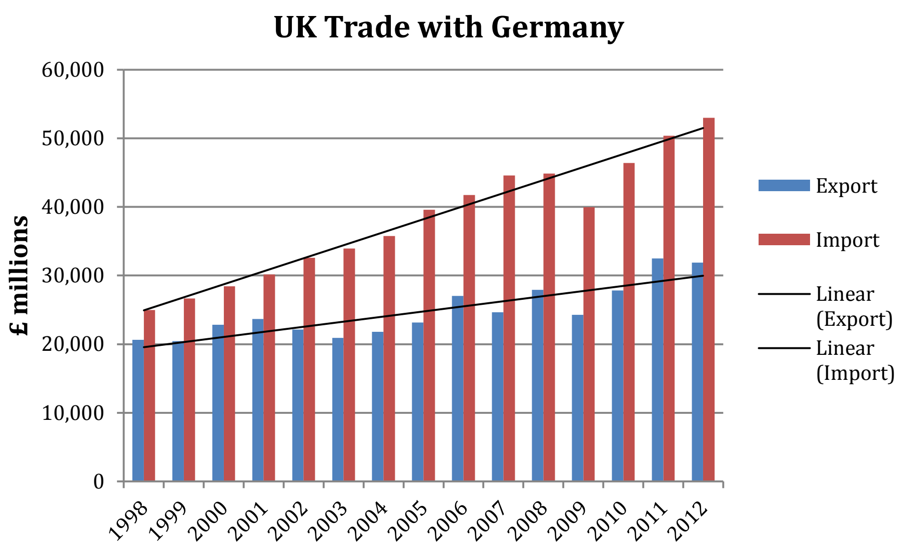
Source: Eurostat & SIMAS

To emphasise further the differences, see now the graph of the balances of trade in manufactured products:



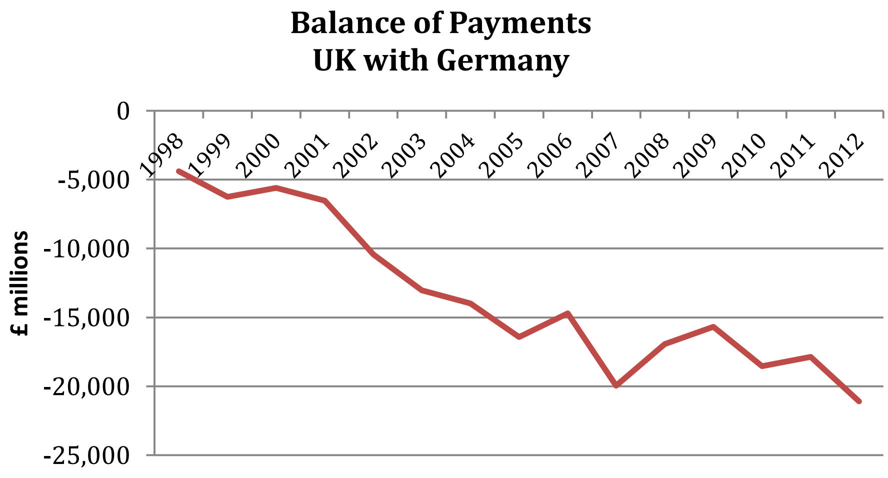
Source: Eurostat and SIMAS

If we look specifically at trade between the UK and Germany, the following picture emerges:



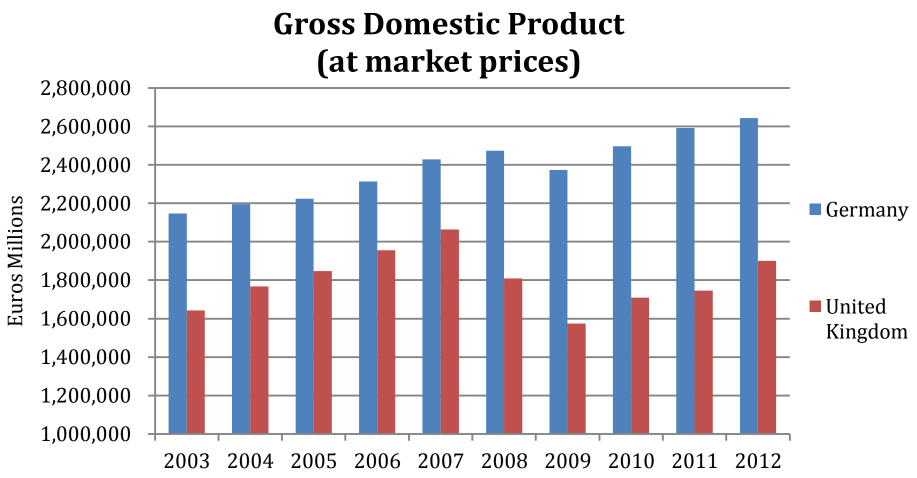
Source: ONS and SIMAS

Clearly there has been significant growth in both imports and exports, but the growth of imports has been the larger with the consequent impact on the overall balance of trade between the two countries:



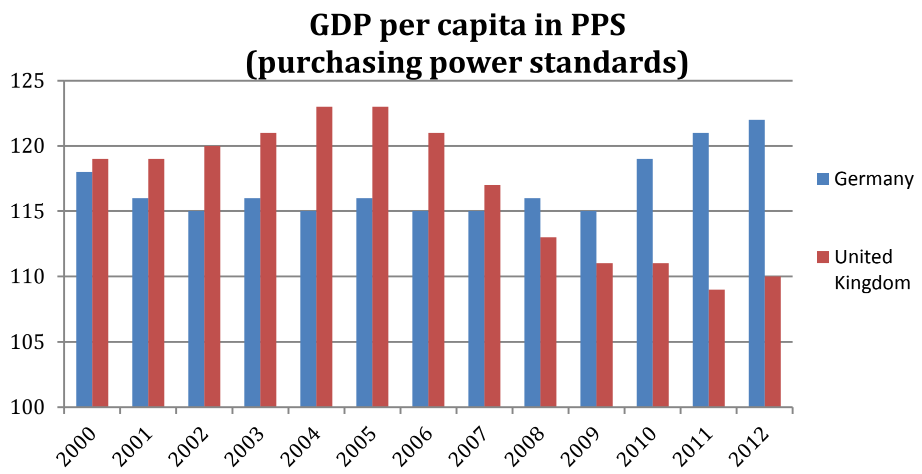
Source: ONS and SIMAS

GDP (gross domestic product) is an indicator of the economic situation in a country. It reflects the total value of all goods and services produced less the value of goods and services used for intermediate consumption in their production. The following chart shows the GDP of Germany and the UK in the decade up to 2012. It indicates that the UK suffered more significantly in the period of the recession and superficially that the country has experienced an economic recovery since 2009.



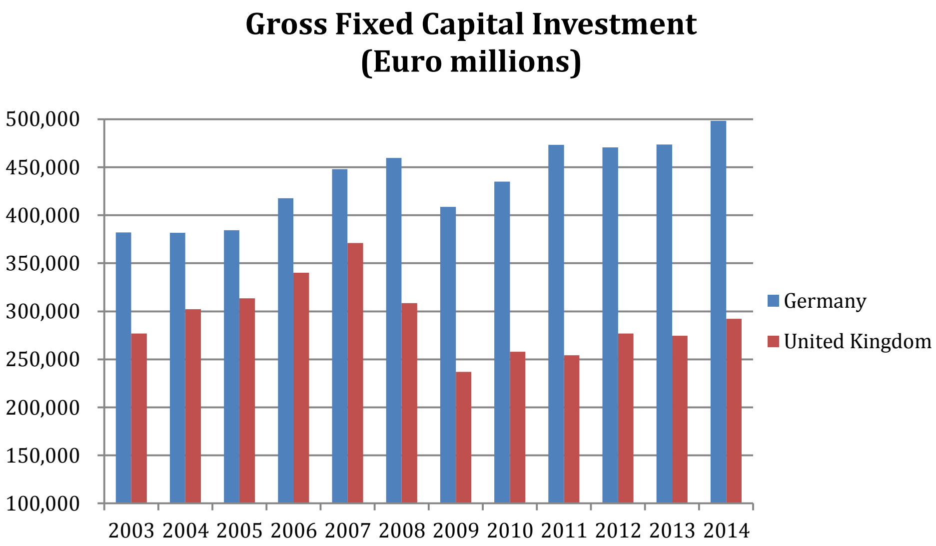
Source: Eurostat & SIMAS

However, expressing GDP in the form of purchasing power parity, as in the following chart, provides a more accurate picture. This eliminates differences in price levels between countries, and calculations on a per head basis allows for the comparison of economies of different absolute size. The picture is not so encouraging and indicates a significant decline in productivity.



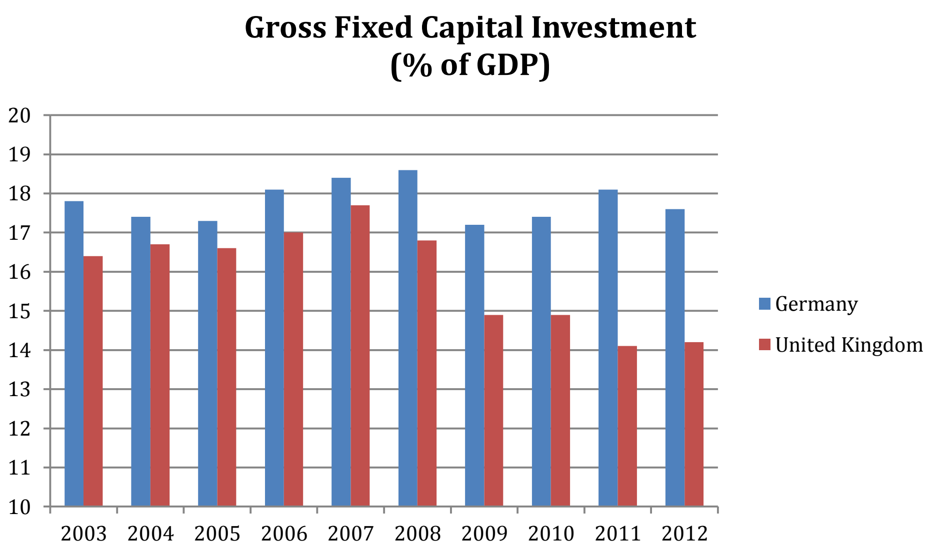
Source: Eurostat and SIMAS

The boom years in the UK in the period from 2000 to 2005, fuelled by the financial sector, were to prove illusionary as the banks collapsed and this has been followed by an economic downturn of even greater magnitude. The decline in levels of productivity in the UK results from very low levels of investment:



Source: Eurostat & SIMAS

Gross fixed capital investment is defined as resident producers´ acquisitions, less disposals, of fixed tangible or intangible assets. This covers in particular machinery and equipment, vehicles, dwellings and other buildings. The forecast is from Eurostat.



Source: Eurostat & SIMAS

As these figures include property development, where in the UK there has been a surge in activity, particularly in London, it means that investment in productive plant and machinery has declined at an even faster rate since 2007.

In these circumstances, with a continuing huge current account deficit in the balance of payments and low investment resulting in declining productivity, radical change is demanded. Clearly it is not possible to consider transferring elements of the German economic and industrial structures without taking into account the culture and history that have allowed these to develop; and some certainly cannot easily be emulated. But as this report will demonstrate there are areas of opportunity where practices could be reformed and wider acceptance secured within all areas of the political, educational and media establishments, as well as wider society, that manufacturing is vital to the future of a modern economy.

1. The background

Any understanding of the current environment in which business is conducted in Germany requires at least an elementary appreciation of the geography, history, culture, governmental structure of the country and latest developments.

The geography

Source: Goethe Institut

The country consists of 16 states (Länder) that are significantly independent. One of the hangovers from history is that the ancient Hanseatic cities of Hamburg and Bremen retain their position as city states and thus have the same rights and privileges as the other States. Berlin as the capital has its own particular structure.

There are almost 82 million Germans living in a land area of 357,027 square kilometres, which is about 47 per cent greater than the land area in the UK. With a population of nearly 63 million in the UK, the respective population densities are 229 and 258 people per square kilometre. But due to the federal structure as discussed further below, the population is more evenly distributed in Germany. Its capital and largest city is Berlin. Below is a list of other major German cities and their population:

Rank	City	State	Population
1	Berlin	Berlin	3,439,100
2	Hamburg	Hamburg	1,769,117
3	Munich	Bavaria	1,330,440
4	Cologne	North Rhine-Westphalia	998,105
5	Frankfurt am Main	Hessen	671,927
6	Stuttgart	Baden-Württemberg	600,068
7	Düsseldorf	North Rhine-Westphalia	586,217
8	Dortmund	North Rhine-Westphalia	581,308
9	Essen	North Rhine-Westphalia	576,259
10	Bremen	Bremen	547,685
11	Hanover	Lower Saxony	520,966
12	Leipzig	Saxony	518,862
13	Dresden	Saxony	517,052
14	Nuremberg	Bavaria	503,673
15	Duisburg	North Rhine-Westphalia	491,931

Source: Destatis (2009)

The further consequence of this federal structure is that individual states compete directly for influence and prestige. Whether it is the quality of the opera house and museums or the economic and industrial strength of a particular region, all are a matter of local pride. This is in contrast to the UK where so much is concentrated in London and the south east.

The physical geography is varied, with a topography that ranges from flat plains and wetland in the north to the Bavarian Alps in the south, with higher ground in the central part of the country. The highest point in Germany is the Zugspitze mountain at 2,963 m and the lowest is Neuendorf bei Wilster at -3.5 m. It has an extended coastline (2,389 km) on both the North Sea and the Baltic. A substantial proportion of the land area of Germany (31 per cent) is covered by forest and woodland. It shares borders with nine different countries including Austria, Switzerland, France, Luxembourg, the Netherlands, Belgium, Denmark, Poland, and the Czech Republic. The climate is considered temperate with relatively cold winters and warm summers. The average low temperature in January of the capital Berlin is 1.9˚C and the average high temperature in July of the city is 23.7˚C.

The history

With respect to the history of the country, the period covering the two World Wars is probably the most extensively researched and written about of any period in history and hence any further reference in this report would be entirely redundant. There are two periods of history, however, which are also of profound importance for understanding how modern German industry operates. The first lasts from unification in 1871 up until the end of the 19th century. The second lasts from the end of the Second World War to the present, encompassing the fall of the Berlin Wall and the subsequent re-unification.

The Federal Republic of Germany is still a young country; it was only unified for the first time in 1871 under Bismark; before this the German speaking countries (outside the Austro-Hungarian Hapsburg empire) comprised Prussia in the north and the kingdoms of Bavaria, Württemberg, Baden and Hessen in the South plus a large number of smaller independent states. The new alliance was Bismarck's great achievement and was followed by administrative reforms, a common currency, a central bank, and a single code of commercial and civil law. Out of this followed the first German industrial revolution with the founding of the trades union and trades associations, which still exercise a significant influence in modern Germany. The Industrial Code removed all remaining bans on the formation of trades union, and devolved the determination of wages and conditions of employment to the employers and the employees' representatives. The employers associated in trade associations to counterbalance the increasing power of the unions.

After the end of the Second World War in 1945, Germany was occupied and divided into four zones with the main Allied powers (the United States, the Soviet Union, Great Britain, and France) responsible for the administration of each zone. In 1947, the United States and Great Britain merged their zones. In 1949 there were further developments after tensions arose between the Soviet Union and the Western powers. The German Federal Republic (FRG), usually called West Germany, was created out of the American, British, and French zones while the Russians formed the German Democratic Republic (GDR), usually called East Germany, out of their zone of occupation. Communism was imposed on East Germany and it was closely linked with the Soviet Union, whilst West Germany adopted a parliamentary democracy and built strong ties with Western Europe and the United States under Konrad Adenauer who became the first new chancellor. The Berlin Wall was the symbol of a division between East and West that lasted until it fell in late 1989, following the collapse of one-party rule in East Germany. The signing of a unification treaty by the East and West German governments in August 1990 and a series of meetings between the foreign ministers of East and West Germany, the United States, Great Britain, France, and the Soviet Union led to a Treaty on the Final Settlement with Respect to Germany. It was signed in Moscow on September 1990 and resulted in Germany being finally reunited in October 1990 as the Federal Republic of Germany.

Out of all the preceding trauma and desolation, a new country, with an advanced democracy, world leading industrial companies and a powerful economy, has been constructed very largely through the endeavours of its own people. It has proved capable of absorbing the almost entirely bankrupt state of East Germany; bankrupt financially, morally and environmentally. Within a very short period some four million people moved from East to West and had to be provided with housing, jobs and all the health and social security facilities that a modern society expects. Over 14,000 state enterprises had to be privatised or closed in the East. The total cost of the re-unification is estimated at around €3 trillion.

An enduring element of the economic success has been the concept of the 'Soziale Marktwirtschaft' (Social Market Economy), which was introduced by the

Minister of Economics Ludwig Erhard under Konrad Adenauer. This system is based on three main principles:

- Individual freedom founded on the liberal ideal of individuality
- Solidarity, meaning that an individual is part of a larger society consisting of mutual dependencies
- Subsidiarity, which means the highest priority is given to individual rights and ensures that what can be done by the individual should be done by the individual and not by the state

The constitution and government

The unified Germany is a federal parliamentary republic still governed by the constitution of 1949. Germany now has 16 states (Länder) – an increased on the 11 states in what previously constituted West Germany. Each has its own legislature, constitution, and government. The government of each state (Land) is able to enact laws on all matters except finance, foreign affairs, and defence. These three areas are the sole province of the Federal Government. Thus each Land exercises control over many areas i.e. education, health, social services etc. that in the UK would be regarded as the responsibility of the central government. The municipalities, states and federal government all have their own specifically defined areas of sovereignty.

Parliament is composed respectively of an upper and lower house:

The Bundesrat (The Lower House of Parliament) represents the sixteen Länder of Germany at the national level. Each Land is represented by three to six members, depending on its population, to give 69 seats in total. The Bundesrat participates in all legislation, together with the Bundestag, affecting state competences and all constitutional changes. The Bundesrat meets at the former Prussian House of Lords in Berlin.

The Bundestag (The Upper House of Parliament) is made up of around 600 deputies elected for a term of four years via a mixed system of direct voting and proportional representation. It is necessary for a party to achieve a minimum of five per cent of the total second votes cast in order to pass the threshold that is required in order to secure seats in the Bundestag (see below). Half of the members of the Bundestag are elected directly from 299 constituencies in what is essentially a first-past-the-post system; the other half are elected from the lists of candidates from each eligible party. In this way a form of proportional representation for the total Bundestag is achieved. Each voter has two votes in the elections to the Bundestag: the first vote is to elect a local representative to the Bundestag and thus determines which candidates are sent to Parliament from the constituencies; the second vote is cast for a party list and hence determines the overall relative strength of each of the parties represented in the Bundestag. A minimum of 598 Members of the Bundestag are elected in this way. Parties that gain more than five per cent of the second votes or win at least three direct mandates are also allocated seats in the Bundestag in proportion to the number of votes they have received. The Bundestag meets in Berlin in the original Reichstag building, which was renovated and developed with a magnificent new glass dome by the British architect Sir Norman Foster.

The President is the nominal head of state but has little influence on the government and the position is largely representative. He or she is elected for a term of five years by the Bundesversammlung (Federal Convention) that meets for this sole purpose. This Convention is made up of the Bundestag and the same number of delegates from the state parliaments. The Chancellor is the head of the government and is elected for a four-year term by a majority of the Bundestag.

The administration of justice is the responsibility of the Länder or more specifically of the state courts (Landesgerichte). The high courts are, however, federal institutions and of these the highest is the Supreme or Federal Constitutional Court (Bundesverfassungsgericht) that is based in Karlsruhe.

The consequence of the federal structure is that all aspects of business and culture and hence economic strength are widely distributed in Germany. This wide distribution is further ensured by the so called Federal Financial Equalisation System which effectively transfers funds from the financially stronger Länder to the weaker Länder. This will be discussed in more detail in Section 12.

Despite all of the changes in the intervening years, many of the allegiances and adherence to religion, culture and local accents associated with the old kingdoms and independent states still remain and have a direct impact on the conduct of business in modern Germany. The presence of so many of the present generation of the old nobility, who continue to retain their titles, is still a common feature in industry and commerce today.

The political parties

The Bundestag has a multi-party system with, up until the 2013 elections, six parties represented. There are three major parties. The first two are the Christian Democratic Union (CDU) and its sister party, the Christian Social Union (CSU), who together form the same parliamentary group known as the CDU/CSU. The other is the Social Democratic Party of Germany (SPD). In addition, there are three minor parties, the Free Democratic Party (FDP), The Left, and Alliance '90/The Greens. The ruling federal government of Germany usually consists of a coalition of a major and a minor party, most typically CDU/CSU and FDP, or a 'red-green alliance' of the SPD and Greens. From 1966 to 1969, and again from 2005 to 2009, the federal government consisted of a grand coalition.

These six (seven including the CSU) parties were represented in the German parliament up until the September 2013 elections and their positions and allegiances may be briefly summarised as follows:

Name	Usually called	Basic Politics	Representatives in Bundestag post 2009 election
Christlich Demokratische Union [Christian Democratic Union]	CDU	A party for conservatism and economic liberalism following the principles of the social market economy, but which rejects socialism and laissez-faire economics. It regards the government's role as providing the framework for fair competition, low unemployment and social welfare.	193
Christlich-Soziale Union in Bayern [Christian Social Union	CSU	This conservative Christian democratic and largely Catholic party is an anomaly in the German political system in that it is the only national political party that is actually a state party. It is	44

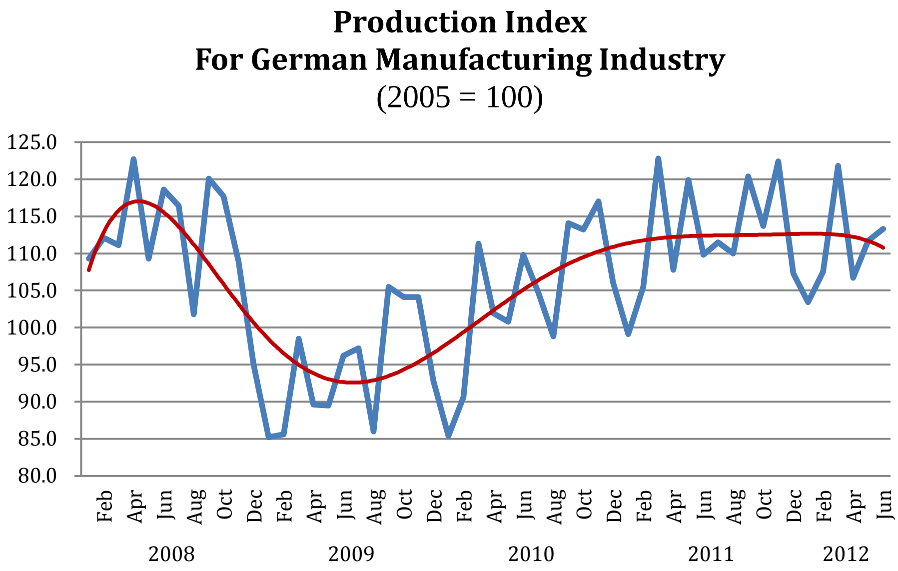
of Bavaria]		based in the southern state of Bavaria. The CSU is the sister party to the CDU and shares power at the national level.	
Sozialdemokratische Partei Deutschlands [Social Democratic Party Germany]	SPD	Social democracy is represented by the centre-left Social Democratic Party founded in the nineteenth century by the labour movement. It traditionally represents the interests of the working class. Much of its support comes from the large cities of traditionally protestant northern Germany and the former coal-mining and steel producing Ruhr region.	146
Freie Demokratische Partei [Free Democratic Party]	FDP	The FDP is a pro-business party that promotes classic individual liberalism and a free market economy. It has the reputation of elitism, representing the privileged few. It was the junior partner in the centre-right coalition with the CDU, but has been damaged by infighting that resulted in a string of regional election defeats and ultimately failure to reach the 5% required to achieve representation in the Bundestag.	93
Die Linke [The Left]	LINKE	The party is the result of a merger of the Party of Democratic Socialism (PDS) and the WASG. The former was the successor to the communist party that ruled East Germany and the latter a group of trade unionists and disenchanted former SPD members. At first, the newly-merged party managed to establish itself in a number of state parliaments, but its fortunes have since declined.	76
Bündnis 90/Die Grünen [Alliance '90/The	GRÜNE	A party formed in the 1970s on a platform of pacifism and environmental activism. It won its first parliamentary seats in 1983 after gaining over 5% of	

Greens]	the vote in the federal election. The party joined the federal government for the first time in 1998 in a coalition with the Social Democrats. It abandoned its strict pacifist principles and even supported NATO in Kosovo and Afghanistan. It was instrumental in pushing through the disastrous nuclear power phase-out	68

The current economic and political situation

Germany was hit hard by the global financial crisis in late 2008 and 2009. In October 2008, the government financed a multi-billion Euro bailout of some of the country's largest banks to prevent them from collapse. These banks had followed the strategy of the American and British banks in investing in sub-prime mortgages and other speculative ventures. It is to be noted that the other banks and the Savings Banks in particular (who finance nearly half of German industry) were largely unaffected and continued their fundamental strategy of providing banking services for industry and the community.

All this was followed in early 2009 with another multi-billion Euro stimulus package to help lift the battered economy out of recession. Very quickly, once the potential depth of the recession became apparent, legislation was introduced that provided additional funds to companies that were obliged to put employees on short-time working. It is estimated that over half a million jobs were protected at a cost to the federal government of around five billion Euros each year. At the peak, some 1.1 million people were being supported by the scheme. This resulted in companies being able to retain their employees who otherwise would have been made redundant - and this had not only an economic impact, but also much assisted in retaining the sense of unity and commitment that is such an integral part of the German Mittelstand – a point that will be further developed later in this report.



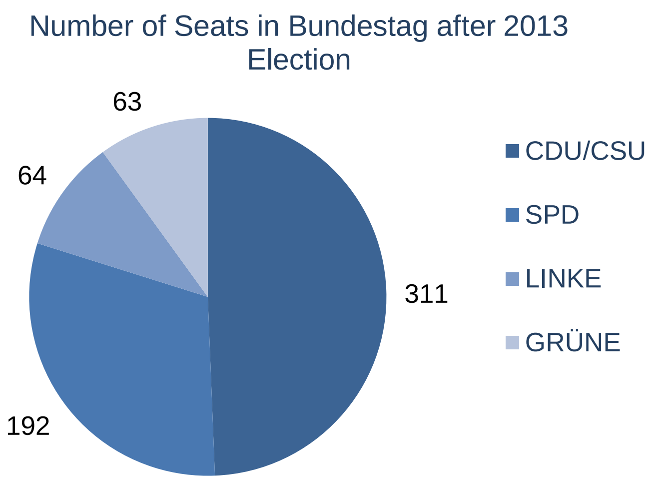
Source: Statistisches Bundesamt and SIMAS

Since the recession German industry has recovered at a remarkable rate, supported by the retention of skilled and committed employees and the additional investment in research and development made during the period of low demand.

As a consequence of all these developments, Frau Merkel was voted into another four-year term as Chancellor in the September 2009 elections. Her party, the Christian Democrats, formed a governing coalition with the pro-business Free Democrats. But the country is now facing a new challenge with the Euro crisis. Germany has been obliged to understand the responsibility that comes with holding the position as Europe's largest economy. Initially Frau Merkel faced criticism in early 2010 for her delay in seeking parliamentary approval of a financial relief package for Greece, which was on the verge of financial collapse. Many international commentators believed that she should have acted sooner, whereas at home she was criticized by voters for coming to the financial rescue of another country. Nevertheless, the Bundestag approved a 22.4 billion Euro bailout for Greece in May 2010. Voters expressed their displeasure with this decision at the polls and Frau Merkel lost her majority in the Bundesrat (the Upper House) in May when her coalition lost regional elections in North-Rhine Westphalia. That defeat was followed by another in March 2011 in Baden-Württemberg.

In all this it is to be remembered that the German tax payer has had to carry the huge cost of re-unification and indeed even now the Solidaritätszuschlag (an additional tax which everyone in paid employment in Germany and every German firm must pay) continues at a current rate of 5.5 per cent. The average German finds it difficult to accept that their retirement age has just been increased to the age of 67 and yet they are expected to provide a financial rescue for a country where it is possible to retire at age 58 with 80 per cent of the full pension entitlements. But wiser thoughts prevail within industry and in government: it is recognised that membership of the Euro has been hugely beneficial in terms of maintaining a much lower international exchange rate than would have been the case were the Deutschemark to have been retained. This has undoubtedly had a very positive impact on exports and hence on the strength of the economy as a whole. If the Euro were to collapse and the currency reverted back to the Deutschemark, then there is a real fear of a major increase in the exchange rate (a problem that Switzerland has had to contend with for many years) with a resulting substantial decline in exports on which the total economy depends. Germany's parliament approved a plan to increase the eurozone's bail-out fund in September 2011 and this was followed in late October with the agreement by the leaders of the eurozone of a wider package meant to bring Europe's debt crisis under control.

Despite so many recent setbacks, Chancellor Angela Merkel's CDU/CSU Alliance has won Germany's 2013 election, but finished just short of an absolute majority.



Source: Statistisches Bundesamt, Bundestag & SIMAS

The percentage of the electorate casting a vote was over 73 per cent.

Her conservative alliance took about 41.5 per cent of the vote – but her previous FDP liberal partners failed to make it into parliament having won only 4.8 per cent.

This is a disaster for the FDP and leaves them with no representation in the Bundestag for the first time in Germany's post-war history. The Social Democrats (SPD) won 26 per cent of the vote, which represents a disappointment, but still puts them in a solid position to form another grand coalition with the CDU/CSU. The FDP not only suffered a devastating result, but was beaten by the Green Party (8.4 per cent) and the former communist Left Party (8.6 per cent).

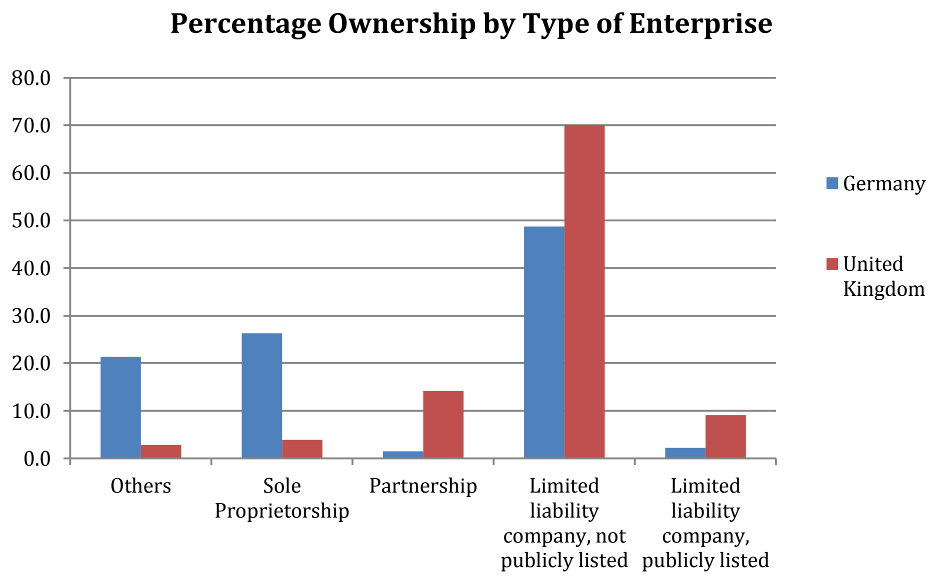
	Percentage of Vote		**Number of Seats**	
	2009	2013	2009	2013
CDU/CSU	33.8	41.5	237	311
SPD	23.0	25.7	146	192
LINKE	11.9	8.6	76	64
GRÜNE	10.7	8.4	68	63
FDP	14.6	4.8	93	-
Others	6.0	11.0	-	-
Total	100.0	100.0	620	630

Source: Bundestag

2. German companies

General overview and structure

The broad concept of limited liability status and the differentiation between quoted and non-quoted companies is similar to that in the UK. But company governance shows marked differences and there is also a variety of formats for non-quoted companies and partnerships that are not immediately recognisable from a UK perspective. The number of quoted companies in Germany in comparison to the UK is relatively few; the number of sole proprietorships and other forms correspondingly higher.



Source: Eurostat and SIMAS

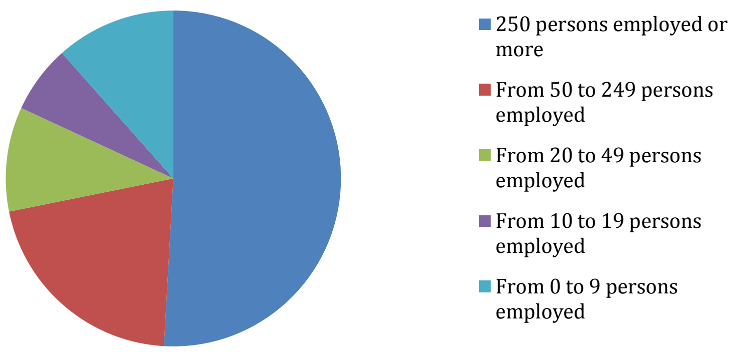
Reference to the Forbes List of the largest 2000 companies (May 2013) worldwide produces the following information:

In total, there were 95 British companies on the list and these companies had a combined market value of $2.319 billion, with $13.984 billion in assets and generated $2.169 billion in revenues and $115 billion in profits. This compares with Germany where there were 50 companies on list. In total, these companies had a combined market value of $1.263 billion, with $7.636 billion in assets, producing $2.085 billion in revenues and $96 billion in profits.

The UK has almost twice the number of large companies as Germany, which must essentially be a reflection of the much higher level of M & A activity in the UK resulting in more takeovers and consolidations. Further analysis is provided later in the section referring to takeover activity.

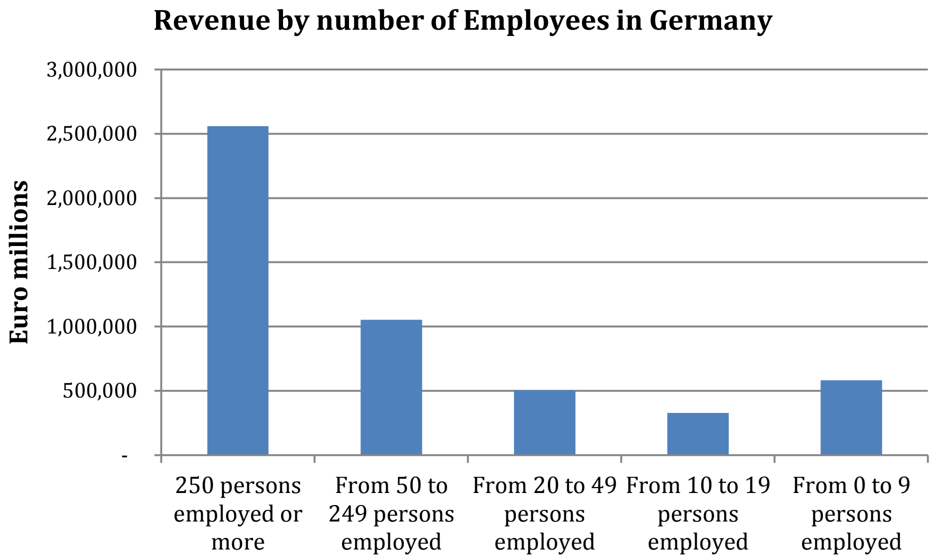
Due to the prominence of many of the largest German companies on world markets, there is an understandable expectation that it is these companies that represent the main driving force in the German economy. They do indeed have a significant impact, not least because of their extended supply chains. But as the following graph shows, the small and medium sized contribute around 50 per cent of the total revenue generated by all German companies:

Revenue by Size of Employment in Germany € million



Source: Statistisches Bundesamt and SIMAS

Many of the companies with over 250 employees, whilst larger than the strict definition of an SME, are an integral part of the ‘Mittelstand’.

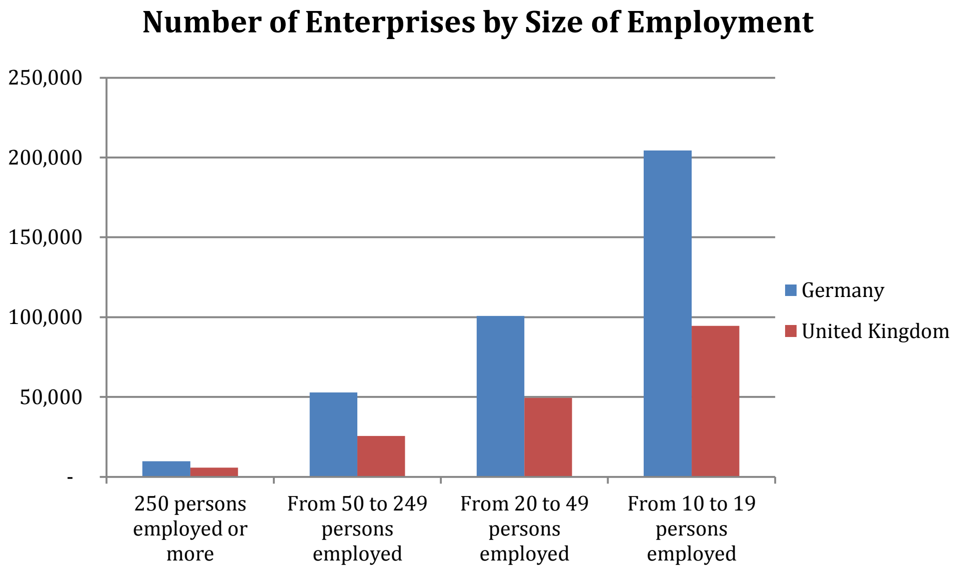


Source: Statistisches Bundesamt and SIMAS

A brief look at the relative structures in the UK and Germany shows:

The number of enterprises by the number of persons employed

	250 persons employed or more	From 50 to 249 persons employed	From 20 to 49 persons employed	From 10 to 19 persons employed	From 0 to 9 persons employed	Total
Germany	9,709	52,893	100,792	204,353	1,706,164	2,073,915
United Kingdom	5,795	25,631	49,450	94,648	1,473,562	1,649,086



Source: Statistisches Bundesamt, ONS and SIMAS

It will be seen that Germany has nearly twice as many companies employing up to 250 people (the definition of an SME) in comparison to the UK.

The main types of company

The German Corporate Governance Code (Deutsche Kodex DCGK) contains the essential statutory regulations for the management and governance of German listed companies.

Aktiengesellschaft (AG) Public Company

An AG may be established with an initial capital of €50,000 and then the company shares are listed on the stock exchange. The founding shareholder(s) must appoint an auditor and an Aufsichtsrat (Supervisory Board) and the appointments must be notarised. The Supervisory Board in turn appoints the first Executive Board (Vorstand). The shareholders' liability is limited to their capital contribution. The conduct of the Aktiengesellschaften and larger non-quoted companies is covered by legislation based on the concept of fair representation of all parties, so called 'Mitbestimmung'. The Executive Board (Vorstand) is formed from the senior echelon of management – the role of the non-executive is undertaken by the Supervisory Board (Aufsichtsrat) that has the responsibility of appointing and monitoring the Vorstand. Representation on the Aufsichtsrat is split 50:50 between the shareholders and the employees. The chairman represents the shareholders and has the casting vote. All major decisions affecting the company have to have the approval of the Aufsichtsrat. The Vorstand carries direct personal responsibility for the conduct of the business and this is only relieved by a motion passed at the annual general meeting following the end of the previous financial year. At the AGM, minority shareholders are represented by a special body and can exercise very significant influence.

Limited Liability Company (GmbH)

The Limited Liability Company (Gesellschaft mit beschränkter Haftung) is the most common business structure. The share capital must be at least €25,000, of which half may be in contributions in kind and the remainder of at least €12,500 must be in a bank account. One person can set up a limited liability company and be its shareholder. Shareholders are liable up to the level of their invested capital. Once entered into the trade register, a limited liability company becomes a legal entity and its name must refer to either the nature of the business or the name of one or more shareholders, followed by the letters GmbH. A mini GmbH can be set up with a start-up capital of one Euro. Legislation for this new type of GmbH was passed in 2008 and enables individuals or groups of individuals to start their own limited liability business. A mini GmbH has to be identified as such and must set aside at least one quarter of its annual profits until a share value of €25,000 is reached. At this point the business becomes a regular GmbH and is entered into the trade register.

Limited Partnership (KG)

The minimum start-up capital for a Limited Partnership (Kommanditgesellschaft) is €50,000. This capital is split into shares and divided according to the capital contributed. The contract between the partners must be notarised and the business entered into the trade register. Strict guidelines are laid out in the Companies Act (Aktiengesetz) as to the wording of the contract. There are two different types of partners: a general partner, who is wholly liable, and limited partners, who are liable up to the value of their respective holdings in the company. The general partner is the representative of the company.

Limited Partnership with a limited liability company as general partner (GmbH & Co KG)

This is a separate form of the Limited Partnership where the general partner is not an individual but a limited liability company, thereby minimising the financial risk to the individual. Usually the shareholders of the limited liability company are identical to those of the limited partners of the limited partnership. It is normal to have a written partnership agreement between the general partner and the limited partners.

General Partnership (oHG)

In this legal form of General Partnership (Offene Handelsgesellschaft), each partner is liable without limit. No start-up capital is required. A general partnership may be created by individuals or an amalgamation of two separate businesses pursuing the same interests. It must be entered into the trade register and the name must be suffixed by oHG for clarification of liability. The general partnership must have a board of directors, and must hold regular shareholders' meetings. All partners are required to play an active part in the partnership unless otherwise specified in the partnership contract.

Civil Law Partnership (GbR)

A minimum of two partners is required to establish a Civil Law Partnership (Gesellschaft bürgerlichen Rechts). All partners have unlimited liability for debts incurred by the company. A written partnership agreement is not required by law but is recommended. A civil law Partnership must register with the local trade office if it is to carry out a small trade business. If annual turnover exceeds €250,000 or there are profits of more than €25,000, it is classified as a commercial business and must be entered into the commercial register and thereby automatically becomes a general commercial partnership – see above.

Management structure

The board of a small industrial German company will consist usually of two managing directors (Geschäftsführer), one responsible for the design, engineering, marketing and production and the other for finance, personnel, commercial and legal matters. They carry joint and several responsibility; but in practical terms it is common for the 'Engineering director' to be regarded as 'one millimetre' more senior. With larger companies, the board is usually increased with representation from divisional and functional directors (R & D, production, marketing etc.). Senior management will have an in-depth understanding of the products and processes and usually they have many years of experience in the company. The structure with respect to the largest publically listed companies, where there is a requirement for both management and supervisory boards, is already covered in the sections above. In German industrial boards, the norm is that the majority are qualified engineers, as will be most of the senior management and it is not uncommon for even the finance functions to be filled with engineers who have further qualifications in finance.

This structure of broad representation contrasts starkly with the UK. The larger industrial companies quoted on the London Stock Exchange have a board structure imposed by legislation, as a result of pressure from the financial sector, where the Board often comprises just two executive directors, the chief executive and the finance director and a cohort of non-executive directors all appointed by the major shareholders. The huge skill and experience that used to be available to the board through direct representation from divisional directors, and engineering, research and marketing directors is lost; the two executive directors act as ‘gatekeepers’ stemming the flow of potentially valuable information, advice and criticism that would otherwise be available. The responsibilities of a Chief Executive are defined almost entirely in a financial context with publication of quarterly financial results and share price being the main drivers. The non-executive directors represent the large shareholders such as investment trusts and pension funds and these organisations are driven also by the same parameters of the next quarter’s results and the next quarter’s bonuses. The interests and objectives of the small minority shareholders are totally ignored. In this environment it is not surprising that a culture of short term-ism prevails. Although there is no direct data to support this, it may confidently be assumed that the problem of acute under-investment is not due to the lack of good investment projects coming forward, but that most never see the light of day as they are rejected by boards focussing on the short term. The reaction of many chief executives in the UK to a long term investment proposal is that if there is an initial negative impact on earnings and it only produces positive returns in say year two or three, this will cause a drop in the share price and as a result they will be out of job. Their solution is to set unrealistically high hurdle rates for the return on the investment. The consequences of this are examined in Sections 7 and 8 covering investment.

Management and social responsibility

The strength of the German Mittelstand is generally understood; but what is often not fully appreciated in the UK is the ethical stance of the majority of the owners, which has such an influence on their conduct. A comparison of corporate legislation in the respective countries shows little difference (EU laws reduce yet further any differences) and legislation certainly does not explain the longer-term culture in Germany. In general, owners of the Mittelstand companies believe they not only have an obligation to their employees, but also to the community in which they conduct their business. Their perceived status in the community is major driver. This contrasts with the widely held view in the UK that a fundamental requirement of running a business is to define the ‘exit strategy’, encouraged of course by the consultants, accountants, lawyers and bankers who generate large fees from the sale and acquisition of such businesses.

A recent survey by the Frankfurter Allgemeine Zeitung (may be considered the equivalent of ‘The Times’ of Germany together with Die Welt) showed that the average annual remuneration of the head of a German company was €157,177 (ca. £130,000). This compares with the average remuneration of a middle ranking person in say marketing or a finance department of €42,823 (ca. £36,000). This is a ratio of around 1:3.6. It is also of interest to establish that the variances from the average in different parts of the country are relatively small with Munich being the highest and Leipzig the lowest. Also from the survey it is immediately seen that the status of engineers and engineering is reflected in the salary levels, with engineers at the same level as lawyers and only exceeded by medical doctors.

The significance of family-owned companies

Even in the largest listed companies in Germany, where one would assume no significant individual impact, there is in fact a strong influence from family owners. These patrimonial firms (those which are controlled by either individual owners or families) are the prevalent form in Germany and constitute around 250 of the biggest listed companies, representing some 50 per cent of the total.

A survey undertaken by the German business newspaper Handelsblatt produced the following data on the top largest companies in Germany that effectively are still under family control:

Top largest German Companies still under family control

	Revenue € billions	No. of Employees 000's	Family	Activities
1: Volkswagen	192	549,800	Porsche	Automobile
2: BMW	76	105,900	Quandt	Automobile
3: Schwarz-Gruppe	67	320,000	Schwartz	Supermarkets
4: Metro	66	283,000	Beisheim/Henkel	Retail
5: Aldi-Gruppe	56	250,000	Albrecht	Supermarkets
6: Robert Bosch GmbH	52	305,000	Bosch Trust	Auto components & Engineering
7: Franz Haniel & Cie GmbH	26	56,500	Haniel	Logistics & conglomerate
8: Phoenix Group	21	28,700	Merkle	Pharmaceutical
9: Heraeus Holding GmbH	20	13,600	Heraeus	Metals & special materials
10: Fresenius SE	19	169,300	Kröner-FreseniusTrust	Private hospitals & medical
11: Marquard & Bahls AG	17	8,500	Weisser	Oil tanking and flight refuelling
12: Henkel AG	16	46,600	Henkel	Domestic products
13: Bertelsmann AG	16	104,300	Bertelsmann Trust	Publishing & media
14: Boehringer Ingelheim	14	42,600	Boehringer	Pharmaceutical s
15: Rethmann AG & Co	12	60,000	Rethmann	Water & waste disposal
16: Otto Group	11	53,800	Otto	Mail Order
17: Merck KgaA	11	38,800	Merck	Pharmaceutical & chemicals
18: Schaeffler AG	11	76,100	Schaeffler	Bearings
19: Oetker-Gruppe	11	26,400	Oetker	Food products
20: Unternehmensgruppe Tengelmann	10	83,400	Schmitz-Scholl/Haub	Multi branch retail

A study by the Institut für Mittelstandsforschung (The Institute for Research in the Mittelstand) in Bonn confirms the vital importance of family-owned companies in the overall German economy:

- Around 95 per cent of all businesses in Germany (equating to almost three million companies) are family-owned
- The revenue generated by these family-owned businesses amounts to 41.5 per cent of the total revenue generated by all companies operating in Germany
- They provide 57 per cent of all the employment in the country

In the interviews that were conducted, there was often reference to the importance of limiting the number of family shareholders to ensure that each held a significant shareholding. The risk of multiple small shareholders was perceived to be that they would primarily be interested in dividends and not in the longer term development of the business. This, it was believed, could place a constraint on future investment. The solution frequently employed is to buy out the minority shareholders and/or those not directly engaged in the management of the business to keep the total number of shareholders small.

3. The concept of Mitbestimmung (co-determination)

The Background

Employee's representation on the supervisory boards of Aktiengesellschaften AGs and larger companies with over 2,000 employees has been referred to already in Section 4.2.1. Works councils have been an integral part of German business and industry since the early 20th century. But the right to representation in smaller companies is also covered in law under the Betriebsverfassungsgesetz (Works Constitution Act). This governs the relationship between the employer and its employees and grants employees 'co-determination' rights in matters concerning the welfare of employees and other staff-related matters as well as economic issues. Remarkably, the first works council provisions were instituted by the British authorities acting on advice of the British trades union following World War II.

The Works Constitution Act (Betriebsverfassungsgesetz)

The Act applies to private enterprises with more than five permanent employees over the age of 18 and stipulates that these employees may elect a works council, but:

- It is not mandated that a works council (Betriebsrat) has to be established
- It is at the discretion of the company's employees if they decide to elect a council
- The works council and the employer must collaborate in good faith
- It does not represent executive officers (i.e. management) of the company

Works councils are established through a democratic process and candidates must secure a given number of signatures from their fellow employees to be eligible for election. Trades union may also nominate candidates for election, but cannot compel their members to vote on their instructions. Works council members are elected directly by company employees through a secret ballot and generally serve for four years.

The works council has the duty to ensure the employees are in compliance with the relevant laws and regulations and also with collective wage agreements and operating agreements made with the employer.

The works council has responsibility for such matters as:

- Working practices (safety)
- Working hours
- Wage structure (but not wage rates – see later under wage bargaining)
- Workplace layout
- Projected staffing requirements
- Vocational training

In companies employing more than twenty members of staff with voting rights, the works council must also approve:

- New appointments of full time employees
- Allocations and re-allocations of staff members to wage groups
- Employee transfers

The number of works council members is determined by the number of people employed by the company and ranges on a sliding scale from one member for companies with five to 20 employees up to 31 members for companies with up to 3,000 employees; thereafter it is two additional members for each additional 3,000 employees.

In companies employing more than 100 people, a Wirtschaftsausschuss (economic affairs committee) must be established that is entitled to be informed and consulted on financial matters relating to the position of the company. Subject to certain conditions being met, trade unions officials may also attend works council meetings if they have members employed by that company. In the event of redundancies, the works council has to be consulted and may lodge an objection, but ultimately there is no right to prevent the redundancy despite the objection.

The employer is required to keep the works council fully informed in matters relating to operations and personnel planning so that the council can participate in determining company policy. The objective is to allow the works council to cooperate with management to avoid potential disputes. Works council resolutions require a quorum of 50 per cent and resolutions are adopted by simple majority. They may enter into valid and binding agreements, which are binding on the employer and employees but limited to those areas of business operation where the Works Constitution Act confers rights of participation.

Collective bargaining agreements between employer associations and trade unions have absolute priority over works council bargaining agreements, even if the latter are more favourable to the employees – this is of the utmost importance – see section 10.2 on employer associations.

In the event that disputes between works councils and management cannot be resolved amicably, the parties may refer the dispute to a conciliation and arbitration board. If both parties agree to be bound by its decision beforehand, the conciliation board's ruling is final and binding.

4. Mergers and Acquisitions

Takeover legislation

In Germany, the acquisition of a listed enterprise or a public takeover (usually of an Aktiengesellschaft) is regulated by the German Securities Acquisition and Takeover Act (Wertpapiererwerbs- und Übernahmegesetz or WpÜG), which was introduced in 2002. Before this there was no specific legislation and takeovers in Germany were governed by a non-binding 'Takeover Code' (Übernahmekodex) that did not provide for any sanctions. The introduction of the Takeover Act was a consequence of an increasing number of public takeovers, which had until then been the exception. The German economy was previously dominated by a relatively small number of major corporations and banks with cross-shareholdings commonly referred to as 'Deutschland AG'. Hostile takeovers were practically unheard of apart from a few notable exceptions such as that by Krupp of Hoesch and subsequently by Krupp/Hoesch of Thyssen and the failed attempt by Pirelli on Continental. The climate changed dramatically in 2000 with the prominent takeover of Mannesmann by Vodafone, where the scale of the transaction and the intensity of the public interest resulted in intense debate. The British telecommunications group Vodafone succeeded in winning a controlling stake in Mannesmann in February 2000, in what was at the time the largest corporate merger. The all-share deal was valued at £112 billion and ended months of political and corporate arguments. As a consequence of all the controversy, it was concluded that the level of investor protection provided by the Takeover Code was insufficient and this resulted in the introduction of the Takeover Act.

This is comprehensive and imposes strict conditions on the management of the target company and requires that the management board and supervisory board must act in the interests of the target company, whilst not taking actions that may prevent the success of the offer. However, this prohibition does not apply to:

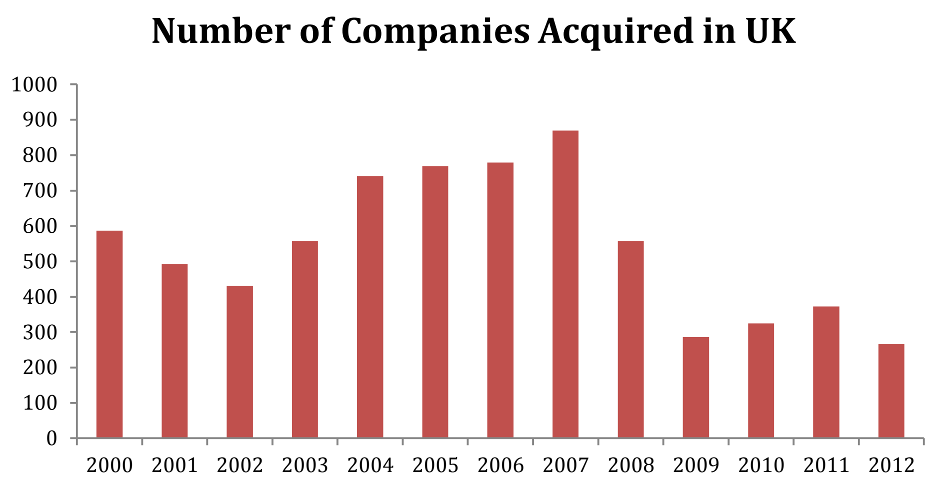
- actions that a prudent and conscientious manager of a company not subject to a takeover offer would have taken
- a search for a competing bidder
- actions approved by the supervisory board

It requires each of the boards to issue reasoned statements regarding the offer without undue delay after receipt of the offer document. In their statements, the boards must comment in detail on the consideration offered, the likely consequences for the target of a successful offer, the goals being pursued by the bidder and whether board members who are also shareholders in the target firm intent to accept the offer. The management board has to inform the employees of any public offers announced and must append to its own statement any additional statement on the offer issued by the target's works council.

The bidder may not give, or hold out the prospect of, unjustified cash payments or other valuable benefits to members of the target boards in connection with the offer.

The level of takeover activity

Since the introduction of the Takeover Act around 300 public takeover offers involving a German target company have occurred, largely encouraged by the British and US offices of leading international accountants and lawyers. Due to the worldwide financial and economic crisis in 2008/2009, the number of these offers has declined significantly. Since then, the German economy has recovered, but the appetite for hostile takeovers remains decidedly weak. This differs significantly to the situation in the UK, where although activity has also declined, relative to Germany it remains a huge influence on the conduct of UK business:

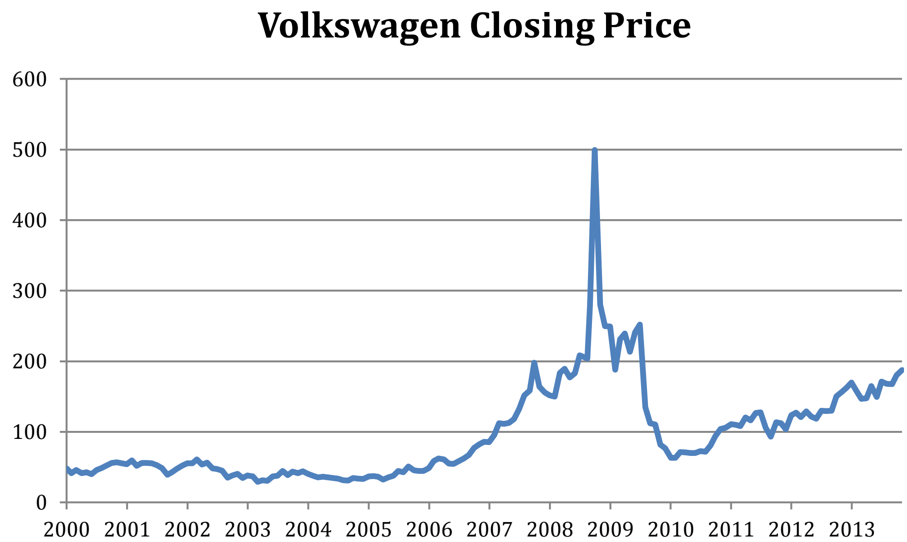


Source: ONS & SIMAS

It is significant that neither the Statistisches Bundesamt (German Office for Statistics) nor Eurostat publish data on mergers and acquisitions. In the UK the data is produced in very considerable detail because the scale of the activity is so large it has a major impact on the national accounts and particularly on the balance of payments capital account.

The Porsche affair

The relationship between the international financial community (particularly the hedge funds) and German industry has to say the least been strained. It is a moot point as to which has the greater loathing of the other. Matters came to a head in October 2008 with the infamous acquisition by Porsche of shares in Volkswagen. Hundreds of hedge funds had previously entered forward contracts worth millions of Euros in the expectation that VW's share price would fall. They were not aware that of the impending revelations of secret plans by Porsche to raise its stake in VW to 75 per cent. Rather than acquiring the shares directly, which would have to have been disclosed, Porsche acquired call options paid in cash from a group of investment banks. Under German legislation, neither the banks that all held under five per cent per cent, nor Porsche were under any obligation to declare their holdings. With Porsche already owning over 42 per cent of VW and the state of Lower Saxony 20 per cent, the additional 31.5 per cent that was acquired left only slightly more than five per cent of shares free to cover short positions that amounted to over 12 per cent of the company's stock. This was devastating for the short-sellers. Shorting VW ordinary shares and buying preference shares had been one of the most popular trades for some time. As soon as the markets opened following the weekend announcement, hedge funds and investment banks desperately attempted to cover their short positions. The demand for stock sent the shares soaring, increasing the losses on the short positions and obliging others that had hoped to hold their positions also to become forced buyers. The panic to get out compounded the situation and at one stage, VW temporarily became the world's biggest company by market value.



Source: Frankfurt Börse (Stock Exchange)

As the estimated losses increased to an unbelievable €30 billion, so did the indignation. The hedge funds believed they were unfairly ensnared. VW had been a popular 'short' investment. The protests were vehement, but Porsche rejected the accusations, commenting 'The ones responsible are those that speculated with huge sums of money on a falling Volkswagen share price'. The German regulatory authorities were involved, but the hedge funds had little hope. The German establishment has made no secret of its contempt for an industry, which is often referred to as the 'Heuschrecken' (locusts). The final stage was a complete debacle with ultimately Volkswagen acquiring Porsche.

Porsche was not the first to use call options to build a stake: in July, German ball bearing manufacturer Schaeffler, Dresdner Bank and Royal Bank of Scotland acquired 30 per cent in tyre and automobile parts manufacturer Continental ahead of a bid using a similar structure.

Takeovers and the consequences

A further factor of significance is the prevalent view in the UK that if a company underperforms, then the only remedy is to allow it to be acquired by another company; the German concept is that if there are problems that cannot be resolved then what is required is to change the management. Studies of the impact of mergers and acquisitions (see Section 6 below) demonstrate that in the majority of cases it results in a reduction in shareholder value; but this evidence is consistently ignored by the financial community, because it is contrary to their objective of maintaining and indeed increasing their fees from M & A activities.

The finance sector in the UK exercises another malign influence on manufacturing companies by engaging in leveraged buy-outs (LBO's). This involves the acquisition of another company using loans to meet the cost of acquisition. The assets of the company being acquired are used as collateral for these loans. The purpose of leveraged buyouts is to allow companies to make large acquisitions without having to commit any significant capital, usually a ratio of 90 per cent debt to 10 per cent equity. Perversely, a company's success, represented by the assets on the balance sheet, can be used as collateral by the hostile company that is making the acquisition. It usually represents an attractive situation for the acquiring company and the banks that support the acquisition; the acquiring company can increase the returns on its equity by employing leverage; banks can make substantially higher margins when supporting the financing of LBOs as compared to usual corporate lending, because the interest chargeable is much higher. All the accountants, lawyers and consultants that are engaged also derive huge fees. The usual consequence for the acquired company is that it is stripped of assets (a process called making the capital work harder), burdened with debt resulting from the acquisition and forced to make large redundancies. It is claimed that such methods achieve improved performance of the acquired company. In reality, when performance is judged over the medium to long term, this hardly ever happens. Instead, most investment is scaled back and cash is drained out of the company. The objective is then to manipulate the balance sheet so that it can be sold off to the next venture capitalist at a substantial profit and the process starts again. The situation is made worse by the fact that all this is supported by a tax regime that encourages such activities. Leveraged buyouts create tax shields by allowing acquiring companies to deduct interest paid on the debt that they have created. These tax benefits should be withdrawn. It is totally wrong that financiers and their advisors are allowed to make huge profits at the expense of industry.

In contrast, the average German industrial company is family-owned and the management focuses on realising long-term objectives. Unless there are family issues with respect to succession, the owners have no interest in selling the company. As they own all or at least the majority of the equity in the business, the prospect of a hostile bid is remote in the extreme. The parameters for success are regarded as steady growth in the business and prosperity for both shareholders and employees. With this stability, it creates an environment that encourages investment in innovation and new products and processes. These Mittelstand companies are essentially outward looking as illustrated by the large number of such companies that have established with success manufacturing operations in China – not because of low labour costs, but due to a strategic recognition of the importance of ‘proximity to market’.

5. The relative performance of UK and German companies

Looking again in more detail at the Forbes 2000 listings (2012) to which reference was previously made:

Germany's Largest Companies

Rank	Global Rank	Company	Sales ($billions)	Profits ($billions)	Assets ($billions)	Market Value ($billions)
1	14	Volkswagen Group	254	28.6	408.2	94.4
2	25	Allianz	140.3	6.8	915.8	66.4
3	36	Daimler	150.8	8	211.9	64.1
4	51	Siemens	100.6	5.7	134.4	91.9
5	55	BMW Group	98.8	6.6	165.5	60
6	69	BASF	103.9	6.4	83.5	90.1
7	81	Munich Re	88	4.2	340.6	34.9
8	99	E.ON	174.2	2.9	184.9	32.5
9	120	Bayer	52.5	3.2	65.6	84.9
10	177	RWE Group	67	1.7	111.5	22.9
11	190	Deutsche Post	73.2	2.2	45	29.4
12	211	SAP	20.9	3.6	35.5	103.9
13	235	Continental	43.2	2.5	35.2	25.3
14	271	Linde	20.2	1.6	43.5	35.2
15	301	Deutsche Bank	55	0.4	2652.6	41.3
16	317	Henkel	21.8	2	25	37.3
17	329	Fresenius	24.8	1.2	40.5	22.1
18	403	Deutsche Lufthansa	39.7	1.3	37.5	9.7
19	413	Talanx	34.9	0.8	171.7	7.9
20	433	Deutsche Telekom	76.9	-6.9	136.1	48.4
21	451	Merck	13.8	0.7	28.6	32
22	462	Porsche Automobil Holding	5.2	10.3	41.1	24.5
23	475	EnBW-Energie Baden	24.7	0.6	48.5	10.8
24	570	Adidas	19.6	0.7	14.7	21.8
25	595	HeidelbergCement	18	0.4	37	13.9

26	654	Commerzbank	25.5	0	838.3	9.2
27	654	ThyssenKrupp Group	51.6	-6	47.4	12.4
28	684	Deutsche Boerse	2.8	0.8	285.5	12.5
29	690	Metro Group	88	0	45.8	9.3
30	930	Beirsdorf	8	0.6	7.2	20.8
31	996	Südzucker	9.3	0.5	10.9	8.6
32	1037	Lanxess	11.7	0.7	8.7	6.8
33	1056	W&W-Wüstenrot	8.8	0.3	101.8	1.9
34	1126	K+S	5.1	0.9	8.8	9.4
35	1132	Brenntag	12.5	0.4	7.5	7.7
36	1259	TUI	23.6	-0.1	16.8	2.8
37	1320	Aurubis	17.7	0.5	6.3	3.1
38	1334	Infineon Technologies	5	0.5	7.2	9.3
39	1338	GEA Group	7.4	0.4	8.5	6.6
40	1410	Bilfinger	11.2	0.4	8.8	4.9
41	1441	Celesio	28.6	-0.2	10.5	3.2
42	1572	Salzgitter	13.4	-0.1	11.7	2.5
43	1668	Aareal Bank	1.5	0.1	60.3	1.4
44	1738	Nürnberger	4.7	0.1	28.9	0.9
45	1759	IKB Deutsche	2.6	-0.7	41.8	0.4
46	1782	Hugo Boss	3	0.4	2.1	7.7
47	1790	ProSiebenSat1 Media	3	0.4	7.1	7.9
48	1875	BayWa	13.5	0.1	5.9	1.7
49	1880	DVB Bank	1.5	0.2	31.4	1.5
50	1921	Fraport	3.1	0.3	12.7	5.2
		Total	2,085.1	96.0	7,636.3	1,263.3

The UK's Largest Companies

Rank	Global Rank	Company	Sales ($billions)	Profits ($billions)	Assets ($billions)	Market Value ($billions)
1	6	HSBC Holdings	104.9	14.3	2,684.1	201.3
2	18	BP	370.9	11.6	301.0	130.4
3	33	Vodafone	74.4	11.1	219.9	135.7
4	65	Prudential	90.2	3.6	489.4	44.7
5	98	Standard	26.9	4.9	636.5	64.4

		Chartered				
6	105	Tesco	102.8	4.5	81.1	46.9
7	112	GlaxoSmithKline	43.0	7.4	63.5	111.1
8	149	AstraZeneca	28.6	6.4	52.5	58.0
9	159	British American Tobacco	24.1	6.1	44.2	102.0
10	163	BG Group	19.3	4.6	64.4	60.6
11	179	National Grid	21.7	3.3	75.6	40.7
12	188	SABMiller	16.7	4.3	55.0	84.1
13	208	Legal & General Group	56.9	1.3	562.9	15.5
14	221	BT Group	30.9	3.2	37.3	32.5
15	224	Old Mutual	32.2	1.9	230.4	15.5
16	242	Diageo	16.9	3.0	34.5	76.4
17	245	Centrica	38.9	2.1	35.4	27.7
18	287	Standard Life	31.2	1.1	283.0	13.5
19	291	Rolls-Royce Holding	19.8	3.7	28.9	30.7
20	296	Imperial Tobacco Group	23.7	1.1	44.4	35.2
21	319	Reckitt Benckiser Group	15.6	3.0	24.4	51.2
22	325	BAE Systems	26.3	1.7	36.2	18.8
23	355	WPP	16.9	1.3	40.3	20.7
24	390	Lloyds Banking Group	75.6	-2.3	1,495.9	53.8
25	400	Barclays	55.7	-1.7	2,422.5	62.3
26	420	Royal Bank of Scotland	42.1	-9.4	2,133.1	52.0
27	435	Rio Tinto	51.0	-3.0	117.6	98.5
28	471	Compass Group	27.3	1.0	14.4	23.1
29	473	Aon	11.5	1.0	30.5	18.7
30	493	Associated British Foods	19.8	0.9	16.2	22.7
31	502	Reed Elsevier	9.9	1.7	17.9	25.6
32	520	J Sainsbury	35.7	1.0	19.7	10.4
33	520	Aviva	69.0	-5.1	512.7	14.5
34	522	Anglo American	29.4	-1.5	78.1	39.9
35	539	SSE	50.8	0.3	31.1	21.2
36	576	Morrison	28.8	1.0	16.6	9.5

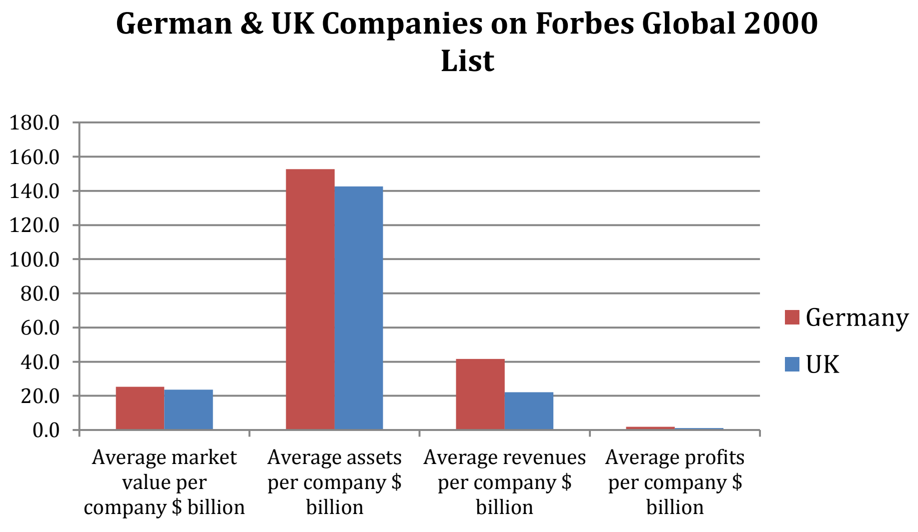
		Supermarkets				
37	642	Ensco	6.8	1.8	18.5	14.1
38	643	Kingfisher	16.8	0.9	15.6	10.3
39	679	Delphi Automotive	15.5	1.1	10.2	13.6
40	700	British Sky Broadcasting	10.7	1.4	8.6	21.6
41	731	RSA Insurance Group	14.4	0.6	33.4	6.3
42	753	Pearson	8.2	0.5	18.1	14.9
43	756	Antofagasta	6.7	1.0	12.9	16.1
44	759	Marks & Spencer	15.9	0.8	11.6	9.1
45	900	London Stock Exchange	1.1	0.8	163.6	5.7
46	912	International Airlines	23.9	-1.2	25.6	7.6
47	923	Evraz Group	16.4	0.5	17.0	5.4
48	924	Investec	5.8	0.4	82.1	6.5
49	979	GKN	10.6	0.8	9.7	6.8
50	999	Land Securities Group	1.1	0.8	17.3	9.8
51	1006	Johnson Matthey	19.3	0.5	5.2	7.5
52	1013	Subsea 7	6.3	0.8	10.5	8.3
53	1076	Vedanta Resources	14.0	0.1	45.4	4.7
54	1098	Schroders	2.3	0.4	23.8	9.2
55	1120	Next	5.6	0.8	3.0	10.0
56	1133	Tullow Oil	2.4	0.6	9.4	17.2
57	1202	Petrofac	6.5	0.6	5.3	8.1
58	1206	British Land	0.6	0.8	13.0	7.5
59	1277	United Utilities	2.5	0.5	16.0	7.1
60	1283	Smith & Nephew	4.2	0.7	5.5	10.2
61	1293	Polyus Gold International	2.8	0.9	5.6	9.8
62	1318	Essar Energy	16.7	-0.6	17.4	2.9
63	1350	Eurasian Natural Resources	6.3	-0.8	20.2	6.8
64	1414	Rexam	7.0	0.3	9.9	6.3
65	1451	Direct Line Insurance	6.1	0.3	18.8	4.7
66	1464	Capita	5.4	0.4	6.3	8.7

67	1487	Mondi	7.7	0.3	8.7	6.4
68	1489	Bunzl	8.7	0.3	4.8	6.5
69	1498	G4S	11.9	0.1	9.1	6.4
70	1517	EasyJet	6.2	0.4	6.9	6.4
71	1526	Travis Perkins	7.9	0.4	7.1	5.0
72	1540	InterContinental Hotels	1.9	0.6	3.1	8.1
73	1551	Weir Group	4.1	0.5	5.3	7.9
74	1554	ICAP	2.7	0.2	129.9	3.2
75	1571	Burberry Group	3.0	0.4	2.4	9.7
76	1602	Smiths Group	4.7	0.4	5.3	7.8
77	1636	ARM Holdings	0.9	0.3	2.3	19.6
78	1647	Serco Group	7.8	0.4	5.3	4.7
79	1654	Tate & Lyle	4.9	0.5	4.6	5.8
80	1664	Aggreko	2.6	0.4	3.4	8.0
81	1671	FirstGroup	10.7	0.3	8.4	1.5
82	1680	Balfour Beauty	15.4	0.1	9.2	2.9
83	1683	Thomas Cook Group	15.3	-0.9	9.2	1.6
84	1704	ITV	3.6	0.4	4.4	7.8
85	1726	Carphone Warehouse	-	1.2	1.2	1.4
86	1778	Whitbread	2.8	0.4	4.7	7.0
87	1779	AMEC	6.8	0.4	4.0	4.8
88	1812	Vesuvius	2.5	0.9	3.0	1.7
89	1813	Sage Group	2.2	0.5	4.0	6.1
90	1843	Inchcape	9.6	0.3	5.5	3.6
91	1854	Willis Group Holdings	3.5	-0.4	15.1	6.6
92	1892	Dixons Retail	13.3	-0.3	4.7	1.9
93	1941	Severn Trent	2.8	0.3	12.3	5.9
94	1942	Aberdeen Asset Management	1.4	0.3	6.5	7.5
95	1987	IMI	3.5	0.4	2.8	6.6
		Total	2,169.7	115.0	13,983.9	2,319.0

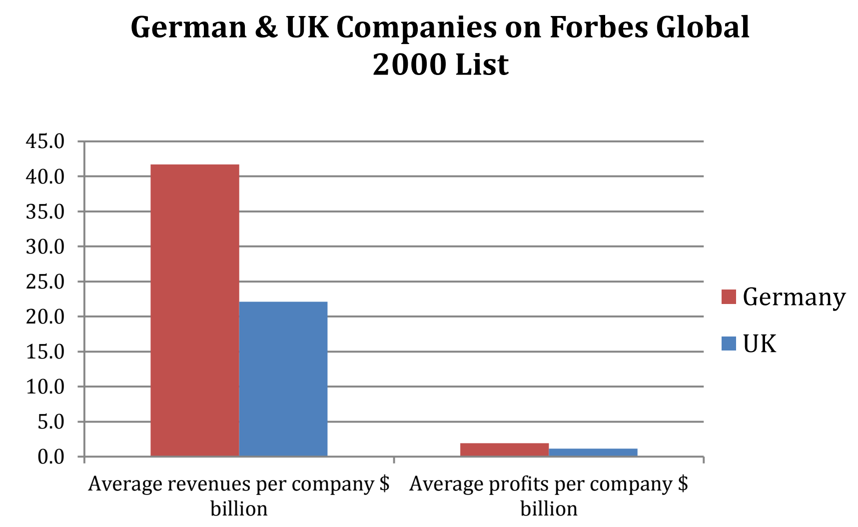
The above tables are summarised as below:

Forbes Global 2000 list		
	UK	Germany
No. of companies	98.00	50.00
Market value $ billion	2,319.00	1,263.00
Assets $ billion	13,984.00	7,636.00
Revenues $ billion	2,169.00	2,085.00
Profits $ billion	115.00	96.00
Average market value per company $ billion	24.40	25.30
Average assets per company $ billion	147.20	152.70
Average revenues per company $ billion	22.80	41.70
Average profits per company $ billion	1.20	1.92

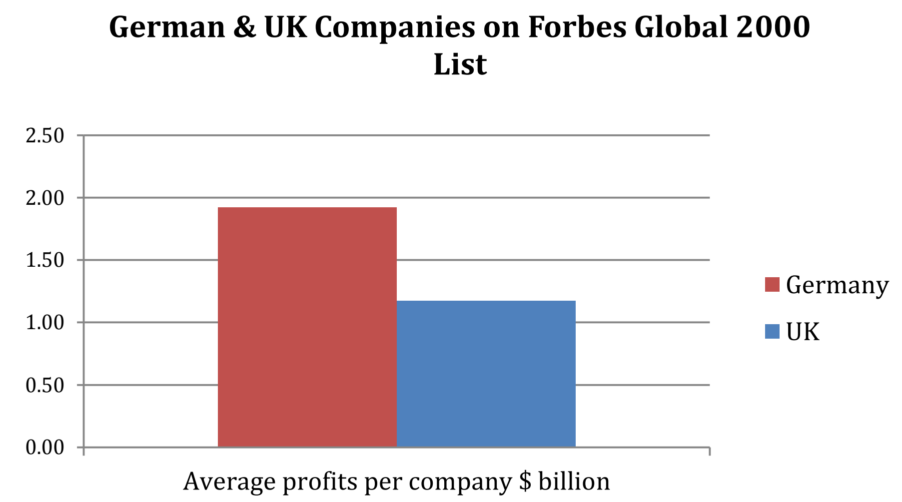
These results are shown graphically below:



Source: Forbes & SIMAS



Source: Forbes & SIMAS



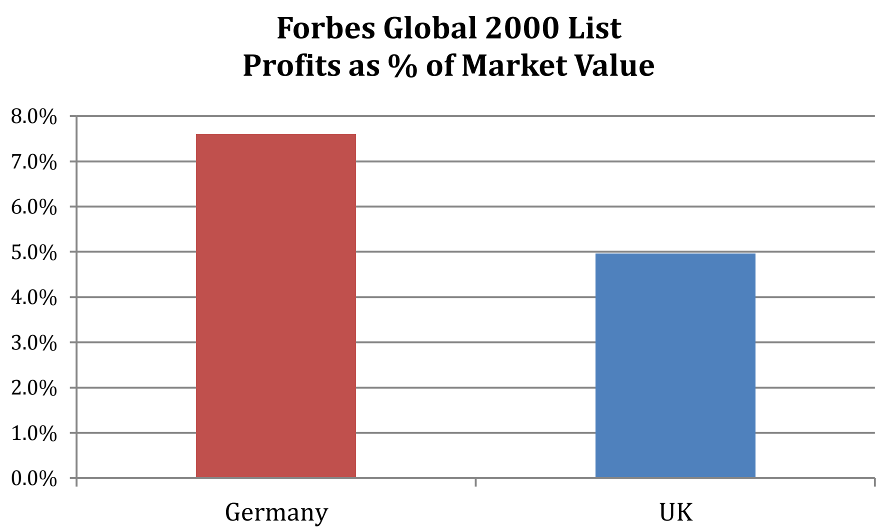
Source: Forbes & SIMAS

The above indicates that M & A activity has contributed to the UK having twice as many large corporations as in Germany. Average market and asset values are broadly comparable; but what is also fundamentally apparent is that this M & A activity has also contributed to these Forbes list British companies generating, on average, revenues some 45 per cent lower and profits 38 per cent lower than equivalent companies in Germany.

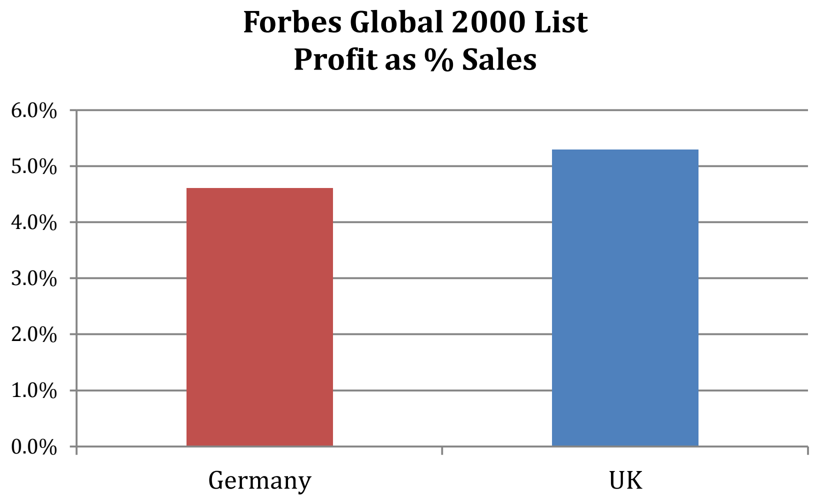
	Germany	UK	Diff	%
Average revenues per company $ billion	41.7	22.1	19.6	47%
Average profits per company $ billion	1.92	1.17	0.7	39%

It is also worth noting that the German firms on the Forbes list generated superior financial returns as defined by profits as a percentage of assets and as a percentage of market value.

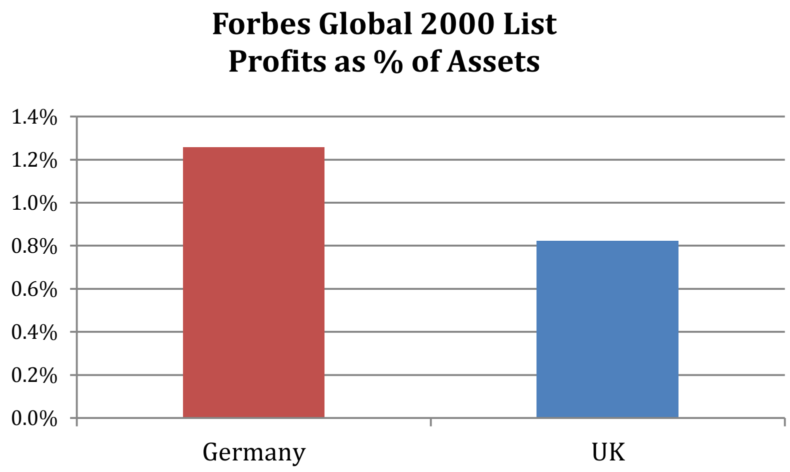
	Germany	UK
Sales ($billions)	2,085.10	2,169.70
Profits ($ billions)	96	115
Profit as % Sales	4.60%	5.30%
Assets ($ billions)	7,636.30	13,983.90
Profits as % of Assets	1.30%	0.80%
Market Value ($ billions)	1,263.30	2,319.00
Market value as % of Assets	16.50%	16.60%
Profits as % Market Value	7.60%	5.00%



Source: Forbes and SIMAS



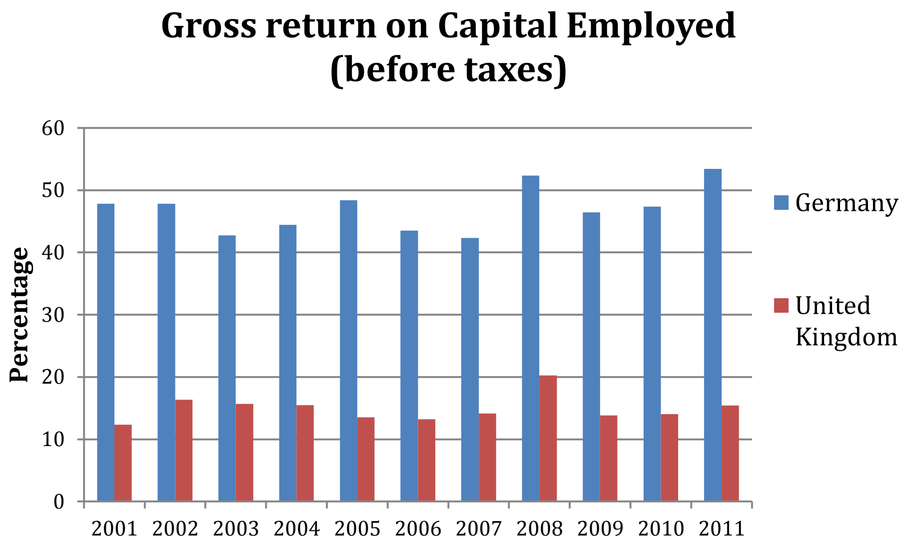
Source: Forbes and SIMAS



Source: Forbes and SIMAS

Care has to be taken in interpreting the data due to the prevalence of the large British banks in the listing (they have high asset values in comparison with other types of company). However, it can be concluded that the much vaunted claim that an active mergers and acquisitions market results in improved performance can surely be challenged.

Looking now at the situation from a more macroeconomic level, the following picture emerges of the total return on capital employed from all non-financial companies[2]:

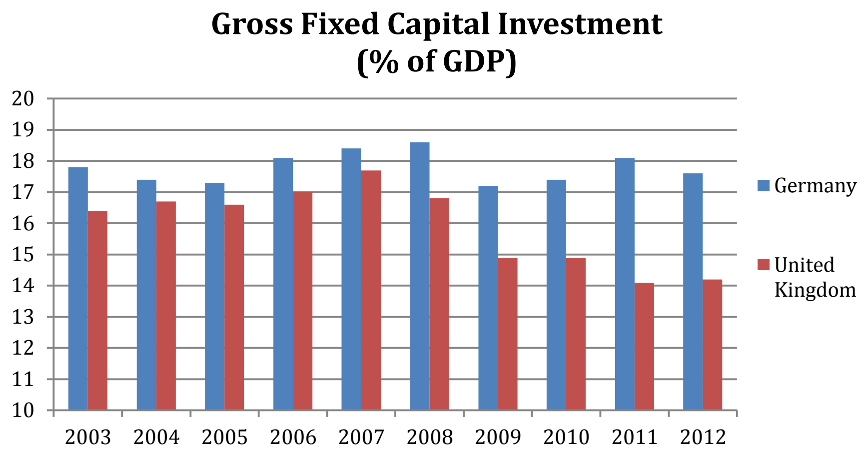


Source: Eurostat and SIMAS

Why is this disparity so large? It can only be due to relative gearing and higher productivity in Germany, which can only result from investment in people and in plant and equipment. And this higher productivity is achieved despite the substantially higher cost of employing people in Germany in comparison to the UK as will be shown in a later section.

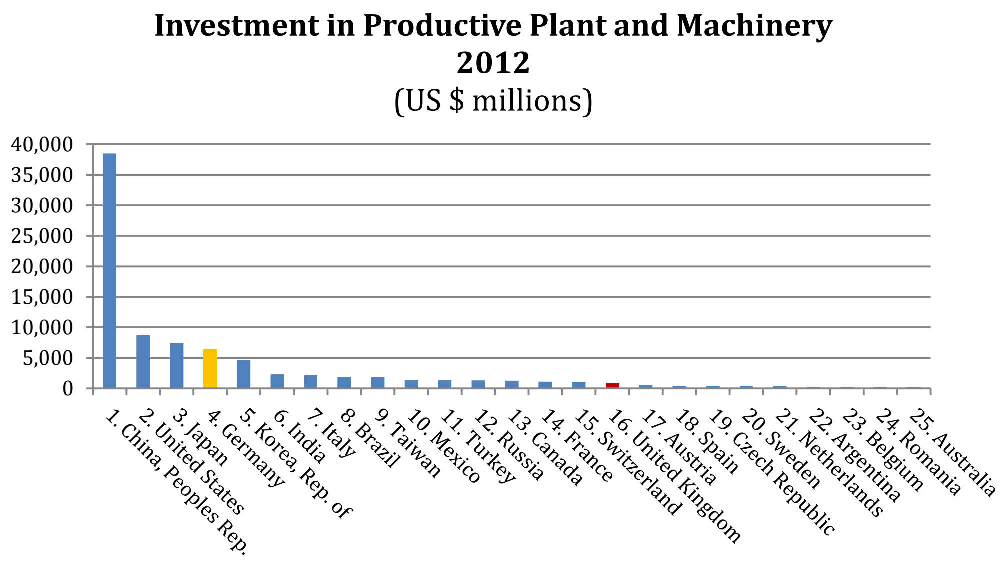
6. Investment in capital equipment

The consequence of the short-termism resulting from the climate of mergers and acquisitions and the desire for an exit strategy are very clearly illustrated in the graph below, previously shown in Section 2:



Source: Eurostat and SIMAS

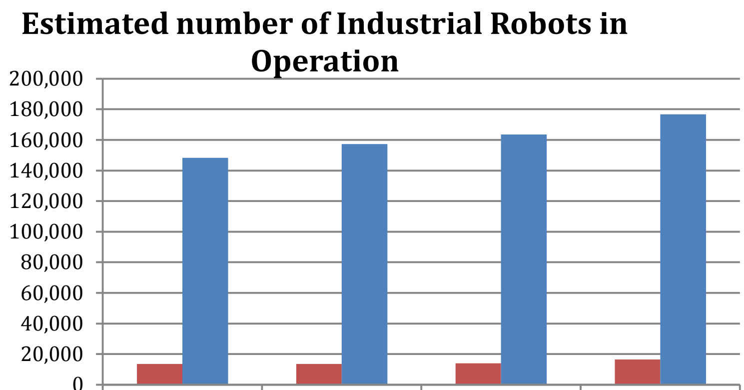
As was stated earlier, the UK investment data includes building construction, which is at a high level, particularly in London. Commensurately, the investment in plant and machinery must be even lower in the UK.



Source: Gardner and SIMAS

The UK is currently in the world's 8th leading manufacturing nation (dependent on the exchange rates used) and yet its position in the investment tables is 16th. How long can the country maintain its present position as a manufacturing nation when in absolute terms it is investing at a lower level than Mexico and Turkey?

In order to achieve and maintain competitive advantage in manufacturing in the western world, it is essential to reduce direct labour costs to a level of under 12 per cent of total costs to ensure that the position is not eroded by low-labour cost countries. This can only be realised by ensuring optimum manufacturing processes; and by this is meant both productivity and flexibility to react to changes in market demand. In turn this demands productive and highly automated machinery. Reference to the graph below shows the relative investment in industrial robots.

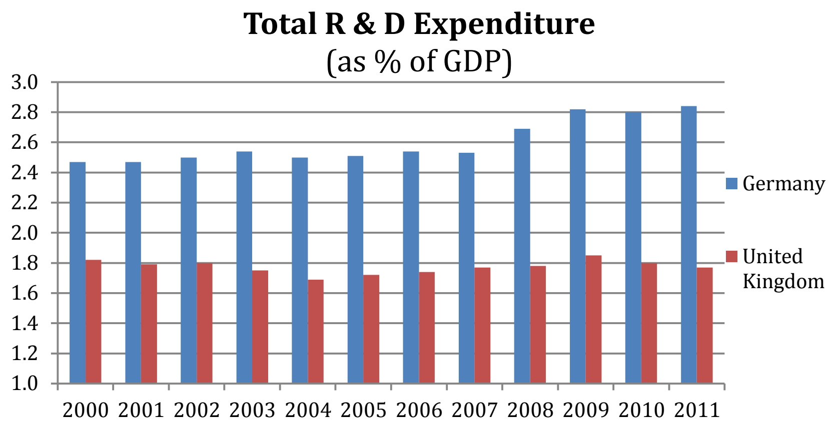


	2010	2011	2012	2015
United Kingdom	13,519	13,641	14,100	16,600
Germany	148,256	157,241	163,500	176,800

Source: World Robotics and SIMAS

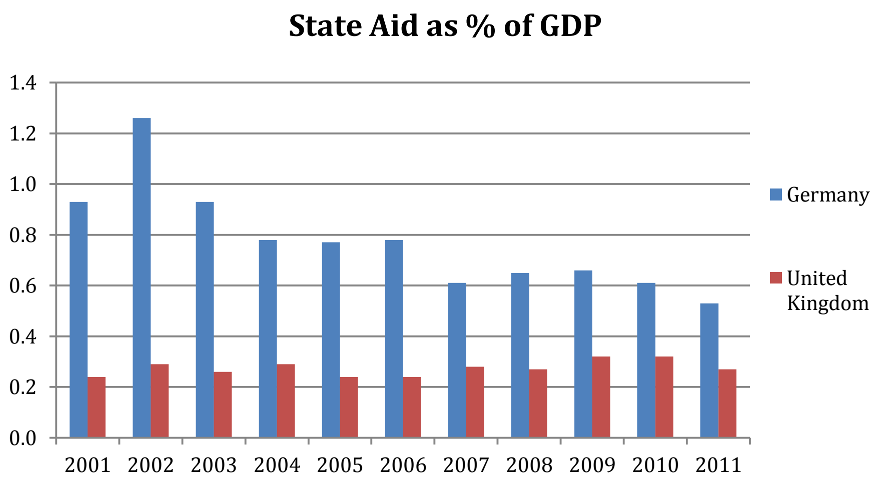
Low labour cost countries are able to employ people at as little as 25 per cent of the rate that is required for equivalent positions in the western world. But if a manufacturer in the west has achieved a competitive advantage by investment in plant, machinery and training where the direct labour cost is 12 per cent or less, then there is little attraction to relocate production. The direct labour cost would reduce to say three per cent, but immediately there is at least an additional 10 per cent transport cost. Further, the extended supply chain presents almost insuperable problems with on-time delivery unless substantial buffer stocks are maintained. And perhaps most importantly, the management capacity to control the logistics involved with off-shore manufacturing is generally underestimated.

A view of the investment in R & D shows a similar situation:



Source: Eurostat and SIMAS

In appraising investment levels, clearly the possible influence of the state in supporting investment initiatives has to be considered. The data used is defined as GERD (Gross domestic expenditure on R&D) as a percentage of GDP. 'Research and experimental development (R&D) comprise creative work undertaken on a systematic basis in order to increase the stock of knowledge, including knowledge of man, culture and society and the use of this stock of knowledge to devise new applications'.

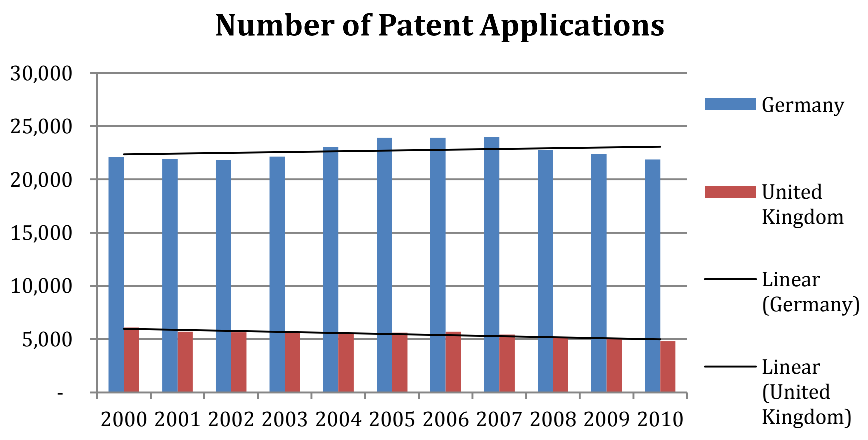


Source: Eurostat and SIMAS

This shows that although support in Germany is much higher, the difference is declining. The figures are somewhat skewed by the fact that a huge amount of investment has gone into the eastern parts of the country following the re-unification. This is also now reducing.

In the extensive interviews that were undertaken, there was not one German company that had a planned investment level below five per cent of revenue - the average was around six per cent. Although in the majority of cases, the management was well qualified and had a clear understanding of capital appraisal methods, it was emphasised that as long as a minimum criterion of say three years payback could be expected, the main driver was always growth in the business and support for product and process innovation. Indeed one director of a world leading company in its sector with revenue of €600 million admitted 'often investment decisions come more from the stomach than the head'. This company has no borrowings and invested from its own capital. Where discounted cash flow analysis was used the discount rate ranged between eight per cent and eleven per cent. It is not claimed that this necessarily is a statistically meaningful example, but it does illustrate the high rate of investment of successful German companies operating in a wide range of industrial and commercial sectors. The one consistent element with the family-owned companies interviewed was that they believed they were investing for the long term and had no external shareholders to place constraints on them.

It is illustrative to look at the consequences of the relative levels of investment between the UK and Germany in terms of patent applications:



Source: Eurostat

7. Investment in people

Education of the people can be regarded as the foundation of any modern economy and society. The main focus in this section will be on the training of industrial apprentices, which has a direct impact on performance and international competitiveness. But first the scene will be set with a brief overview of education at secondary and tertiary level:

Secondary schooling

Education is the responsibility of the Länder (Federal States) as was described in Section 3.3. There are some variations from state to state, but the system largely reflects the system that used to prevail in the UK. Children leave the Grundschule (Primary Schools) at the age of 12, and then have the option to move to alternative secondary schools. There is no examination to determine which children go to which particular school; the decision is based on teachers' recommendations. There is, however, an important qualification in that parents have the right effectively to overrule any particular decision. In most cases, this is to request a move to the Gymnasium (Grammar School), which offers a higher academic level, usually in preparation for university. But parents tend to use this right with considerable discretion as any pupil not able to maintain the academic standards demanded at a Gymnasium will be required to move to another school more appropriate to that child's ability. In principle, it is possible to change schools after the initial decision, but different curricula at the different school types complicate such a change especially after sixth grade.

Pupils in Germany are usually selected into three (or four depending on the particular state) school types after four years of elementary school:

- The Hauptschule is the lowest level secondary school type and is intended to be the most vocational and least academic track. The number of these schools is decreasing in favour of the Realschule
- The Realschule is an intermediate level secondary school which prepares pupils for a basically vocational education
- The Gymnasium is structured for the most academically inclined pupils and enables them to pursue further academic studies up to university entrance level

- The Gesamtschule (Comprehensive) is an alternative school track offered in some areas

Looking at these different schools now in a little more detail:

Hauptschule

In the majority of the Länder (federal states), children spend five years at the Hauptschule. The main objective of the Hauptschule is to prepare for entry into the world of work. All children are taught mathematics, physics/chemistry, biology, geography, history, German, English (sometimes French), religion, music, art, politics and sports. They are also given an introduction to the world of work (Arbeitslehre). Once pupils have obtained their leaving certificate at the age of 15 or 16, they can go into practical vocational training, start work in the public service at basic or secretarial level, or attend a Berufsfachschule (full-time vocational school).

Realschule

Pupils attend Realschule for six years. It is the most common form of schooling and provides an essentially vocationally oriented education. The Realschule gives children a broader general education and expects them to show greater independence. They also have a chance to learn a second foreign language (usually French), in addition to the first compulsory language (generally English). At the end of their 10th year, on successful completion pupils obtain the Realschule leaving certificate. With this certificate, they have access to a variety of training options such as in-company vocational training, work in the public service, or further education in school or at a Fachhochschule.

Gymnasium

The most academically able pupils are expected to attend the Gymnasium which provides a further eight or nine years of school education before pupils take their final leaving examinations (Abitur or Hochschulreife). The Gymnasium is designed to provide pupils with an education which will enable them, once they have passed their Abitur, to study at a German university or equivalent. Pupils receive intensive specialised instruction to prepare them for academic work at a higher level. The Abitur is based on the assessment of these subjects.

The Gesamtschule (Comprehensive School)

This type of school was introduced between 1973 and 1982 on an experimental basis in all German states, mainly on the initiative of the education ministers in Länder governed by the SPD (Social Democratic Party). It combines elements from the Hauptschule, the Realschule and the Gymnasium. Children usually spend six years at the Gesamtschule, from the sixth to the tenth grade. Depending on their ability, they either obtain a Hauptschule or a Realschule leaving certificate. Those wishing to sit the Abitur attend school for another three years. Pupils are taught in different ability groups in some subjects (Integrierte Gesamtschule) or are selected and streamed according to their ability (Kooperative Gesamtschule). The general experience with these schools has been negative, largely due to the 'lowest common denominator' effect as experienced in the UK and elsewhere. Also and significantly, the high standing accorded to craft and engineering skills and the recognition that these are as important to the economy as academic qualifications, allows parents to decide with confidence for the Realschule and Hauptschule. At the present time, the acceptance of comprehensive schools is largely influenced by the politics of the ruling party in any particular state and as a consequence varies between the German states. There is only one comprehensive school left in Bavaria, but it is still the most common type of school in the state of Berlin for example.

Tertiary education

This does not now significantly differ from that in the UK. The standards, certainly in the Russell Group universities in the UK, compare favourably with those in Germany. Hence only a few cursory comments will be made in this section. German higher education used to be offered in integrated programmes leading to Diplom- or Magister-Artium degrees of up to seven years duration in the science and engineering faculties. As a result of European integration, the previous programmes are successively being replaced by a new system of Bachelor and Master's programmes now offered at most institutions. The Bachelor and Master's programmes are designed to provide greater flexibility to students and ensure international compatibility of studies and thus international mobility. Increasingly, higher education institutions offer study programs taught in English to attract a larger number of incoming students. Doctoral or PhD programmes are not yet subject to state regulations, but there exists a clear trend towards more integrated programmes. Bachelor degrees are completed in three to four years and then a further one to two years is required for the Masters degree.

There are three types of Higher Education Institution:

- Universities (Universitäten) - offer the whole range of academic disciplines.
- Universities of Applied Sciences (Fachhochschulen) - concentrate on engineering and other technical disciplines, business-related studies, social work, and design areas.
- Universities of Art/Music (Kunst- und Musikhochschulen)
  - provide studies for artistic careers in fine arts, performing arts and music; covering such areas as theatre, film, media and communication.

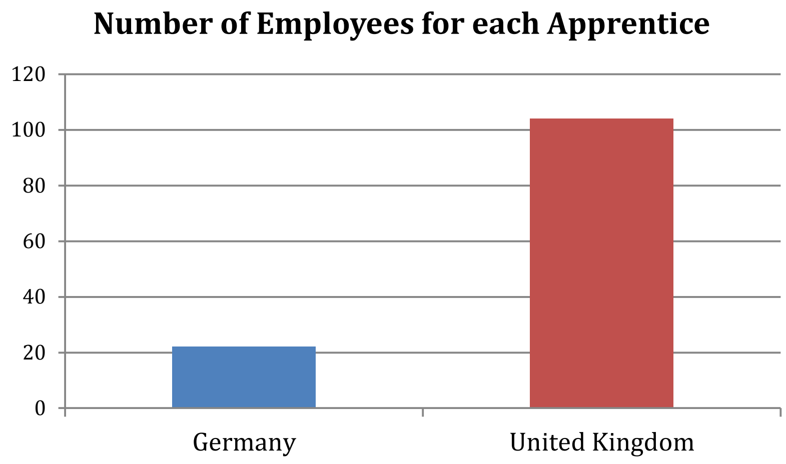
Besides these three main types, which may be either state institutions or private institutions recognised by the state, some special categories exist, for example, church-maintained colleges, universities of cooperative education (Berufsakademien), colleges of education or colleges of public administration. In their operations, including the organisation of studies and the designation and award of degrees, all types are subject to higher education legislation. All types of programme are completed by a Staatsprüfung (State Examination).

Training of apprentices

According to a report from the UK Sector Skills Development Agency:

> Both apprentices and employers need to see a return on their investment in training. While employers benefit in the long term from the skills that apprenticeship provides, these skills cannot be developed at the expense of the individual employer's competitiveness. Both apprentices and employers will need to earn a return to their investment in training to compensate for the costs each party has to bear. The benefits of apprenticeship are shared amongst the relevant parties. The apprentice can expect to gain in terms of future earnings. The employer gains an extended supply of skilled labour, according to the willingness of the apprentice to stay after training. Other employers also gain, to the extent that ex-apprentices leave to join them. The taxpayer and the wider economy also gain, to the extent that a greater supply of skilled labour increases productivity and through the development of a more educated and knowledgeable society.[3]

Let us see how this basic definition is converted into practice respectively in the United Kingdom and Germany. The graph below shows that in Germany there is one apprentice for every 22 employees, but in the UK there is only one apprentice for every 104 employees.



Source: SSDA

The UK has in the past suffered from a lack of government interest or financial support to encourage apprenticeships. The view, fortunately now changed, was that apprentices were classified as simply another type of job training, which was the responsibility of industry to organise and fund. A long-term commitment for government funding of apprenticeships to cover the off-site training was only achieved in the UK in 1995. Much of this highly unsatisfactory situation relates to earlier times when pay rates of semi-skilled production workers came close to and even exceeded those of fully skilled workers who had completed apprenticeships. Further fundamental problems related to large increases in pay of apprentices, largely driven by the unions, who claimed that otherwise there would be a danger of employers using apprentices as a form of cheap labour. Training boards at the same time attempted to raise training standards with a consequent increase in training costs. Employers were thus obliged to carry what they regarded as an unreasonable level of training cost. The outcome was a distorted system and with the inevitable result that the supply of training places hugely declined.

In Germany, the training is governed by the Berufsbildungsgesetz (BBiG) or Vocational Training Act of 23 March 2005. In June 2004, the federal government and the employers' associations of German industry concluded a 'Memorandum of

Understanding' (Nationaler Pakt für Ausbildung und Fachkräftenachwuchs - loosely translated as the Apprenticeship Pact), in which the partners undertook to offer training opportunities to every young person willing and capable of undergoing training, working in close cooperation with the Länder. There are a total of 346 state-recognised training occupations.[4]

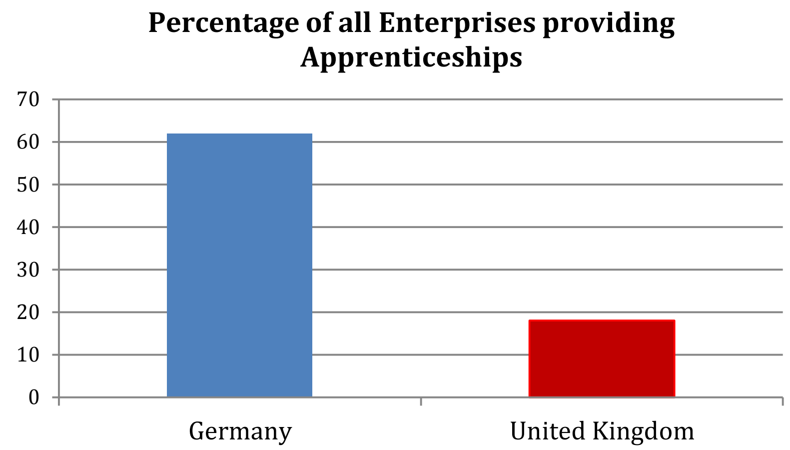
Each of these 'training occupations' is supported by an equivalent employer's organisation and an equivalent trades union. In order to understand the overall German training system, it is necessary to appreciate that all trades and professions are protected by law. Whether it is a hairdresser or a bricklayer or an engineer or lawyer, no one is permitted to use the title until the prescribed training is completed.

Further, all businesses irrespective of size are obliged by law to register with the the Industrie- und Handelskammer IHK (Chamber of Industry and Commerce). According to the BBiG:

> Vocational training shall, through a systematic training programme, impart the vocational skills, knowledge and qualifications (vocational competence) necessary to engage in a form of skilled occupational activity in a changing working world. It shall also enable trainees to acquire the necessary occupational experience.[5]

After completing their education at the Realschule and Hauptschule, pupils are able to start a career with an apprenticeship in the Berufsschule (Vocational School). The Berufsschule is normally attended twice a week during a two, three, or three-and-a-half year apprenticeship with the other days spent working at a company. This 'Dual System' is intended to provide a combination of theory and practice. The system is described as 'dual' because training is conducted in two places of learning: at companies and at vocational schools. The aim of the training is to provide broadly based basic vocational training and the qualifications and competences required to practise an occupation as a skilled worker. Compulsory full-time education must have been completed by the time of commencing vocational training. But there are no further requirements for access to training (although most hold a leaving certificate) in the dual system and it is essentially open to all.

Although there is no direct legal obligation, (apart from the construction industry) in practice the majority of companies, as a consequence of the Apprenticeship Pact, accept a given number of apprentices in proportion to the size of the wage bill. The normal target is around five per cent of the total number of employees for medium and larger companies and a minimum of at least one apprentice for the smallest businesses. This is in stark contrast to the UK and provides a 'level playing field' with all companies exercising their responsibility, rather than a situation in which cynical companies poach skilled personnel from others, having made no contribution themselves.



Source: Eurostat Survey 2010 and SIMAS

The figure for Germany of 62 per cent appears low. It may reflect the fact that nearly 50 per cent of all enterprises in Germany are in sole ownership or equivalent and most of these have between one and ten employees. A survey by the Organisation of the German Federation of Employer Associations (Bundesvereinigung der Deutschen Arbeitgeber-verbände – BDA) produced the following information:

Spectrum of Occupational Training		
Forms of Training	Percentage of companies active in training	Estimated percentage of total time
Training in the work situation	92.9	44.2
Self-managed learning via media	86.9	7.1
Internal learning events	75.6	16.5
External learning events	84.3	19.8
Information events	91.8	11.1
Retraining measures	12.7	1.3
Total	97.1	100

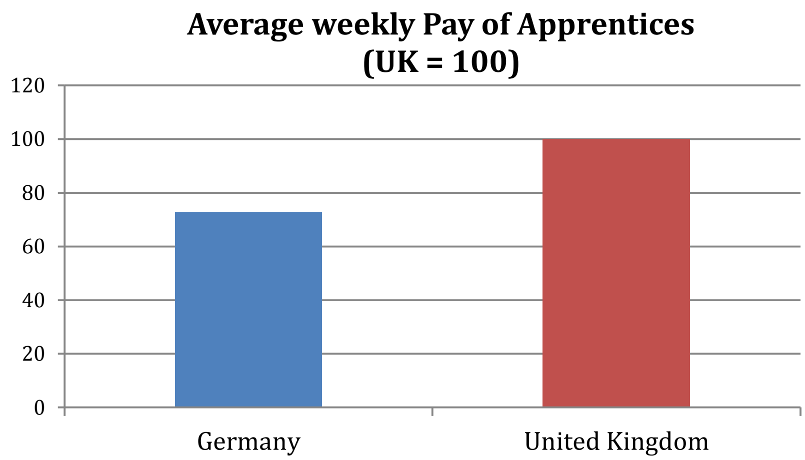
The apprentice is also required to be registered on a list at the Industrie und Handelskammer IHK (Chamber of Industry and Commerce). During the apprenticeship, the apprentice is a part-time salaried employee of the company. After passing the Berufsschule and the final exams of the IHK, a certificate is awarded and the young person is ready to follow the first stages of his or her career.

Local municipal authorities provide the funding for vocational training schools and the Länder are responsible for the teaching staff and the materials and format of the training. The individual companies carry the costs of the in-company element of the training and pay the apprentice's wages, the level of which are determined by collective agreement between the parties. The wages increase with every year of training, and average about one-third of the starting pay for a fully trained skilled worker.

In larger enterprises, training departments with specific training workshops and offices are set up for the purpose, all under the direction of the production or works manager. In small or medium-sized companies with fewer apprentices, training is often provided by qualified people with another main job within the company. Some small and medium-sized companies are often unable to provide all the required training due to lack of suitable training personnel, or, owing to their particular specialisation, which means they cannot cover all the training content themselves. In such circumstances intercompany training periods are offered and designed to supplement in-company training. Often companies cooperate to provide joint training structures (Ausbildungsverbünde) with a lead enterprise carrying overall responsibility for training, but some parts of the training conducted by other partners.

The Chambers of Industry and Commerce and the Chambers of Trade (Handwerkskammer) are responsible for ensuring that individual employers comply with state standards. Substantial fines can be levied for non-compliance. The binding requirements of the training directives guarantee a uniform national standard.

There are two further factors that differentiate training of young people in Germany: the level of remuneration that they receive and the duration of their training:

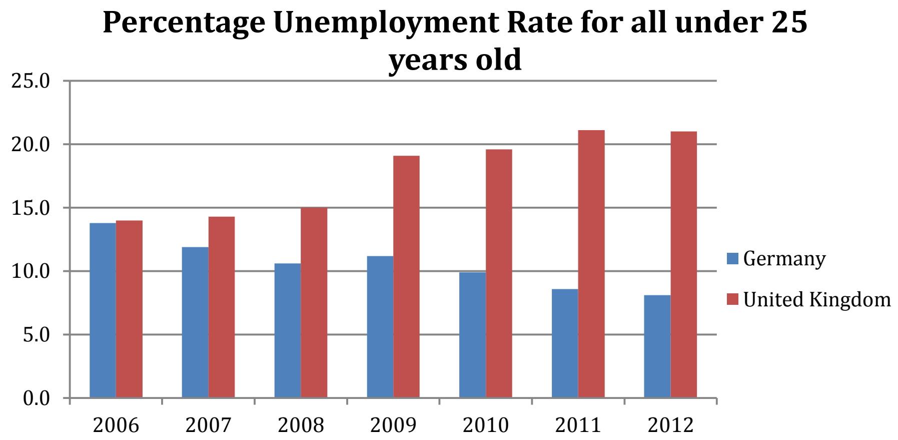


Source: SSDA and SIMAS

The general view in Germany is that as the majority of apprentices live at home, they can manage adequately on a relatively low income. This makes the employment of apprentices more attractive to employers in Germany in comparison to the UK. There is a strong argument that in the UK, the result of external pressures, driving up pay, has priced many potential apprentices out of the market.

The average duration, of an apprenticeship in the UK is one year; in Germany it is three years. It is not unreasonable to state that as a reflection of the quality and duration of the training provided, young German people come out of their training period significantly better qualified.

A further outcome of Germany producing a higher number of skilled young people is that youth employment is very low:



Source: Eurostat and SIMAS

This is most important from a wider social perspective and has obvious further consequences in terms of crime rates and social security costs.

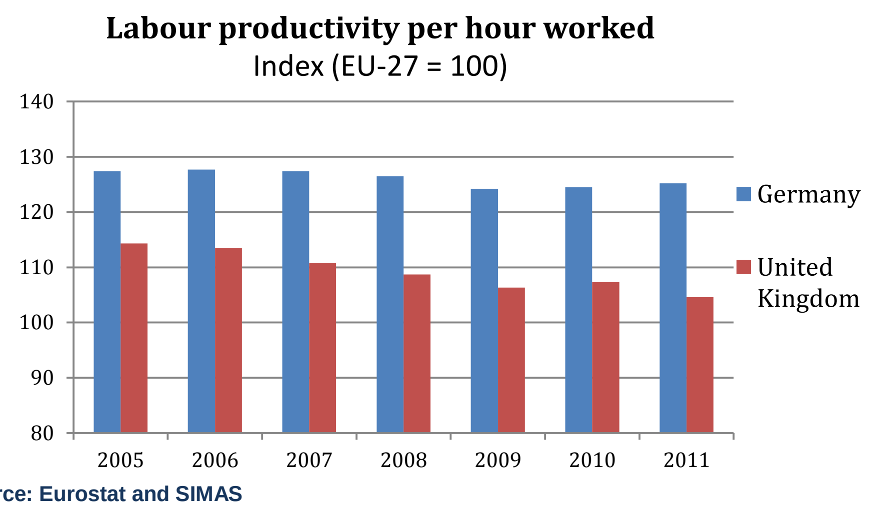
Completion of an apprenticeship is far from the end of vocational training in Germany; young people aspiring to advance their careers and certainly to increase their earning capacity will continue their studies to gain the qualification of master craftsman or ‘Meister’. The first stage after a successfully completed apprenticeship is to gain at least three to five years’ experience as a journeyman (Geselle) followed by an examination, called the ‘Gesellenprüfung’. Training courses for the Meisterprüfung (‘Master's examination’) then follow taking up to four or six years depending on the craft. The education includes theoretical and practical training in the craft and also business and legal training and is regulated in the German Gesetz zur Ordnung des Handwerks (Crafts and Trades Regulation Code). The final examination covers theoretical, practical and oral elements and takes five to seven days. It usually includes production of a ‘masterpiece’.

The master craftsman is a state-approved professional qualification and this qualification is required by law for all people engaged in the training of apprentices. Although recent legislation has removed the absolute necessity for all businesses to be run by a master craftsman or to employ at least one master craftsman before it can trade, the tradition is still widely maintained; and indeed in some 41 trades where safety is involved, e.g. electrical work, the Meister qualification is still a legal precondition to start and run a business or train apprentices. Journeymen and masters are automatically members of the regional chamber for their specific craft, which are regarded as self-governing public bodies. The chambers are responsible for the technical vocational educational training and supervise the examination of the journeymen and masters.

The consequence of this system, supported by legislation, is that a very high quality is ensured. The Meister qualification is also regarded as of sufficient standard to permit the holder to study at University or Fachhochschule. Master craftsmen who do not run their own business usually occupy responsible positions in the larger German companies. Many such companies prefer to employ master craftsmen rather than university graduates as technical managers at middle management level. Their education is more practical, and these master craftsmen also acquire significant theoretical skills and business knowledge during their training.

Financial support is available to further vocational training through the Support for Further Training for Advancement Act (AFBG, known as Meister-BaföG). This is jointly financed by the state and the Länder and has given craftsmen and other skilled workers a statutory individual entitlement to financial support for further training and advancement. The financial assistance essentially comprises subsidies and bank loans at favourable rates to cover the cost of the courses and examination fees. As a further incentive, recipients can also be released from a certain percentage (currently 66 per cent) of the balance of the loan taken out, if within three years of successfully completing their training, they set up a company or become self-employed.

The outcome of these initiatives is illustrated in the graph below:



Source: Eurostat and SIMAS

Currently the net cost of training carried by German companies is €14.7 billion; the Länder subscribe €2.8 billion. This represents respectively 84 per cent and 16 per cent of the total cost.

Advantages of the German dual system:

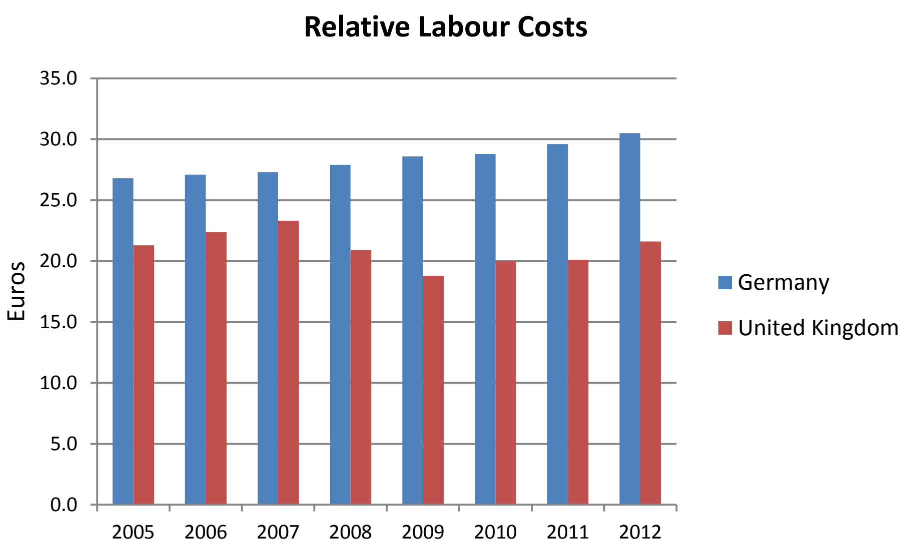
- Low financial burden on the state
- Training is in line with the requirements of the labour market
- Apprentices benefit from both practical and theoretical training
- Nationally recognised quality standards for training and examinations
- Low rate of youth unemployment compared to other countries
- Nearly all German companies contribute and thereby create a level playing field

The companies carry a high cost, but in the interviews conducted there was without exception enthusiastic approval of the system and recognition of the advantages that it brings. A director of one major German concern with hundreds of thousands of employees stated ‘we aim to maintain a situation where we have between 8 and 10 per cent of the total workforce on apprenticeship programmes’.

8. Labour and labour costs

Comparative costs

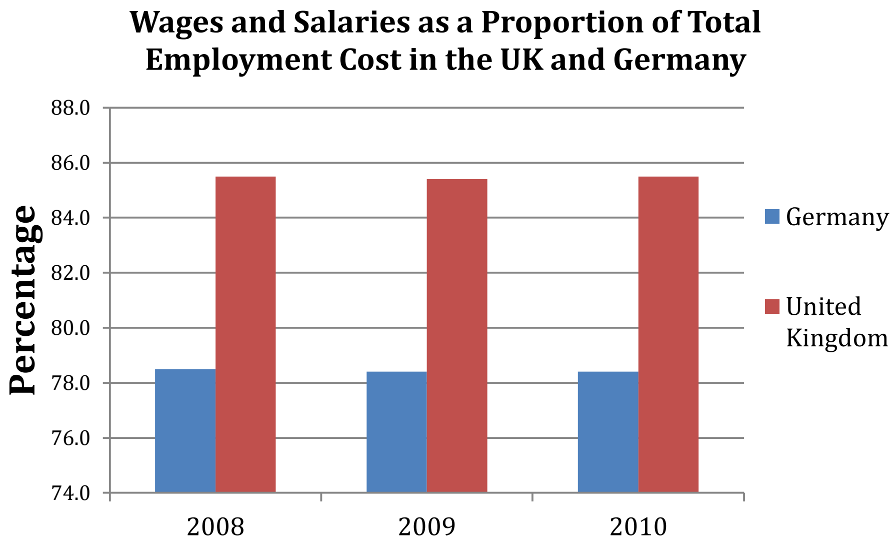
For the purposes of this exercise, labour costs are defined in accordance with Eurostat as core expenditure borne by employers for the purpose of employing staff. They include employee compensation, with wages and salaries in cash and in kind, employers' social security contributions and employment taxes. The data covers industry, construction and services, but excludes public administration, defence and compulsory social security.



Source: Eurostat and SIMAS

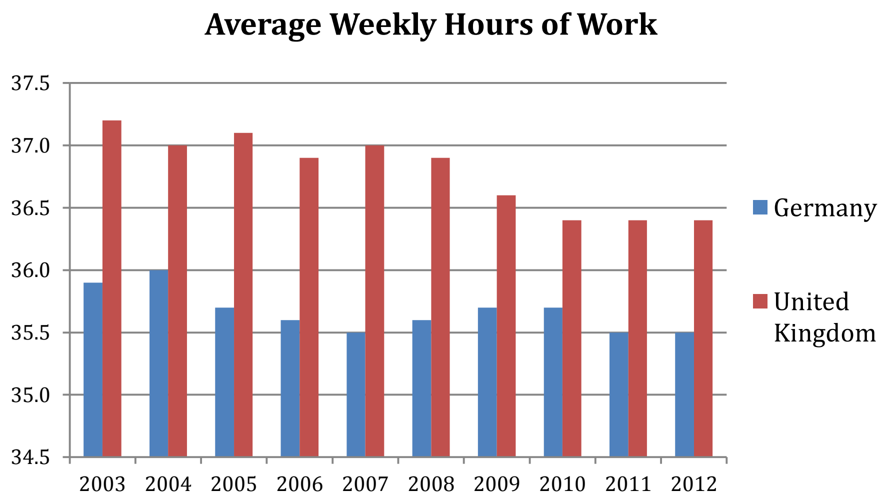
	2005	2006	2007	2008	2009	2010	2011	2012	Average
Germany	26.8	27.1	27.3	27.9	28.6	28.8	29.6	30.5	28.3
United Kingdom	21.3	22.4	23.3	20.9	18.8	20.0	20.1	21.6	21.1
Percentage	25.8	21.0	17.2	33.5	52.1	44.0	47.3	41.2	35.3

Over the period German labour costs expressed as a percentage of UK costs have been 35 per cent higher. This substantial difference in the cost of employing people, results from the higher costs of social security and other related payments in Germany. The graph below shows wages & salaries expressed as percentage of the total cost of employment:



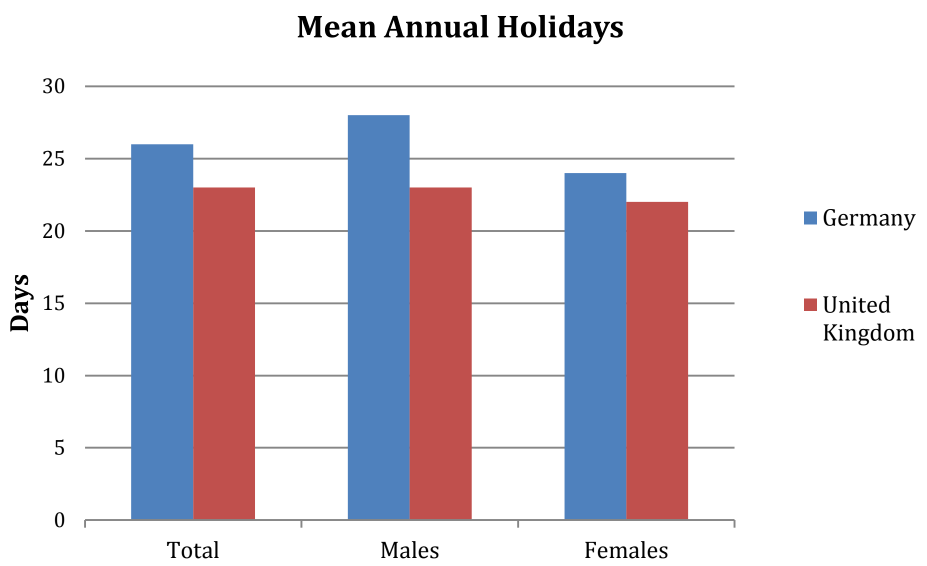
Source: Eurostat and SIMAS

Further analysis shows that the actual take home pay before tax is around 30 per cent higher in Germany compared to the UK. An investigation into the hours worked per week produced the following:



Source: Eurostat and SIMAS

If we now look at the amount of holiday taken based on a survey in 2010 of enterprises with 10 employees or more and covering industry, construction and services (except public administration, defence, compulsory social security):



Source: Eurostat and SIMAS

In summary, German labour costs 35 per cent more than in the UK, hours worked are lower and holidays longer. Yet productivity is 15 per cent higher.

Labour productivity per hour worked								
Index (EU-27 = 100)								
	2005	2006	2007	2008	2009	2010	2011	Average
Germany	127.4	127.7	127.4	126.5	124.2	124.5	125.2	126.1
United Kingdom	114.3	113.5	110.8	108.7	106.3	107.3	104.6	109.4
Percentage	111%	113%	115%	116%	117%	116%	120%	115%

Wage negotiation in Germany

Collective bargaining is at the heart of the German economy and social system. A fundamental principle is that wages and working times are negotiated not by individual companies as in the UK, but autonomously by so-called 'social partners without state influence'. It relieves most individual companies of the burden of negotiating wages and working conditions and thus provides the foundation for good and stable industrial relations. The system of co-determination within companies reduces the potential for conflict and saves companies a considerable amount of time, resource and effort.

An essential condition for autonomous collective bargaining is the freedom of association enshrined in the basic law, i.e. 'the right to establish associations to maintain and promote work and economic conditions' (article 9.3). An element of freedom of association is that membership of these associations is voluntary.

In practice these social partners are the trades union representing the workers and the employers' associations representing the employers. There are two kinds of collective agreements:

- Agreements between trades union and employers' associations (Tarifverträge)
- Agreements between employers and works councils (Betriebsvereinbarungen).

There are collective agreements for different industries, crafts, public and private services. Often they are limited to a particular Land (State) or other defined geographical area. Sometimes a trade union may also make a collective agreement with a single employer (like Volkswagen). The record of reaching mutually acceptable agreements is strong, but occasionally disputes do break out. In interviews, it was emphasised that both parties hold substantial 'war chests' so that in the event of failure to reach a settlement the threat of a strike and the potential to fund such a strike is real.

There is a central federation, the Bundesvereinigung der Deutschen Arbeitgeberverbände (BDA) - Confederation of German Employers' Associations - that does not negotiate collective agreements itself, but coordinates the pay policy of its member federations in the various sectors and regions. Its members include 14 regional associations (approximately based on the Länder, but with some combined) and 52 trade and professional associations covering industry, services, finance, trade, transport and agriculture. The industry associations number around 22 and include everything from cigarette manufacture to coal and steel. A total of about one million businesses are indirectly a member of the BDA. These employ about 70 per cent of all workers. Negotiated pay agreements are applicable in full or in large part to around 80 per cent of all pay agreements. Altogether, around 70,000 collective agreements are in operation, with some 6,000 new agreements made each year.

Trades union in Germany have a history reaching back to around 1848, as was referred to in the introduction and still play an important role in the German economy and society as a whole. The most important umbrella organisation is the German Confederation of Trade Unions (Deutsche Gewerkschaftsbund or DGB), which represents more than six million people and provides services to the industry trades union that form its membership. Note, these are industry unions, not craft or trade unions and each negotiates for a particular industrial sector, which can often include many different trade skills.

The largest single trade union is the IG Metall with about 2,300,000 members and acts for employees in metal (including automobile and machine building), electronics, steel, textile, wood and other industries. Others include the union for mining, chemical industry and energy and there is also a range of unions covering the public sector. Germany also has a confusing array of niche professional unions. For example the healthcare sector has more than a dozen independent organisations, including three different nursing associations. The aviation sector includes the Cockpit Union, the Independent Flight Attendant Organisation, the Ground Workers' Union and the Aviation Technology Union.

The main trades union have been losing members at a substantial rate for some time. In contrast, the niche professional unions that undermine collective solidarity by vying for specific pay and work packages for their individual groups are proliferating. Clearly the main unions have failed to respond quickly to transformations in the modern workforce such as the rise of female employment and the increase in professional workers, thus deterring younger potential members from joining. The rise of small unions is of concern in that it could be an indication of the collapse of a system where labour contracts are negotiated for entire industries or firms. Collective agreements have been crucial in protecting the interests of the labour force that has contributed to Germany's economic growth. Their demise could seriously endanger its future.

The weakening of trade union bargaining power can be traced back to the large-scale unemployment in the east and competition for jobs that accompanied the fall of the Berlin Wall in the 1990s (some 14,000 East German state enterprises were privatised or closed) and the introduction of the Hartz IV legislation under Chancellor Schröder. Some ten years ago Germany was becoming increasingly concerned with the high cost of labour and rising unemployment that had to be financed by an exchequer still carrying the cost burden of reunification. Chancellor Gerhard Schröder commissioned a report from former Volkswagen director, Peter Hartz, which contained radical proposals concerning unemployment and social welfare benefits. It was a watershed moment that has had a profound impact on the German economy and on the social and financial consequences of unemployment.

The immediate effect was to leave those living on benefits worse off (in 2013, the standard unemployment benefit for a single person is €382 a month, plus the cost of provision of adequate housing and healthcare). But the new element that brought the most profound change was the provisions of a contract that was required to be drawn up between the unemployed person and the Arbeitsamt (Job Centre). This defined what each party had to do to get the unemployed person back in employment. It was coupled with measures that included benefit cuts if the unemployed person failed to abide by the terms of the contract. This provided a real incentive to make genuine efforts to gain employment.

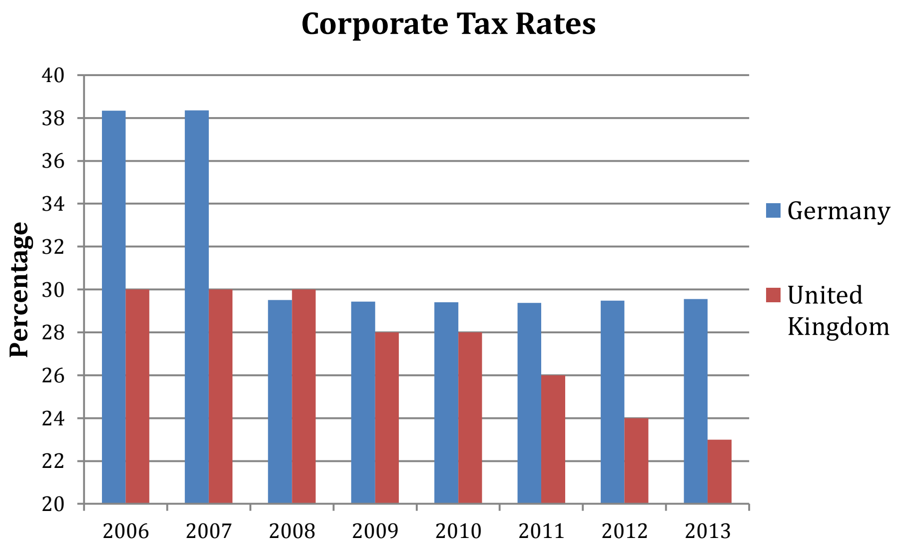
There are continuing debates about the outcome and consequences of the Hartz reforms. Unemployment, both long-term and short-term has reduced, but critics contend that most jobless people are forced to accept the next job they can find and that often they have to accept such low-paid and part-time work that they remain dependent on state welfare. Undoubtedly the new flexibility allows employers in major industrial companies to take on and lay off part-time shift workers depending on the state of the economy; and this certainly (in conjunction with the governments brilliant initiative to provided financial support for short-time working) helped Germany to survive and recover from the global economic crisis better than most other countries. The general view is that the reforms of 2003 increased the flexibility of the labour market and encouraged wage moderation; but from the perspective of the Mittelstand, the perceived obligation to retain and protect the security of their employees remains an integral element of their business strategy.

It would appear that some recent draft UK legislation has been based on the concepts and experience gained with Hartz IV.

9. Relative tax regimes in Germany and the United Kingdom

Company taxation

The average total corporate tax on companies in the UK and Germany is shown below:



Source: KPMG and SIMAS

	2006	2007	2008	2009	2010	2011	2012	2013
Germany	38.34	38.36	29.51	29.44	29.41	29.37	29.48	29.55
United Kingdom	30.00	30.00	30.00	28.00	28.00	26.00	24.00	23.00

As can be seen, in Germany the current average total tax rate on companies is 29.5 per cent in comparison to 23 per cent in the UK. The reason that reference is made to average tax is because the total tax rate on companies in Germany is dependent in part on the region (local authority) in which the company is based. There are three elements to the corporate tax burden to which companies such as the public liability companies (Aktiengesellschaften) or limited liability companies (GmbH) are subject:

1. Corporation tax (Körperschaftssteuer)
2. A ‘Solidarity’ surcharge to fund the re-unification (Solidaritätszuschlag)
3. A local Trade Tax (Gewerbesteuer),

The first two taxes are levied by the federal government and the third by local authorities or municipalities (i.e. the town or city where the company is based) that retain all of this revenue. Looking now at each element:

Corporation tax

Companies based in Germany, or with an executive board in Germany, are liable to corporation tax on all income, both from within and outside the country. Dividends that have been generated and taxed abroad may be exempt from taxation in Germany or taxes paid in a foreign country can be offset against taxation in Germany. Companies that are not based in, nor have an executive board in Germany are only liable to corporation tax on income generated within the country. Taxable income (defined as annual business profit) forms the base for the corporation tax calculation. It should be noted that German tax law provides different accounting options and income adjustment regulations, meaning that the taxable income usually differs from the annual profit set out in the financial statement. Corporation tax is currently levied throughout the country at a flat rate of 15 per cent of taxable corporate income.

The ‘solidarity’ surcharge

The solidarity surcharge was introduced in 1995 to finance German reunification and is added on top of the corporation tax. The surcharge is 5.5 per cent of the 15 per cent corporation tax so resulting in a total of 0.825 per cent of taxable income. Thus, corporation tax and the solidarity surcharge together produce a total of 15.825 per cent.

Trade tax

All commercial business operations in Germany are liable to pay trade tax irrespective of their legal form. The trade tax is levied by local authorities and can vary from one authority to another. However, trade tax is generally the same rate for all businesses within one authority. Trade tax in Germany is currently set at between 7 and 17 per cent. There are two components:

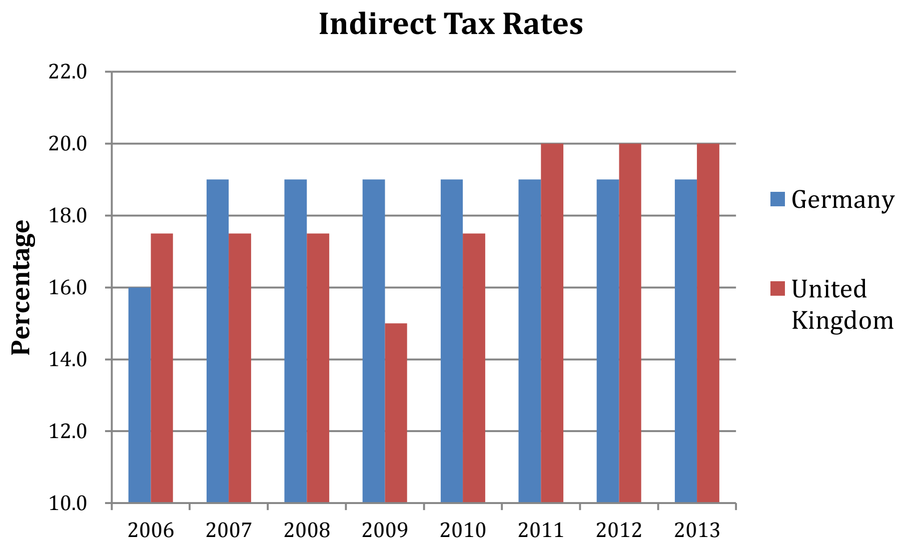
- A tax base rate of 3.5 per cent that applies throughout Germany)
- A multiplier (Hebesatz) set individually by each authority

The taxable income of the company is multiplied by the tax base rate of 3.5 per cent, which results in the so-called tax base value. This tax base value is then multiplied by the relevant local multiplier to produce the sum total of trade tax that is due. The multiplier varies currently between 350 and 490 per cent; it may not be less than 200 per cent and there is no upper limit. It is generally higher in urban areas than it is in rural areas with the highest rate of 490 per cent applying in some of the large cities. The average for the country as a whole is around 390 per cent. The local trade tax is not deductible as a business expense.

In the United Kingdom, the current corporation tax rate is 23 per cent. From 1 April 2014 it will be reduced to 21 per cent and from 1 April 2015 it will be reduced to 20 per cent. A small company's rate applies until 1 April 2015 to companies with taxable profits of up to £300,000 with marginal relief up to £1.5 million. The current small company's rate of 20 per cent has been in place since 1 April 2011. Companies with taxable profits of £1.5 million or more pay tax at the main rate.

Indirect taxes

These are generally described as value added taxes.



Source: KPMG and SIMAS

	2006	2007	2008	2009	2010	2011	2012	2013
Germany	16.0	19.0	19.0	19.0	19.0	19.0	19.0	19.0
United Kingdom	17.5	17.5	17.5	15.0	17.5	20.0	20.0	20.0

In Germany, the standard rate of VAT (Umsatzsteuer (USt)) is 19 per cent. Reduced rates apply to certain items:

- Seven per cent for food, plants, animals, books/newspapers, short term accommodation including certain connected services and short distance passenger transport
- Zero per cent for cross-border air passenger transport, financial services to non-EU recipients, exports, and certain transactions involving ships and aircrafts

VAT exempt transactions include financial services to EU recipients, insurance services, certain supplies of land, health, welfare, education, specific public postal services, and supplies within the Real Estate Acquisition Law.

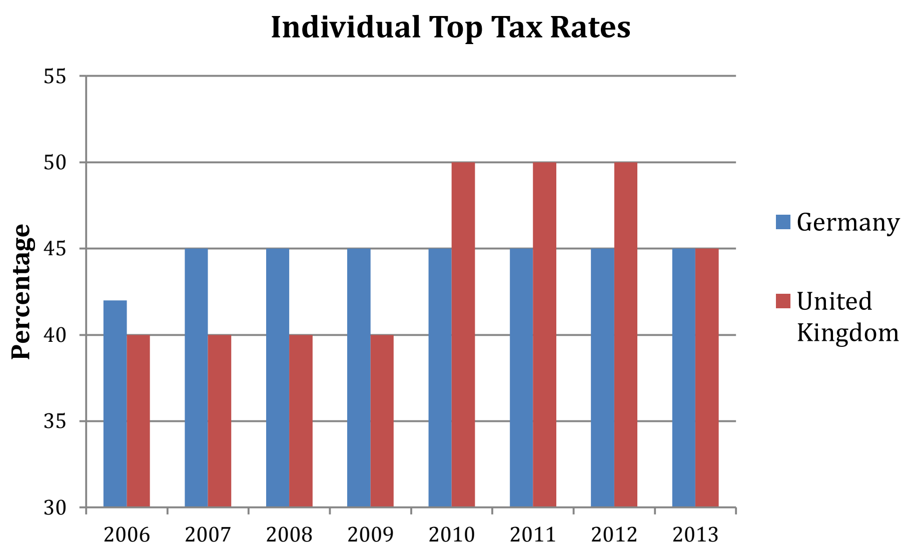
In the United Kingdom standard rate of VAT is 20 per cent (effective 4 January 2011). There are reduced rates of five per cent and zero per cent which apply:

- Five per cent for children's car seats, domestic fuel and power, and renovations/conversions of residential properties
- Zero per cent for food and animal feed, books and newspapers, prescription drugs and medicines, children's clothes, passenger transport, and exports of goods

Supplies of certain goods and services are exempt from VAT, for example financial and insurance services; education services supplied by eligible bodies; certain cultural services; betting, gaming, and lotteries; subscriptions; and health and welfare.

Individual taxes

This includes income tax and certain other forms of tax as described below:



Source: KPMG and SIMAS

	2006	2007	2008	2009	2010	2011	2012	2013
Germany	42	45	45	45	45	45	45	45
United Kingdom	40	40	40	40	50	50	50	45

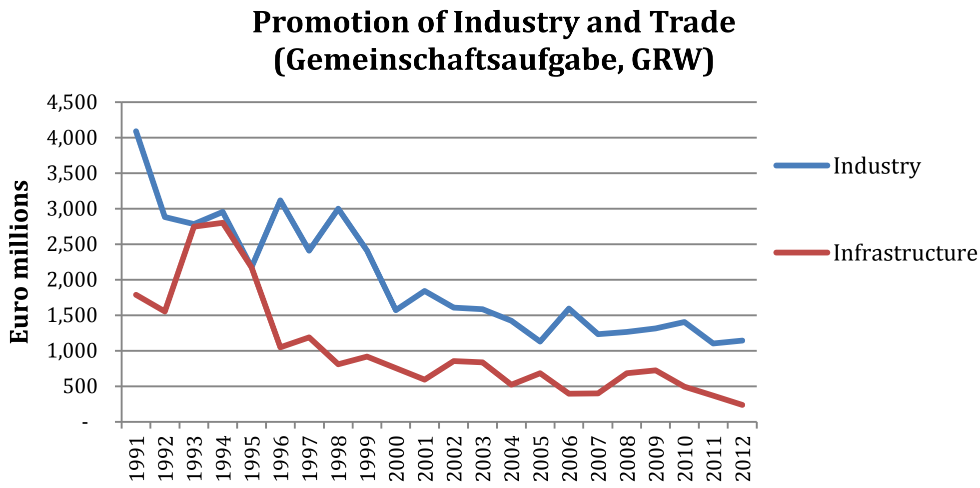
In Germany, the top marginal rate starts at €250,731 (ca. £210,000) of taxable income for single taxpayer and this figure doubles for married people. In addition to income tax, there is a solidarity surcharge of 5.5 per cent of the income tax and a church tax of eight or nine per cent of the income tax that optionally may be paid.

In the United Kingdom, the top marginal rate starts at £150,000. The top rate has been reduced to 45 per cent from 6 April 2013.

Tax allowances and other incentives to invest

As referred to above, German tax law provides different accounting options and income adjustment rules. At a local level, when calculating liability to the trade tax, this can result in incentives to invest. Further, there are specific investment incentives that are covered by the investment allowance law Investitionszulagengesetz (IZ). This was extended in 2010 for a period up to 2013 and is one of the main industrial subsidy mechanisms that the German government uses to support investments in eastern Germany. Using the IZ, the state encourages businesses from eligible industries that invest in eastern Germany and other defined areas. The businesses receive an allowance for each of their investment projects and this allowance is incorporated into a company's tax declaration and is then granted either as a tax saving or as a direct grant. The investment allowance law targets businesses engaged in manufacturing or services that are closely linked to industry, together with some types of technicians or craftsmen. As an example, a small or medium sized enterprise (SME) that invests in machines receives an allowance of 20 per cent of the investment value and if further investment is made in the following year as a part of the same project, then this machine can also be subsidised at 20 per cent. The new law gives investors a strong incentive to begin investment projects quickly and secure a long-term benefit.

An additional measure is the cash incentives for investment schemes. Production facility establishment costs can be significantly reduced using a number of different measures from Germany's investment incentives package. Cash incentives provided in the form of non-repayable grants make up the main components of this package. There is one major program called the ‘Joint Task for the Promotion of Industry and Trade’ (Gemeinschaftsaufgabe, GRW) directing the allocation of these cash incentives. It falls under the responsibility of the Ministry of Economics and Technology, but is usually administered by the German states. Money available through this program is usually distributed in the form of cash payments which are based on either investment costs or assumed wage costs (of the future operating business). The actual amount granted varies from region to region subject to economic development levels. Regions with the highest incentives rates offer grants of up to 30 per cent of eligible expenditures for large enterprises, up to 40 per cent for medium-sized enterprises, and up to 50 per cent for small enterprises respectively. These higher incentive rate regions are mainly situated in Eastern Germany. Several regions within the western parts of Germany and Berlin are also designated incentives regions, but at a lower incentive rate level than in the east. In these regions, large enterprises can receive subsidy rates of up to 15 per cent, medium-sized enterprises up to 25 per cent, and small enterprises up to 35 per cent of eligible project costs respectively. The graph below shows the total annual expenditure:



As will be observed, there has been a continuous reduction in support since the re-unification. Approximately 90 per cent of the total expenditure goes to the neue Bundesländer (the states previously in East Germany).

Investment grants for the improvement of the regional economic structure (GRW) are now coming under pressure as a result of the EU guidelines for regional aid. New guidelines for the funding period 2014-2020 have been published by the European Commission and the federal government is currently adjusting the framework for the allocation of funds, working in cooperation with the states to ensure accordance with the new guidelines. The new funding rules and updated priority funding areas will apply from 1 July 2014 onward. Eastern Germany and certain western German regions are expected to remain eligible funding regions.

All this compares with the annual investment allowance (IA) that was introduced in the Finance Act 2008 in the UK for qualifying expenditure incurred on or after 1 April 2008 for corporation tax purposes and 6 April 2008 for income tax purposes. It provides for a 100 per cent allowance for expenditure within a set limit. This was initially £50,000 but was increased to £100,000 for expenditure incurred on or after 1 or 6 April 2010. The Finance Act 2011 decreased the limit to £25,000 for expenditure incurred on or after 1 or 6 April 2012. The Finance Bill 2013 has increased the limit to £250,000 for expenditure incurred on or after 1 January 2013 for a two year period before the limit falls back to £25,000 on 1 January 2015.

Summary

Immediately following re-unification in Germany, there was a wide range of incentives offered to encourage new investment, mainly in the East. But these are progressively being reduced as a consequence of EU pressure, except for some remote areas declared to require special assistance. Thus it may be concluded that the gap between Germany and the UK in terms of incentives for investment is closing. But despite this the level of overall investment in Germany remains far higher.

10. The German tax equalisation system

This system is very complex and in this report the intention is only to provide a basic overview of the main features.

As we have previously seen, Germany has very strong and independent Länder (States) and local authorities. In order for these States and authorities to exercise the responsibilities imposed on them under the Constitution (the Grundgesetz or Basic Law in Germany) they require adequate financial resources. Further, the Länder are guaranteed free and independent control over these resources. This high degree of local autonomy is achieved by these authorities having their own tax-raising capability and receiving other funds through tax redistribution. As a consequence of this financial independence, they are able to pursue their own policies vigorously.

Aligning the revenue of the Länder is a fundamental principle and is intended to create and maintain equal living conditions for the entire population in all of Germany.

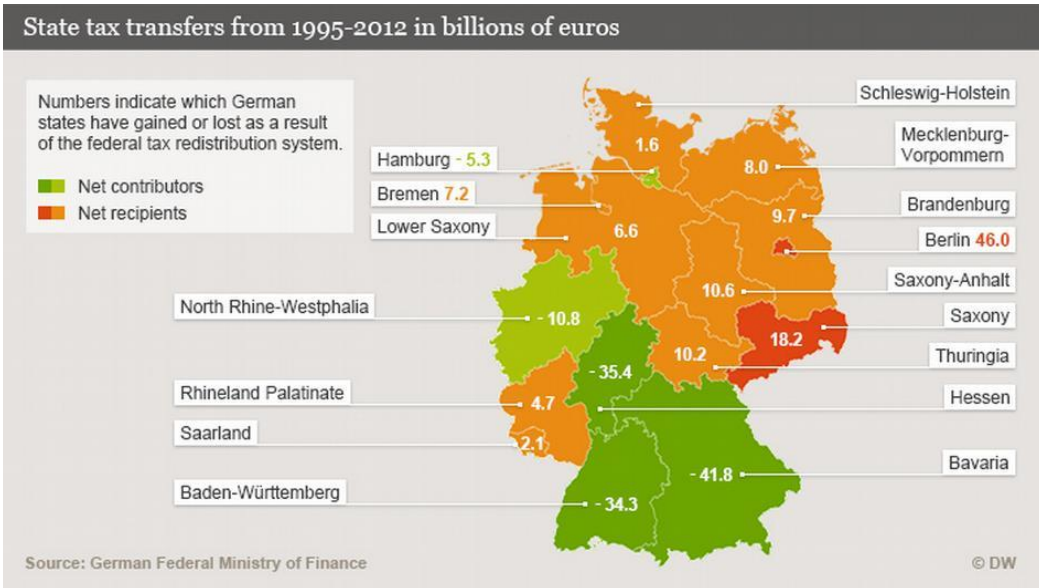
The procedural regulations in this regard are divided into four stages[6] and may be summarised as follows:

1. First, the entire tax revenue is distributed to the two levels of government – namely the federal government and all the Länder – and the municipalities receive a supplementary grant of revenue (vertical distribution)
2. Next, the total Länder portion of tax revenue is assigned among the various Länder (horizontal distribution)
3. In a third stage, there is equalisation between the poor Länder and the rich Länder
4. In addition, poor Länder also receive funds from the supplementary federal grants

The details of the individual stages for those with a specific interest and a strong disposition are set out in Annex IV.

In practice, despite all this complex redistribution, differences still exist between the Länder, particularly between the Länder in the West and the 'neue Länder' in the

East. Not surprisingly there is continuous friction between the donor and recipient Länder and the relevant laws are due for review in 2019. But in this debate, it cannot be ignored that Bavaria was once one of the poorest of the Länder and is now the largest donor. Some of this transition can be attributed to the tax redistribution.



11. Finance, financial reporting and control

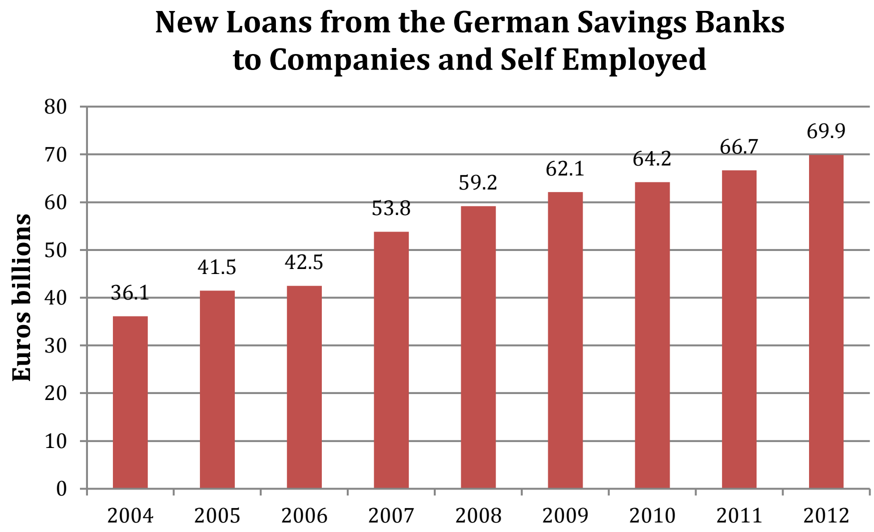
Finance for business

This is a topic of great relevance; but one already covered in detail in another study for Civitas[7] and readers are referred to this for further information. Reproduced below are some extracts from the work and the conclusions reached:

Whilst some of the major German banks and state banks were culpable of following the same strategies as the US and UK banks, which led to the financial collapse, there has been one shining light in all this calamity; and these are the German Savings Banks.

The German Sparkassen (Savings Banks) in total provide nearly half of all finance to German businesses. As has previously been demonstrated, nearly 99 per cent of all German businesses have annual revenues of less than €10 million. For such companies provision of finance via the capital markets is neither economic nor indeed in most cases realisable. Many of the larger family businesses are not prepared to consider market finance as they remain determined to retain control of the business. The Savings Banks provide in every local community across the country immediate access to finance for these small and medium sized companies. The local Savings Bank is regarded as the 'house bank' and ensures a long term and secure relationship with each of their commercial customers.

The remarkable success of the German industrial Mittelstand in the last 60 years is directly related to the financial and overall economic support that has been provided by these Sparkassen. As previously commented, German manufacturing industry went through an acute recession in 2008 and 2009. The financial support given in this critical period by the Savings Banks proved vital not only in terms of survival, but in the ability of industry to emerge from the recession much faster as they were able to retain most if not all of their employees.



Source: Sparkassenverband and SIMAS

In terms of structure, organisation, operation and definition of responsibility, seen from an Anglo-American perspective, they are unique. They provide not just finance but are obligated by their constitution to support the sustainable development of the total economy within their defined geographic business area. They also have very significant social responsibilities that extend well beyond provision of banking services. The Savings Banks are not state banks but are essentially credit institutions operating under public law.

In one interview with a director responsible for credit control, the question was asked as to how his local Savings Bank responded in circumstances where a company found itself in severe financial difficulties and there appeared to be no reasonable expectation of a solution. The response was 'Well first it needs to be recognised that in all probability in such a case, over 50 per cent of the employees will hold current and savings accounts with us!' But this should not be interpreted as suggesting that the savings banks are anything other than highly commercial. They are legally and financially independent and operate according to commercial principles, with an obligation to use local deposits to convert into local loans. There is a record of low debt write-offs and customers are protected with a highly comprehensive joint liability scheme.

In contrast, small and medium sized British industrial companies continue to suffer from an acute shortage of finance from the British banking system; and when finance is available it is often on unacceptable terms. The problem is exacerbated by the heavy centralisation of the major clearing banks, which leads to decisions on lending being based on formulaic processes and computer analyses in some remote central office. The concept of local managers with detailed knowledge of the area and of the loan applicants has largely been eroded. Further, there is usually a demand for substantial collateral, which is difficult if not impossible to comply with for start-up operations and many other small businesses.

Financial Reporting

Until 2007 only the public liability companies (Aktiengesellschaften) and other very large companies employing over 2,000 people were obliged in Germany to publish accounts. There was no central register and companies filed locally in over 400 Handelsregisters (Commercial Register at the Chamber of Commerce). German accounts, apart from internal management requirements, were traditionally produced for taxation purposes only and not for the benefit of other interested parties. Further, there was rarely any penalty for failure to comply with filing requirements. Accordingly, except for publicly quoted companies, few companies actually made any effort to file accounts. This explains why many privately owned companies are still very reticent about making known their financial information.

In November 2007, the German Parliament passed the German Accounting Law Modernization Act which seeks a closer alignment of national accounting standards and practices with IFRS (International Financial Reporting Standards). In accordance with the EU Accounting Regulation, IFRSs as adopted by the EU are required for the consolidated financial statements of all European companies whose debt or equity securities trade in a regulated market. Nevertheless, in April 2009 the Act to Modernize Accounting Law was passed preferring the GAAP (Generally Accepted Accounting Principles) for small-medium sized companies without public accountability. It considered IFRS ‘cost-intensive and highly complex’.

The law on electronic commercial registers and registers of cooperative societies as well as the company register (EHUG) came into force on 1 January 2007. This law also introduced changes affecting the publication of annual accounts of German companies. Since January 2007, annual accounts no longer have to be submitted to the commercial register but filed with the publisher of the German electronic Federal Gazette (elektronischer Bundesanzeiger), the Bundesanzeiger

Verlagsgesellschaft mbH. This applies to all annual accounts which relate to the 2006 financial year or a subsequent financial year.

It is now compulsory for all companies limited by shares, i.e. all public limited liability companies and partnerships limited by shares and all private limited liability companies to file and publish annual accounts once a year.

The amount of information that has to be registered and what is publicly available is governed by a very complex set of regulations covering the size and type of company, asset value, turnover, and number of employees (for details see Annex III).

Large and medium-sized companies (medium-sized companies in accordance with § 327 of the German Commercial Code can take advantage of certain relaxations regarding the content of individual documents) must file the following documents:

- Statement of financial position and Balance sheet
- Income statement
- Notes
- Management report
- Additional documents specific to the legal form (e.g. details of the appropriation of profits)
- Report of the Supervisory Board, Auditors' certificate etc.)

Small companies can make use of the facilities under § 326 of the German Commercial Code and only have to file and publish a balance sheet and notes.

The EHUG Law has made a large contribution to better publicising of corporate financial statements in Germany and also to greater market transparency. In the past it was a major problem to obtain comprehensive and reliable financial information on small and medium sized companies. This has now radically changed and on-line access via the Bundesanzeiger works well.

12. Other Factors

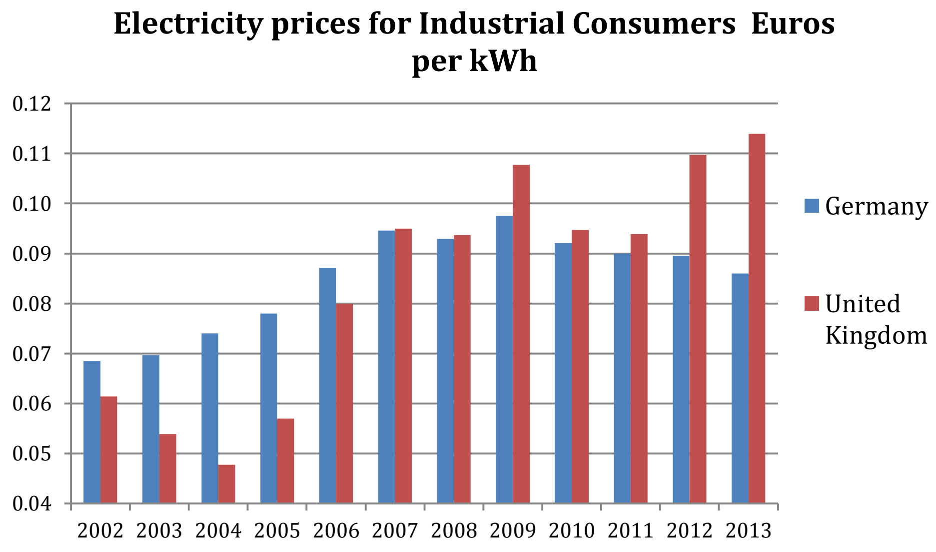
Energy policy

So far in this report, we have seen many factors that are conducive to the conduct of efficient and competitive business in Germany. The energy and particularly the supply of electricity is not one of them. The situation is akin to something out of Alice in Wonderland where on a day of low demand with the wind blowing and the sun shining the owners of conventional generating plant (coal and nuclear) are obliged to pay the owners of the grid to take the electricity they produce. The grid becomes unstable when close or above capacity and thus prices become negative to protect the grid from overloading. The power plants using nuclear fuel or brown coal are designed to run at full or close to full capacity and cannot easily reduce production. As the energy from solar and wind is given priority, the burden of adjustment falls on gas-fired and hard-coal power plants, where output now often drops to ten per cent of capacity and as a consequence the owners are making huge losses. The growth of solar and wind power is destabilising the grid, and is likely to result in failures. It is also damaging the established utilities and replacing them with something less reliable and much more expensive. But these established utilities are indispensable as when the sun does not shine and wind does not blow, they are essential to maintaining supply.

The Fukushima nuclear disaster in Japan panicked the German government into a decision to order the immediate closure of eight of Germany's nuclear-power plants and a phasing out of the other nine by 2022. Further, the development of shale-gas in the USA has caused coal that had previously been burned there to be exported to Europe, thereby reducing coal prices in Germany relative to gas prices. At the same time, carbon prices have fallen because there were too many permits to emit carbon in Europe's emissions-trading regime. This has reduced the penalties for burning coal, thereby maintaining profit margins at coal-fired power plants at a high level whereas gas-fired plants are running with crippling losses. The increase in coal-burning has resulted in the opposite of what was intended with German carbon emissions significantly increased.

Renewable energy in Germany has taken a growing share of the market and reduced wholesale prices. But the subsidy cost has been huge and the environmental gains are so far non-existent. Huge sums need to be invested in an extended grid network, (the renewable sources of energy are located mainly in the north of the country, remote from the main demand in the south) but the major utilities have had their balance sheets devastated by the energy policies and have no possibility of providing support.

If one is critical of German energy policy, then that in the UK is no better. There has been a total absence of a long term strategy, which has resulted in the annihilation of the UK civil nuclear energy industry that used to be a world leader. The belated recognition of the essential value of nuclear energy has come too late and the recently ordered next generation of nuclear power stations will be designed and built (apart from earthmoving) mainly by overseas contractors. The result of all this is shown below in the comparison of UK and German electricity prices for industrial consumers:



Source: Eurostat and SIMAS

Electricity prices for industrial consumers (Euro per kwh)			
	Germany	United Kingdom	UK electricity prices as a percentage of German prices
2002	0.0685	0.0614	90%
2003	0.0697	0.0539	77%
2004	0.074	0.0478	65%
2005	0.078	0.057	73%
2006	0.0871	0.0799	92%
2007	0.0946	0.095	100%
2008	0.0929	0.0937	101%
2009	0.0975	0.1077	110%
2010	0.0921	0.0947	103%
2011	0.09	0.0939	104%
2012	0.0895	0.1097	123%
2013	0.086	0.1139	132%

The current position is that British industry is now carrying a cost penalty of over 30 per cent on its electricity prices compared with German competitors.

Planning and the environment

The large number of highly successful small and medium sized German companies has been discussed in previous sections. Their location and distribution is also of relevance. For anyone familiar with Germany, it is obvious that most villages and small towns have a modern industrial estate, usually well landscaped and surrounded by trees and often in very beautiful parts of the country. The buildings are usually built to a very high standard with real architectural style reflecting the pride and confidence of their owners. There is recognition that although protection of the countryside and the environment is an important obligation, planning also has to take into account the needs of the people and the economy. This fundamentally includes a planning strategy to ensure local jobs for local people. The situation that exists in the UK, where the countryside is largely occupied by wealthy and retired people, while the local people have limited work opportunities and find house prices beyond their reach, is rejected in Germany. It is not unusual to find a small town being the home to not one, but a number of Mittelstand companies with world-leading positions in niche markets. In this study for example, two companies interviewed are based in an ancient and attractive town in southern Germany, one a leading company in construction equipment and the other in hydraulic machinery. It comes back to the point already frequently made in this report of pride in the local community.

Planning takes place within a decentralised decision-making structure and a strong legal framework, in accordance with the Basic Law (Grundgesetz). Those involved in the process include the federal government, the 16 state governments, the 114 planning regions and the approximately 14,000 municipalities. Although planning is a joint responsibility within all levels of government, the federal government does not produce or carry out plans, but has the responsibility for the overall framework and policy to ensure uniform implementation. The states, regions and municipalities are the actual planning bodies. The planning is based on a process of reciprocal influence by federal, state and municipal authorities, often referred to as the 'counter-current principle' (Gegenstromprinzip) where mediation and consensus building are main drivers, and allow for input and participation from lower levels, as long as the plans are consistent with higher-level goals and objectives,

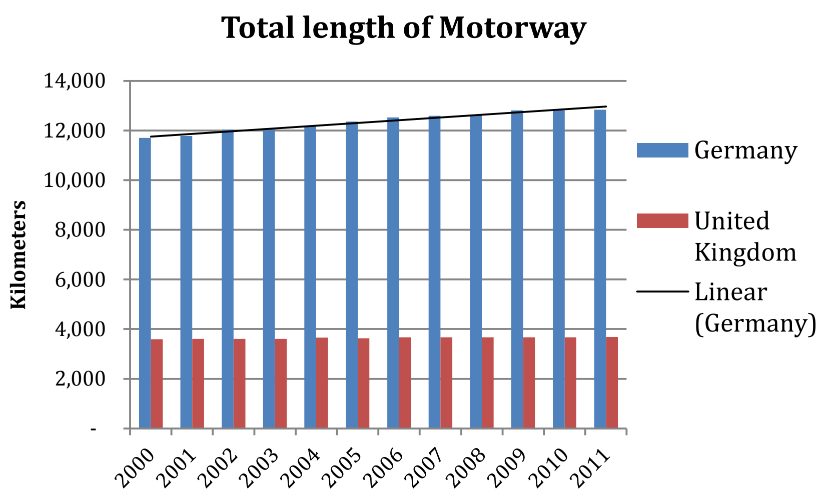
The framework incorporates both local land use planning (Bauleitplanung) and spatial planning (Raumordnung). These fall under two federal acts:

- Federal Building Code (Baugesetzbuch) that requires lower levels of government to make plans that are 'vertically and horizontally consistent'.
- Federal Spatial Planning Act (Bundes-Raumordnungsgesetz), which outlines broad guidelines to be met at the Land level.

In practical terms, planning permission must be obtained in accordance with the relevant state building law (Landesbauordnung). In some cases simplified variants of the planning permission procedure are possible. A standard planning permission procedure starts by submitting a building application to the municipality. The building authority verifies the application and forwards it to the building control authority. This authority contacts the administrations or internal administrative offices affected by the plan and any affected neighbours, where applicable. In normal circumstances the process ends with the granting of planning permission, which often contains special requirements covering the environment and nature conservation.

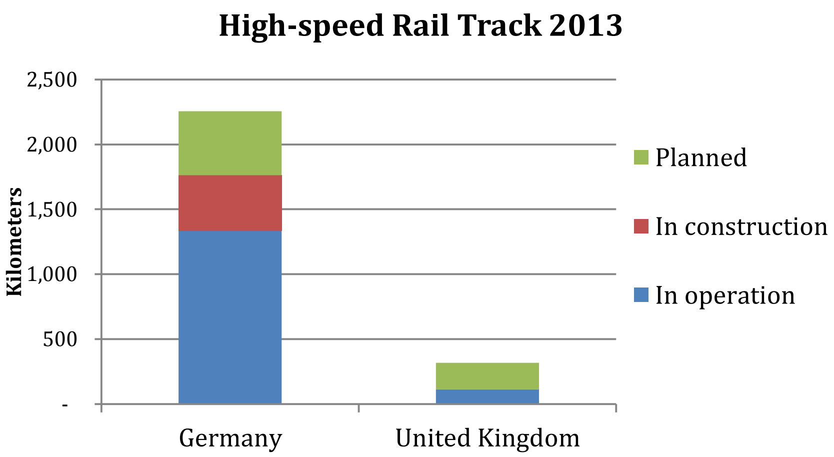
Infrastructure

Most are aware of the scale and efficiency of the German Autobahn. It is regarded as a vital element in both the industrial and social strategy of the country.



Source: Eurostat and SIMAS

It is recognised that fundamental to an efficient industry are advanced logistics that enable fast and reliable transfer of goods, materials and finished products.



Source: International Union of Railways and SIMAS

Development of infrastructure requires large investment that can only be realised on the basis of a sound economy. What we see in Germany is a propensity to invest at a high level both in the private sector and in the public sector. It applies not just to transport, but to the whole urban environment with clean streets, efficient medical care (an effective insurance backed combination of private and public providers) and decent housing.

Media

German newspapers report success in industry in detail and with pride (even taking into account the propensity of, for example, the *Bild Zeitung* to indulge in the most lurid of headlines) and this also applies to radio and television. It may be argued that this is all peripheral; but in fact it has a profound effect on the psyche of people in industry who are striving to succeed. They know their achievements will generally be reported in a balanced and positive way.

This results in the recognition by the general population of the essential value of industry to the German economy, in stark contrast with the UK. In Germany, an engineer is regarded as a highly valued member of society; in the UK an engineer is a person with a spanner and an oily rag who comes to fix the plumbing. The problem has first to be addressed in the schools, where sadly the majority of British teachers have little knowledge of industry and even less inclination to convey the attractions of a career in industry.

Conclusions

The United Kingdom has a huge resource in its people. It has outstanding academics and engineers and architects. Its leading companies are some of the best and most successful in the world. They all need to be at the forefront in providing the example and encouragement for more to follow – there is an urgent economic necessity not only to improve the quality but to restore the scale of industrial activity. Unlike the service sector, manufacturing is by definition open to competition from around the world; just to survive is a clear indication of a level of efficiency and productivity. There are many British companies that are not just good, but excellent and achieve great success in world markets. The problem from the perspective of the UK economy is that there are simply not enough of these companies.

The weakness in translating new inventions and processes into commercially viable products is starting to be addressed effectively by the government's initiative with the 'Catapult' project. The website of the UK's Technology Strategy Board describes the aim of the project as follows:

'A Catapult is a technology and innovation centre where the very best of the UK's businesses, scientists and engineers can work side by side on research and development, transforming ideas into new products and services to generate economic growth. They aim to:

- Use the power of people and organisations, working closely together to unlock opportunity, reduce innovation risk and speed new products and services towards commercial reality
- Help businesses to adopt, develop and exploit innovative products and technologies
- Offer concentrated expertise, access to cutting edge equipment and specialist facilities to develop and test ideas in reality

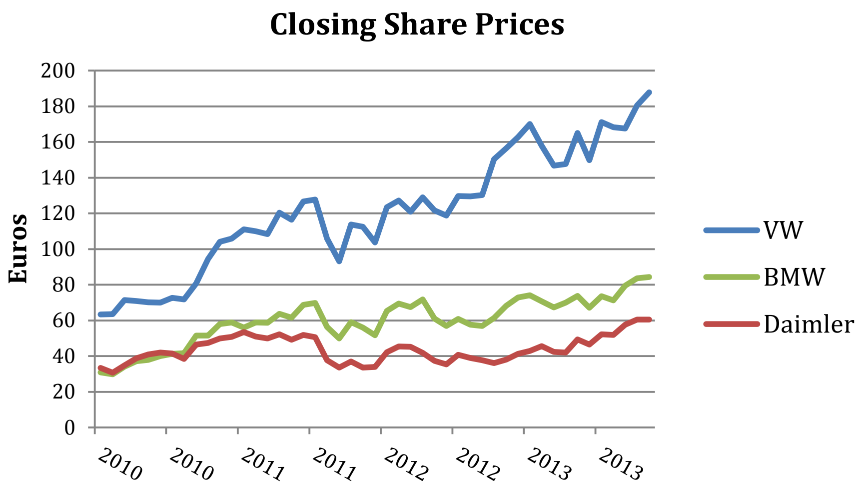
The Manufacturing Technology Centre (MTC) is embarking on a major new project to provide apprentices with high level training that will make them more attractive to the smaller industrial companies. There is other good news regarding further new government initiatives to encourage more and better trained apprentices. But all of this will not produce the desired results until the government recognises its duty to encourage a more equitable environment for the employment of apprentices. As long as the responsible companies strive to do their best whilst a large number of irresponsible companies take advantage of this by undertaking no training themselves, but rely on poaching when they require additional skilled labour, then no substantive progress will be made. Legislation is not appropriate, but creating an environment of accepted social responsibility as exists in Germany will bring about huge improvement. It is an initiative that the government can embrace that has no significant cost attached, but will bring about great benefit.

Little appears to be done to address the fundamental problem of short-termism in the UK. A year is a very short period of time when designing a new product, introducing a new manufacturing process or developing an international marketing strategy. Yet the financial community continues to claim that publication of quarterly reports is an essential element of good management.

How is it then that the majority of German companies holding market-leading positions and generating on average higher rates of return in comparison with British companies are able to continue to prosper? The unequivocal answer is that they operate in a climate where next quarter’s results are of little significance when assessed in isolation. The real drivers are innovation, product development, order books, market share and of course profitability viewed over a sensible timescale dependent on the type of business. One of the interviews conducted for this report was with the director of a world-leading company with approaching 90 per cent exports, generating consistently an EBIT of over 25 per cent and a return on in invested capital (ROIC) of over 40 per cent. An integral part of the company’s strategy is to ensure products are technically at least three years in advance of any competition. When asked about the importance of profits, the director responded ‘*man atmet um zu leben und lebt nicht um zu atmen* – one breathes to live and does not live to breath’. His pride is in the products and most of all in his commitment to the over 1,250 employees – in regular surveys over 93 per cent of all his employees are not just satisfied, but are proud to work for the company.

It is illustrative to compare the performance of the three leading German automotive manufacturers Daimler (Mercedes Benz), BMW and Volkswagen. All three are publically owned Aktiengesellschaften, but the majority control of BMW and Volkswagen is still held by private families and associates. The operating margins of BMW and Audi (the luxury end of VW) are 11 per cent, whilst that of

Mercedes Benz is a third lower at 7.4 per cent. Daimler has in the past undertaken unwise investments, whereas VW has been much more strategic in its investments in Audi and Porsche. BMW continues to maintain a strategy of organic growth. It is unlikely that Daimler has less able engineers or indeed management, but what differentiates it from its main competitors is the continued pressure it experiences from the stock markets to generate short term results. Despite this in recent years the Daimler share price has performed relatively poorly:



Source: Frankfurt Stock Exchange and SIMAS

The United Kingdom has experienced the wide scale takeover of many major industrial companies by foreign investors. Although many have effectively been a raid on intellectual property, followed by closure of manufacturing operations and R & D facilities, there is no doubt that acquisitions by companies such as Siemens or Tata have resulted in substantial improvements in the businesses concerned. Very often the improvement has been achieved by the same management as before who are now operating under new and more enlightened ownership. Jaguar Land Rover is a classic example. That so much potential could be released by creating the correct environment is surely a cause for optimism. It is, as Sir Alan Rudge so correctly observed, a matter of creating a 'greenhouse effect' that allows companies to prosper. This is the true responsibility of government requiring the provision of well-educated young people, a good infrastructure and availability of stable finance on acceptable terms.

For so long the concept of a free and open stock market was seen as the foundation of capitalistic endeavour, providing necessary equity funding to support new ventures and allow existing ventures to develop further. It was regarded as the 'efficient market' where every trend and development was immediately reflected in the share price. The reality is that it now fails in both respects; funding to new businesses has been eroded and the huge level of speculative trading totally distorts the real value, seen over a sensible time horizon, of the businesses whose shares are being bought and sold. The concept of long term stable capital has disappeared and has been replaced by a casino like operation, where effectively the traders are only competing against themselves. The operation of the stock market is now largely based on securing tiny margins on huge volumes of computer driven trading, which produces large profits for the traders and professional advisors, but contributes very little to true wealth creation. Effectively the growth of financial services has resulted in the decimation of British industry – see the balance of payments graph in the introduction.

It is not just the trading aspects that do so much damage; the whole of the predatory mergers and acquisitions business is predicated on selling short term with total disregard for the damage it does to the companies and the people whom they employ. Sir Anthony Bamford, chairman of the highly successful British manufacturer JCB, has stated that 'as a publically owned company we would no longer exist'. Why do other highly successful British companies such as Renishaw fight to ensure that although they are quoted, the owners still retain a majority holding? It is extraordinary that now companies are reporting substantial cash holdings in their balance sheets, the cry goes up in the financial press that this cash has to be used to fund another round of acquisition activity – an activity that is proven in general to reduce value for their shareholders. Are they entirely unaware that industry in the UK, in real terms, invested less than Turkey and Mexico in productive plant and machinery in 2012?

This report has demonstrated that the highly successful German industrial companies in the Mittelstand can survive and prosper without any engagement with a stock market – indeed on average they substantially out-perform British companies. But this is entirely dependent on being able to obtain necessary funding from alternative sources, such as the local savings banks and other providers of finance that they can rely upon, without being exposed to withdrawal of funds at short notice, often on the slightest pretext.

To bring about change will be a phenomenal task due to the huge vested interest in maintaining the status quo. It is not just the stock market, but the large number of people engaged in the legal, accountancy, banking and business consultancy sectors that will resist. The first step, however, is for the current disastrous situation to be recognised. Fundamentally, wealth for a nation can only be created by digging material out of the ground, farming, building and manufacturing products and the export of services. The rest, despite the value, indeed necessity, of many professional services amounts simply to 'taking in each other's washing'. This is also not to deny the importance of the public service sectors, but again by definition they ultimately can only be funded by the wealth creating activities described above.

For any successful society, there has to be a correct combination of reward for endeavour and compassion and support for those dependent on assistance from others. Inequalities require a strategy for resolution if resentment is not to build up. This includes both social and geographic inequalities. It is clear that one cannot transfer the whole of the Länder structure to the UK, but the concept of delegating more powers to a local level is realisable. This would best be achieved through the main UK cities where a basic political structure and organisation is in place. There are perhaps parallels with Victorian times when say Neville Chamberlain could first build a power base in Birmingham. This could also provide the foundation for regional banking to replicate some of the advantages that the German Savings Banks offer.

This report inevitably highlights many aspects of British industrial and commercial activity that compare unfavourably with that found in Germany. But if positive change is to be achieved, then open recognition of the problems is the first step. As in many areas of life, it is benchmarking against best practice that provides the most effective tool for realising new commonly accepted objectives.

In summary this report concludes that the following fundamentals need to be addressed in the United Kingdom:

Education

- Provide a structure where the interests of all can be protected, but the very best young people, irrespective of resource and background, have the opportunity to reach the highest levels of achievement

- Create an environment where practical skills are regarded as an alternative to academic studies rather than a second best option
- Introduce incentives for the study of subjects that contribute to wealth creation
- Train teachers of the importance of industry to the economy

Training

- Ensure uniform and nationally recognised high standards
- Oblige all businesses to accept responsibility to train young people in relation to their size
- Lower the payments made to people under training so that they are more affordable to companies
- Provide on-going training after completion of apprenticeships with recognised qualifications

Finance to business

- Establish regionally based banks that have a defined remit to provide a service to their customers
- Ensure a clear division between the provision of banking services and trading on the bank's own account
- Provide a tax regime that discourages short term investment and trading
- Remove the tax advantages for leveraged acquisitions

Investment

- Introduce radical long term fiscal measures that encourage business investment to ensure a quantum increase in the current disastrously low levels
- Recognise that public investment has to be increased to provide the infrastructure that is necessary for industry and commerce to thrive

Regional policy

- Give more responsibility to regions to establish policies suitable for their specific needs and provide a method of funding that ensures both independence and responsibility

Social aspects

- Assign priority to individual rights and obligations to ensure that what can be done on the part of the individual should be done by the individual and not by the state

By these means a ‘greenhouse environment’ may progressively be established similar to that which a small to medium business in Germany experiences and which has brought so much benefit to their entire nation.

Appendices

Appendix I

List of Business Sectors covered:

Accountancy

Automotive components

Banking

Catering equipment

Construction plant and equipment

Flour millers

Hydraulic equipment

Machine Tools

Machines for water and gas analysis

Medical equipment

Restaurant chain

Scientific equipment

Appendix II

Forbes 2000 List Methodology:

'We first create four separate lists of the 2000 biggest companies in each of the metrics: sales 2000, profits 2000, assets 2000 and market value 2000. Each of the 2000 lists has a minimum cut off value in order for a company to qualify: sales of \$3.89 billion, profits of \$232.2 million, assets of \$ 7.85 billion and market value of \$4.25 billion. A company needs to qualify for at least one of the lists in order to be eligible for the final Global 2000 ranking. This year 3,400 companies were needed to fill out the four lists of 2000, each company qualifying for at least one of the lists. Each company receives a separate score for each metric based on where it ranks on the metric's 2000 list. If a company ranks below any metric's 2000 list cut-off (see above minimum cut-off values), it receives a zero score for that metric. We add up the scores for all four metrics (equally weighted) and compile a composite score for each company based on their rankings for sales, profits, assets and market value. We sort the companies in descending order by the highest composite score and then apply our Forbes Global 2000 rank. The highest composite score gets the highest rank.'[8]

Appendix III

For the purposes of registration of annual accounts with the Bundesanzeiger, companies are defined in three categories:

1. Small companies limited by shares which exceed no more than one of the three criteria specified below:

    - Balance sheet total: €4,840,000
    - Turnover: €9,680,000
    - Annual average of 50 employees.

2. Medium-sized companies limited by shares which exceed at least two of the three criteria specified under 1 but exceed no more than one of the three criteria specified below:

    - Balance sheet total: €19,250,000
    - Turnover: €38,500,000
    - Annual average of 250 employees.

3. Large companies limited by shares which exceed at least two of the three criteria specified under 2.

A company limited by shares is always regarded as large if it is active in an organised market.

A business that belongs to one of the following special groups:

- credit institutions
- financial services institutions
- pension funds or
- insurance undertakings

must publish its annual financial statements and reports in accordance with the provisions applying to large companies, irrespective of size.

Appendix IV

Further details of the German Tax Equalisation System

i. Vertical distribution

Income tax, corporation tax and VAT are divided between the Federation and the Länder. In addition, the municipalities are entitled to a share of the income tax and VAT. These taxes are referred to as joint taxes. The Federation receives 42.5 per cent of the income tax, 50 per cent of the corporation tax and around 53 per cent of VAT. The revenue accruing to the Länder is 42.5 of the income tax, 50 per cent of the corporation tax around 45 per cent of VAT. The municipalities receive 15 per cent of the income tax and around 2 per cent of VAT.

The Federation receives all of the revenue from the federal taxes. The majority of the excise duties (such as energy duty and tobacco duty) as well as the insurance tax are federal taxes. The Länder are entitled to receive all of the revenue from Länder taxes. These include the inheritance tax, most types of transactions taxes (in particular, the real property transfer tax) as well as some other types of taxes that generate small amounts of revenue. The municipalities receive the revenue from the trade tax, the real property tax as well as the local excise taxes. The Federation and the Länder receive a share of the trade tax receipts through an apportionment.

ii. Horizontal distribution

At the second stage, the tax revenue belonging to the Länder as a whole is distributed among the individual Länder. Apart from VAT, the individual Länder are entitled, in principle, to the tax revenue which is collected by the revenue authorities on their territory (principle of local revenue). In the case of income tax and corporation tax, the principle of local revenue is corrected by special regulations, or what is referred to as allotment. With regard to income tax, this means that in the end every Land receives approximately the tax revenues that are collected for the income of its inhabitants inside or outside of its territory. Companies pay corporation tax centrally. In line with the principle of allotment, this tax is distributed to all states in which a company maintains a place of business.

VAT is not distributed according to the principle of local revenue. Up to 25 per cent of the Länder share of VAT goes as a supplementary portion to the Länder. They are meant for those Länder, whose receipts from the income tax, the corporation tax and the Land taxes per capita are lower than the per capita average of all the Länder. This partially closes the gap between the tax revenue of the fiscally weak Länder and the Länder average. The exact amount of the VAT supplementary portions depends on the amount by which the per capita tax revenue of a Land falls below the average per capita tax receipts for all Länder. A linear-progressive topping-up schedule is used to calculate the exact amount of the VAT supplementary portions. The remainder of the Länder share of VAT, at least 75 per cent, is distributed according to the number of inhabitants among all Länder. The distribution of VAT thus already has an equalising effect.

iii. Financial equalisation among the Länder

In this third stage, less wealthy Länder receive adjustment payments, which are funded by the more wealthy states. The starting point for the financial equalisation between the Länder is the financial capacity per inhabitant in each of the Länder. The financial capacity of a Land is the sum of its receipts and (64 per cent) of the sum of receipts of its municipalities. The local authority revenues are taken into account when assessing financial capacity because the Länder are responsible for providing their municipalities with appropriate and adequate financial resources. Länder with financially strong municipalities are required to spend less of their own finances on the financial resources of their municipalities than Länder with financially weak municipalities.

In principle, all types of Länder and municipality revenue are taken into account when determining the financial capacity, but in fact, basically the tax revenue is regarded as relevant for the equalisation scheme: The Länder share of joint taxes, the tax revenues of the Länder and partially the tax revenues of municipalities are taken into consideration for the financial equalisation among the Länder. In principle, the system of financial equalisation among the Länder assumes that the financial requirement per inhabitant is the same in all the Länder.

iv. Supplementary federal grants

In addition, less wealthy Länder also receive funds from the Federation. Supplementary federal grants are made by the federal government to poor Länder to complement the financial equalisation referred to above. These grants are uncommitted funds and serve to meet general financial requirements. There are two different kinds: general supplementary federal grants and supplementary federal grants for special needs. The eastern German Länder receive special-need supplementary federal grants. The calculation that is involved is even more complex than that described in this Section so far and further information if required should be sourced from the Bundesministerium der Finanzen in Berlin.

References

[1] See ERA Foundation Report based on ONS data and work by SIMAS.

[2] Gross return on capital employed, before taxes, of non-financial corporations is defined as gross operating surplus (ESA95 code: B2G_B3G) divided by main financial liabilities. The latter include currency and deposits (AF2), debt securities (excluding financial derivatives) (AF33) loans (AF4) and shares and other equity (AF5).

[3] Steedman, Dr H., 'Time to look again at apprentice pay? – Getting cost sharing Right', The UK Sectors Skills Development Agency (SSDA) (2008).

[4] *Liste der staatlich anerkannten Ausbildungsberufe* (BIBB, 2006).

[5] Bundesministerium für Bildung und Forschung (BBiG) Berufsbildungsgesetz (Federal Ministry for Education and Research Vocational Training Act Part I General Provisions)

[6] Bundesministerium der Finanzen.

[7] Simpson, C.V.J., *The German Sparkassen (savings Banks): A commentary and case study*, (Civitas, 2013).

[8] Forbes website, available at: http://www.forbes.com/sites/scottdecarlo/2013/04/17/global-2000-methodology-how-we-crunch-the-numbers/