



**VALUE OF  
FOOD & DRINK  
MANUFACTURING  
TO THE UK**



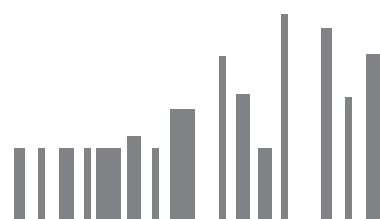
## **VALUE OF FOOD & DRINK MANUFACTURING TO THE UK**

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## EXECUTIVE SUMMARY

This report provides a summary of the impact of food and drink manufacturers on the UK economy. The manufacturing element of the industry, linking the outputs of our farms to the retailers in the high street, is not well understood and so the Food and Drink Federation (FDF) commissioned a report from the Institute for Manufacturing (IfM) to clarify what the impacts of the industry were and to understand what could be done to improve the economic and social impacts of the industry.

### **Food and drink is a significant and resilient element of the manufacturing sector**

The food and drink industry is a core element of the UK manufacturing economy, representing over 15% of manufacturing turnover and employment. Through the recent recession it was the sector that reduced its output the least and has returned to pre-recession output levels the fastest.

### **Innovation is a key focus for the food and drink industry**

The food and drink sector accounts for over 4% of the total R&D spend reported in the annual R&D Scoreboard. Due to the highly competitive nature of the industry, there are over 1,500 new products introduced each quarter. This mix of product and process innovation is a core strength of the sector.

### **The sector provides above average pay and relatively long tenure in employment**

The image of work in the food and drink industry is one of temporary and relatively low paid employment. Contrary to this common perception, the weekly earnings of employees in the food and drink industry are above those of the economy as a whole and job tenure appears to be over nine years on average for employees of food and drink manufacturers with only 6% temporary workers.

### **Strong and positive response to environmental and health concerns**

Since 1990 food and drink manufacturing in the UK has reduced its CO<sub>2</sub> emissions by at least 11%, showing a strong commitment to reducing the environmental impact of food production. At the same time, as there is a growing awareness of health issues related to diet and nutrition, the UK has become a leading source of new foods with health propositions. In 2007 36% of new health product launches in the European Union originated in the UK.

### **While exports have increased significantly, imports are rising faster**

Over the past decade exports of both lightly and highly processed food products have risen by approximately 15%, showing a strong demand for UK products abroad. However, there is a growing trade deficit for food and drink in the UK, rising from £2.6 billion in 1995 to £9.9 billion in 2007. This impacts on the UK's ability to increase its food independence and is an ongoing concern in terms of the environmental impact of transporting food great distances.

### **The food and drink sector could contribute significantly to future sustainable growth**

Due to its size, direct links to health outcomes and its impact on emissions from production and logistics, the food and drink sector should be a strategic focus of public and private action. Helping the sector to improve its trade balance, continue to invest in innovation and through supporting new low impact production technologies should be key public goals to retain a high value sector with significant social and environmental impacts.



# CONTENTS

Executive Summary	1
<b>1. Introduction</b>	<b>5</b>
1.1 Approach	5
1.2 Structure of the report	5
<b>2. Structure and value in food and drink manufacturing</b>	<b>7</b>
2.1 Structure of the food and drink industry	7
2.2 Is food and drink high value manufacturing?	7
<b>3. Value of the food and drink industry</b>	<b>11</b>
3.1 Summary of value impact	20
<b>4. Future importance of the food and drink industry</b>	<b>22</b>
<b>5. Conclusion</b>	<b>23</b>
Endnotes	24



## Background and structure of the project



## 1.0 INTRODUCTION

The impact of any one sector on the national economy is difficult to fully describe. Companies, and the industry they make up, provide jobs, invest in R&D, have a carbon footprint as well as a long list of other positives and negatives. The food and drink (F&D) industry is a case in point, as the real value of the industry to the UK is not well understood.

This report was commissioned by the Food and Drink Federation (FDF) from the Institute for Manufacturing, University of Cambridge, in order to investigate the impact of the food and drink industry across the UK economy. The starting point for the work was a sense that the industry has been narrowly interpreted either from the agricultural perspective, focusing on the farming base of the UK, or from the retail perspective, emphasising the large supermarket chains such as Sainsbury's or Tesco's. This misses a key element in the chain from raw materials to the consumer, the food manufacturers. This report fills that gap, summarising the impact of food manufacturers from the level of the national economy down to the consumer. It looks beyond the traditional measures of GDP and employment, developing a broader picture of the impact of food and drink manufacturers in the UK.

## 1.1 APPROACH

The approach taken in this report was to take existing national statistics, combined with other relevant publicly available statistics and data from a new sample of food and drink companies in the UK. In this way, the report provides a more up to date and more balanced picture of the value of the industry, as standard national statistics cannot capture some of the more complex impacts of an industry in a timely fashion.

The majority of the standard national data for industry sectors comes from the Office of National Statistics in the form of national accounts data. Further statistics were drawn from central government offices including the Department for Business, Innovation and Skills (BIS) and the Department for Environment, Food and Rural Affairs (DEFRA) and international sources such as the World Intellectual Property Organisation (WIPO). All statistical sources are detailed in the endnotes to this report.

The companies who responded to the survey are members of the FDF and were contacted via the FDF. Forty companies responded and represent food and drink manufacturers of all ages and sizes (see table one).

	Employees	Turnover (£M)	Table One Characteristics of the survey sample
Maximum	8500	12,000	
Minimum	5	0.109	
Average	1356	188	

The data from the survey allows us to add to the official statistics and to add a current perspective to the questions we are interested in addressing.

## 1.2 STRUCTURE OF THE REPORT

The rest of the report is structured as follows –

- **Section 2** provides an overview of the structure of the food and drink industry, as well as discussing how we can talk about value
- **Section 3** outlines the value of the industry to the UK at the present time
- **Section 4** takes a future look at the value of the industry
- **Section 5** discusses the key findings of the report

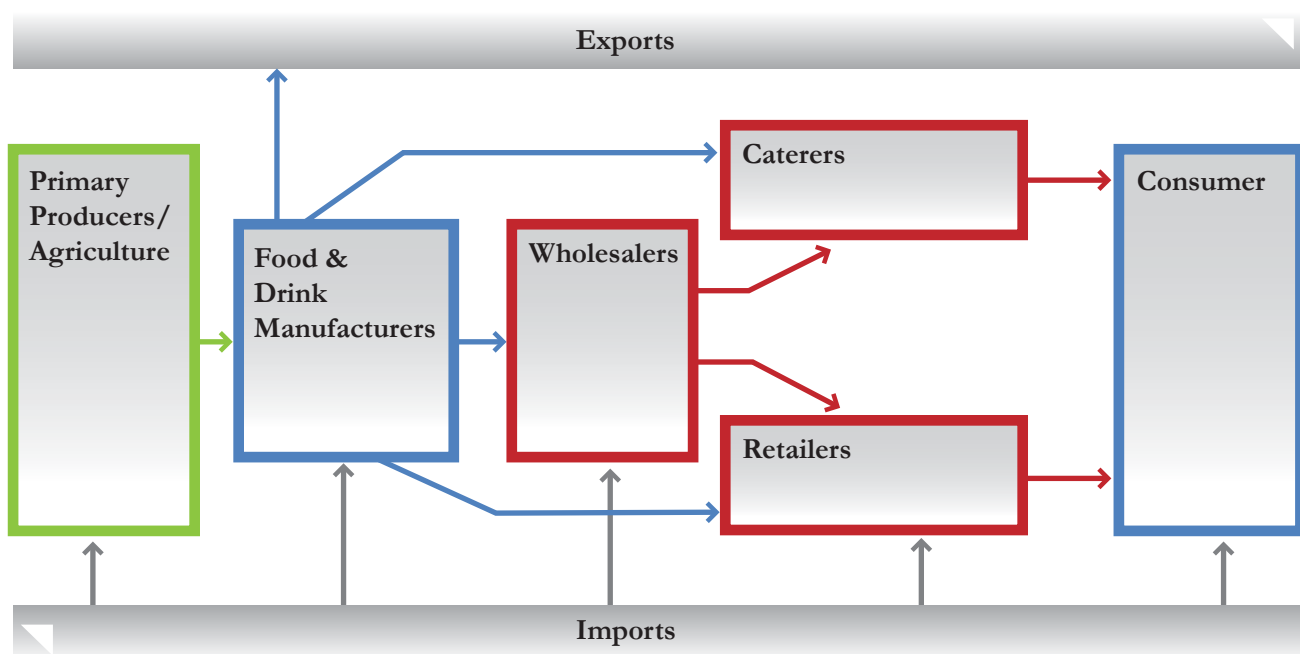
## 2.0 STRUCTURE AND VALUE IN FOOD & DRINK MANUFACTURING

Over the past five years the UK government has increased its focus on manufacturing, and is now looking to support growth through rebalancing the economy. The type of manufacturing being targeted is referred to either as high value or advanced manufacturing. This leads to the obvious question – is food and drink a high value manufacturing industry? This section briefly clarifies the structure of the food and drink industry and then goes on to discuss a framework for assessing the value of the food and drink industry to the UK.

### 2.1 STRUCTURE OF THE FOOD & DRINK INDUSTRY

The food sector encompasses the complete value chain from farmers, through food manufacturers, on to large and small scale retailers, and finally the consumer (figure one).

Figure One – interaction of companies from agriculture through to consumer



This flow, from the raw materials of agriculture, through the production processes of food manufacturers and on to the consumer via retailers, is an international story, with significant input from outside the UK and significant sales from the UK to foreign buyers. This report is specifically interested in the food and drink manufacturers, who we believe have not been well understood in discussions on the value of the overall food industry and the potential needs they have for support.



## 2.2 IS FOOD & DRINK HIGH VALUE MANUFACTURING?

Any discussion of high value manufacturing faces two difficulties – what manufacturing really is and whether it is of value. The definition of manufacturing that is now used broadly by the UK government is one that encompasses R&D, design, production, logistics and services.<sup>i</sup>

This definition makes a clear distinction between production (the act of making) and manufacturing (the collection of activities to develop, make and deliver products and services). This is important as it emphasises the breadth of potential value from investments in R&D, through the products made and on to the services delivered around products.

Most companies and industries have impacts that go beyond their financial performance. This extended value can be thought of along three dimensions – financial value, strategic value, and social value. Financial value is the most common way to express the impact of a company or an industry, in terms of revenue or contribution to GDP. However, there are strategic impacts of industries, such as whether they allow us to continue to access certain products or to enable us to make and export goods. The societal impact, positive and negative, of industries is more and more discussed, whether it is the quality of employment in the industry or the environmental footprint of a company.

Figure Two – definition of manufacturing



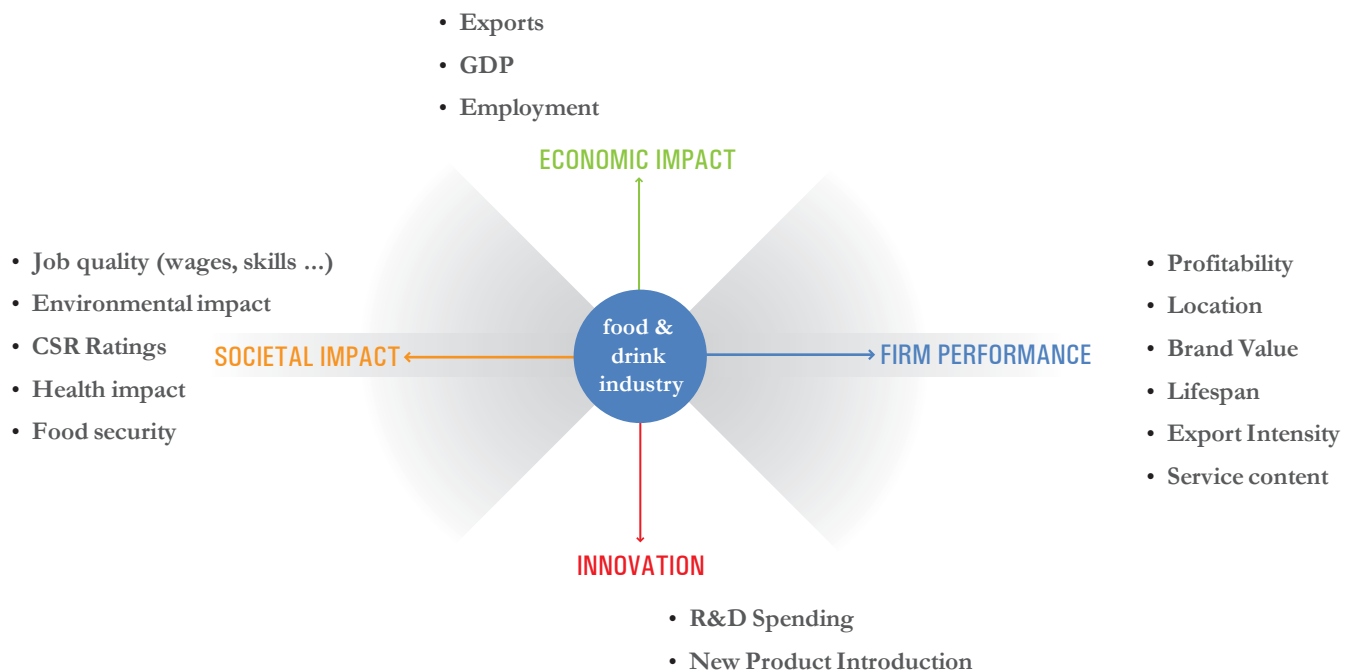
Table Two – example value matrix<sup>ii</sup>

	<b>Financial</b>	<b>Strategic</b>	<b>Social</b>
<b>Country</b>	GDP, GVA	Sustainable employment IP development	Environmental impact
<b>Investors</b>	Return adjusted for risk Growth	Adaptability Sustainability	Acts ethically
<b>Employees</b>	Wages Funding of retirement	Lifelong learning Opportunities for growth	Work-life balance Social interaction

These three dimensions of value also need to be considered for a variety of stakeholders, from the country as a whole, through investors and on to the employees and customers of an industry. No one stakeholder's perspective can provide the complete picture, as there are trade-offs that naturally occur between them. This can be seen in table two, where the types of value and possible examples are shown for different stakeholders.

Taking the original framework, we have adapted it for the food and drink industry, so that we can show the extended value map for all stakeholders and different types of value at the same time. Figure three sketches the potential impacts of food and drink companies on themselves, on the national economy (including innovation performance), and finally on individuals and society at large. This sketch also takes into consideration the availability of data and so is not exhaustive.

Figure Three – extended value map for the food and drink industry



Section three takes this value map and collects the best available data for the food and drink industry, discussing the strengths and weaknesses of the industry in terms of the value it provides to the economy and the country.



## **Value in food and drink manufacturing**





### 3.0 VALUE OF THE FOOD & DRINK INDUSTRY

This section discusses the value of the food and drink industry to the UK economy, using the extended value map developed in the previous section. As well as highlighting where there are key strengths, in terms of overall contribution to manufacturing turnover and employment for example, this section also highlights where there are improvements to be made. It is only with an honest appraisal of the contribution of the sector to the economy that a discussion can be had on what actions are needed from the industry and from government to ensure that the true value potential of the sector is realised.

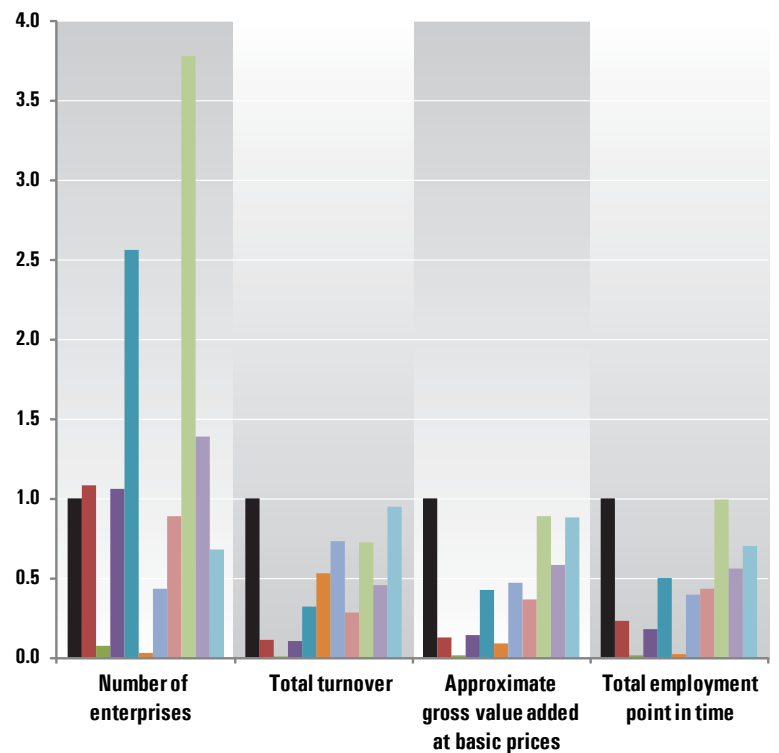
#### The food and drink industry is a high value, progressive sector

The common perception of the food and drink industry is one which involves low value companies with production processes that date back to the dark ages. Nothing could be further from the truth.

The sector<sup>1</sup> was the largest component of UK manufacturing turnover between 2001 and 2006, representing between 14% and 16% of turnover. In 2008 in terms of turnover, employment and gross value added (GVA), food and drink remains at the forefront, with approximately 15.5% of each.

As figure four shows, food and drink has a significant and leading contribution in turnover, gross value added (GVA) and employment in 2008 compared to other manufacturing sectors. The other sectors shown are normalised to the values for food and drink, so that a sector with a value above one is larger than food and drink, and one lower than one is smaller than food and drink. The only sector comparable to food and drink in terms of turnover is transport equipment manufacturing, whereas in employment terms metal product manufacturing is similar. It is interesting to note that the food and drink sector has fewer enterprises, implying a larger average number of employees per enterprise in food and drink.

Figure four – comparison of food and drink to other manufacturing sectors for 2008 (food & drink =1 for all indicators) <sup>iii</sup>



#### Manufacture by area

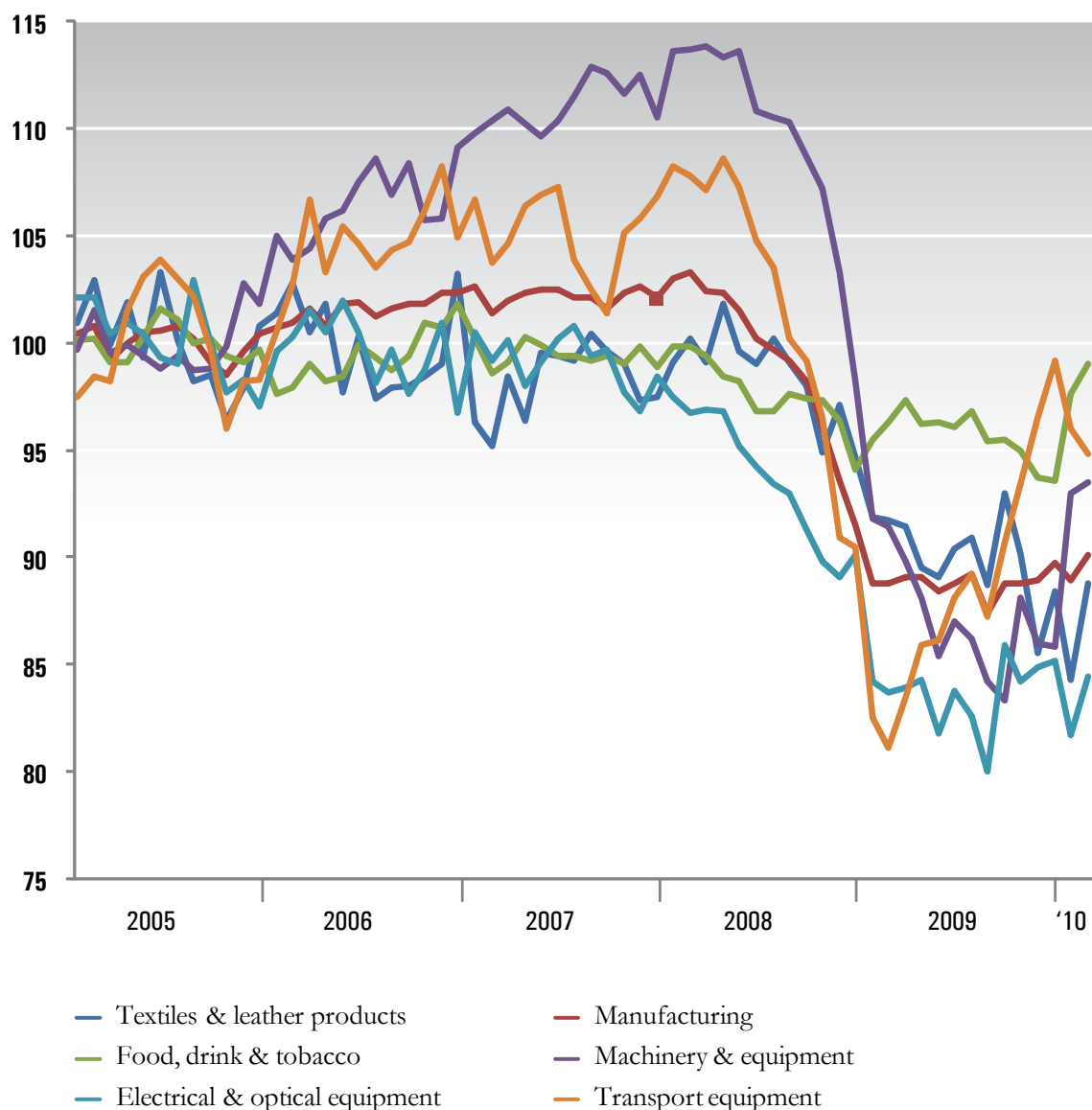
- Food products, beverages & tobacco
- Textiles & textile products
- Leather & leather products
- Wood & wood products
- Pulp, paper & paper products; publishing & printing
- Coke, refined petroleum products & nuclear fuel
- Chemicals, chemical products & man-made fibres
- Rubber & plastic products
- Basic metals & fabricated metal products
- Electrical & optical equipment
- Transport equipment

<sup>1</sup> The main statistics for the food and drink sector include tobacco production, which is a relatively small proportion of turnover etc. Where tobacco is excluded from the statistics we will note this.

**One of the most resilient sectors through the recession**

Through the credit crisis and the recent economic downturn the food and drink industry has remained very stable. The index of production for all manufacturing (indexed to 2005) is currently at 90 basis points, whereas food and drink is at 99 basis points, a 1% change from 2005 levels of production. As figure five shows, food manufacturing has had the least volatility and is the strongest in terms of recovery from the effects of the recession. For example, while food production is back to 2005 levels, the production of electrical and optical equipment is languishing at 84 on the production index, i.e. a 16% fall in output compared to the 2005 level.

Figure Five – levels of production for various industries through the recession (2005 = 100)<sup>iv</sup>





Through the recession food and drink production fell by the least of all manufacturing sectors. For May 2008 to May 2009, the production index for food and drink fell by 1.9, compared to 13.1 for manufacturing overall, 28.2 for machinery and equipment, and 21.2 for transport equipment.

This resilience is also seen in the export performance of the sector with 5.4% growth in exports for the first nine months of 2009 as compared with the same period in 2008. This compares “... extremely favourably with the -14.3% performance for all UK commodity exports during the same period”.<sup>v</sup>

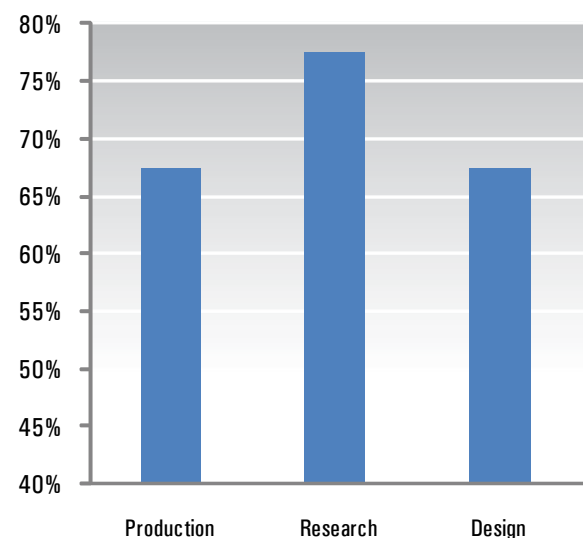
It should also be noted that there has been a consistent increase in productivity in the food and drink industry, over 4% higher in 2007 than 1998.<sup>vi</sup> This is lower than the increase in productivity for manufacturing in general and productivity improvements remain a key target for the sector.

### Strong bias to have production and research and development in the UK

As globalisation has increased the ability of companies to place their different functions in different parts of the world there has been a dispersal of many activities out of the UK. The food and drink sector appears to have a strong locational element, as two thirds of our survey companies have over 75% of their production in the UK, similar to the level of design retained in the UK (65% of companies have over 75% of their design work done in the UK). Research is even more concentrated in the UK with approximately 78% of companies having over 75% of their research carried out in the UK (see figure six).

The picture for levels of outsourcing is slightly different, with the majority of production done in-house by over 80% of the companies, while only 50% of design and research is held in-house for these companies.

Figure Six – percentage of companies with over 75% (i.e. significant majority) of each activity in the UK



The structure of the industry seems to have a dominant footprint retained in the UK, especially for R&D, although production is mainly done in-house R&D and design are equally kept inside as outsourced for our survey companies.

#### And likely to increase production, research and design in the UK

The turmoil in economic markets has made all companies wary of making significant investments at a time of uncertainty. However, the companies in our sample have an overall positive outlook, as they have indicated on balance a trend to increase production, R&D and design over the coming three to five years across the board. Figure eight shows the percentage of companies indicating that they will increase either production, research or design less those who are going to decrease each function.

Figure Seven – percentage of companies with over 75% (i.e. significant majority) of each activity in the UK

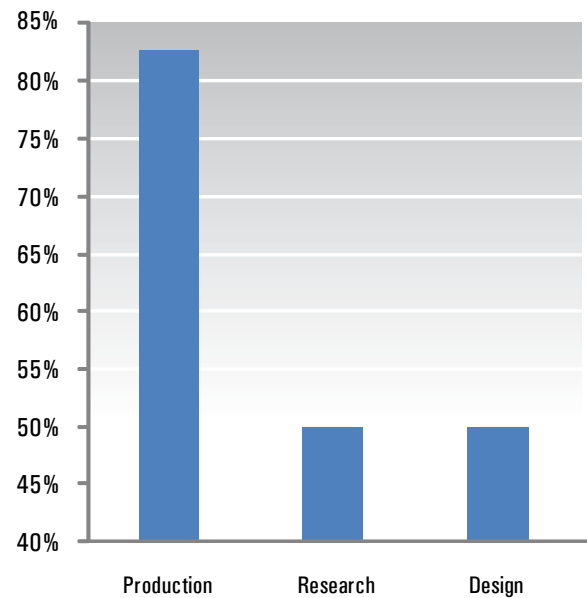
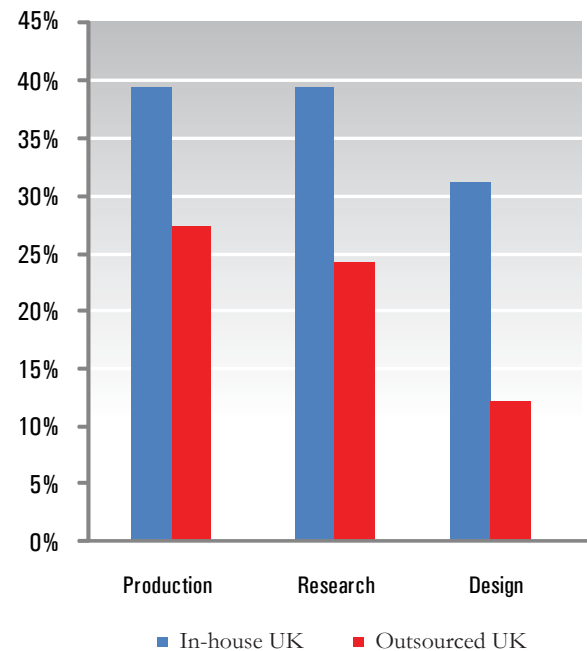


Figure Eight – percentage of companies intending to increase minus those decreasing by function





As figure eight shows, there is a balance of just under 40% of companies with an intention to increase their in-house research capability and their in-house production in the UK. This is in comparison to a balance of approximately 31% of companies increasing their in-house design capability in the UK. The overall balance of intended increases for outsourced activities is lower which may reflect a desire to reduce uncertainty in difficult times by keeping these activities within the company.

Also, as leading companies in the sector are moving into foreign ownership, there is a question as to whether control and location will remain biased towards the UK.

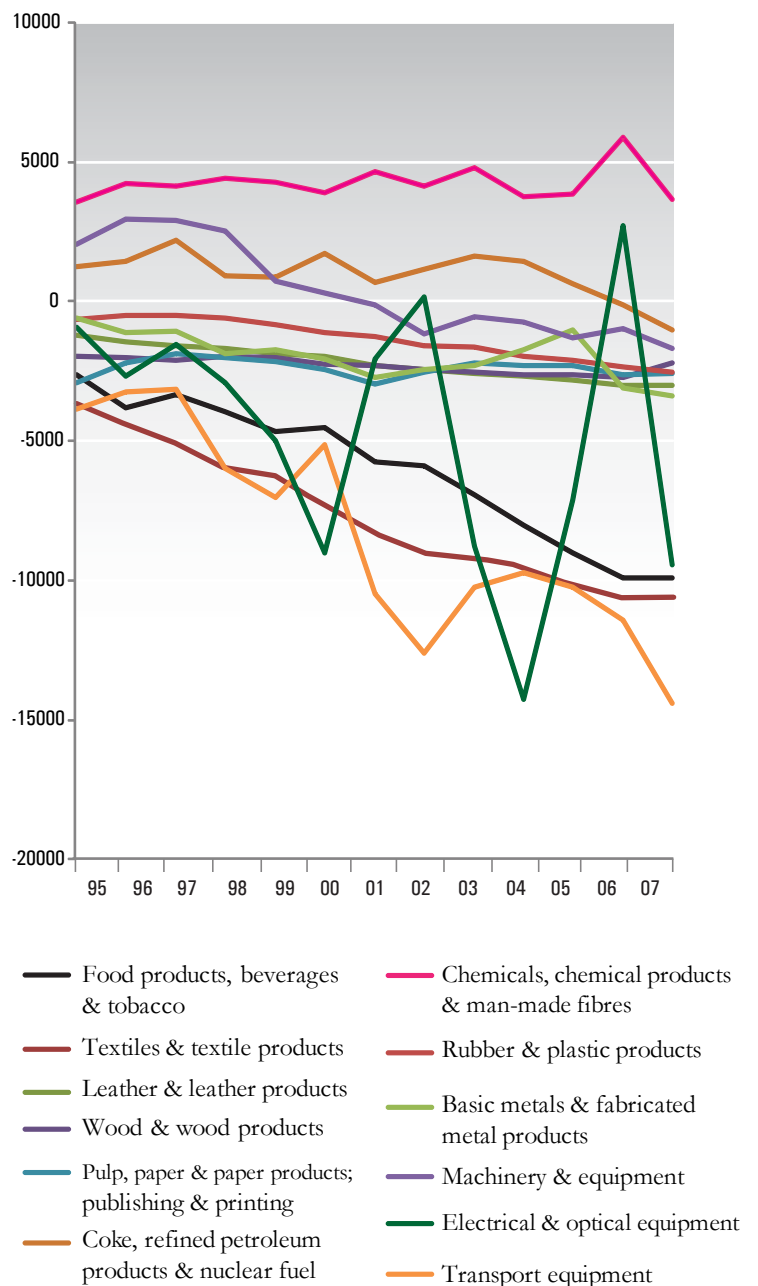
**Food and drink exports continue to strengthen, trade deficit grows**

The growth of exports from the food and drink industry in the past decade has been significant, with exports of highly processed food and drink (confectionery, jams, ice cream etc.) up 14% in real terms between 1999 and 2008.<sup>vii</sup> Over the same period, exports of lightly processed goods (such as meat and cheese) rose by 16%. Over the past year, “UK food and non-alcoholic drink exports grew 4.4% in 2009 to £9.65bn, a fifth consecutive year of record food and non-alcoholic drink export performance.”<sup>viii</sup>

However, there has been a growing trade deficit across UK manufacturing, as shown in figure nine.

The growth of a trade deficit for the food and drink industry is not unique, however it is one of the most significant. Addressing the trade deficit in food and drink could have multiple positive impacts on the UK economy beyond the broad call for reducing imports. It could increase self sufficiency in food production for the UK, create new jobs in food production and potentially reduce environmental emissions from food transportation.

**Figure Nine – trade balance for manufacturing sectors 1995 - 2007** <sup>ix</sup>





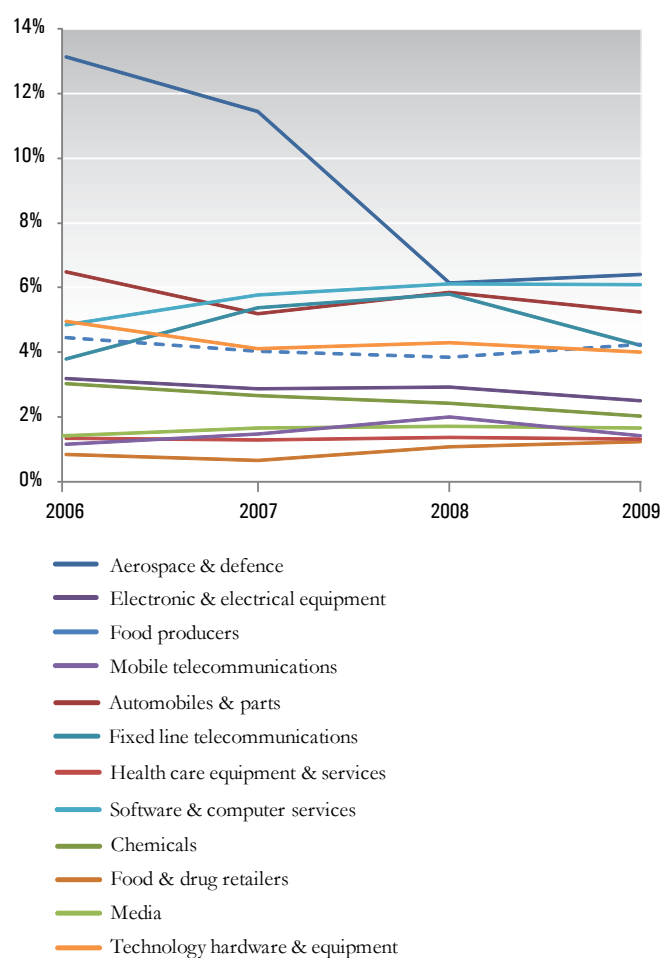
### Increasingly a sector with strength in innovation

Surviving in the food and drink industry demands constant improvement. The need to update and introduce new products has increased as competition in the sector has become fierce. This is reflected in the number of new product launches each year, with over 1,500 new products introduced each quarter since the beginning of 2008.<sup>x</sup> This level of changes demands significant innovation beyond simple repackaging or rebranding. It drives the need for significant investment in design, technology and research and development (R&D).

The food and drink sector provides a core contribution to the R&D carried out by UK companies. According to the 2009 R&D Scoreboard, UK food producers spent £1.13 billion on R&D, which represented 4.25% of the reported R&D in the scoreboard (figure ten).<sup>xi</sup>

Care should be taken in comparing industries on the percentage of the R&D scoreboard as the number of firms in the scoreboard has changed, from 800 in 2006 to 1000 in 2009. However, it appears that year on year the food and drink industry contributes over 4% to the leading R&D spending companies, a much higher proportion than most commentators would expect. Pharmaceuticals is consistently the largest sector, with approximately 35% of reported R&D attributed to it. However, food and drink is comparable to other leading sectors (for example automotive) and contributes more than electronic and electrical equipment, chemicals or media.

Figure Ten – share of UK R&D Scoreboard attributed to various industries 2006 - 2009



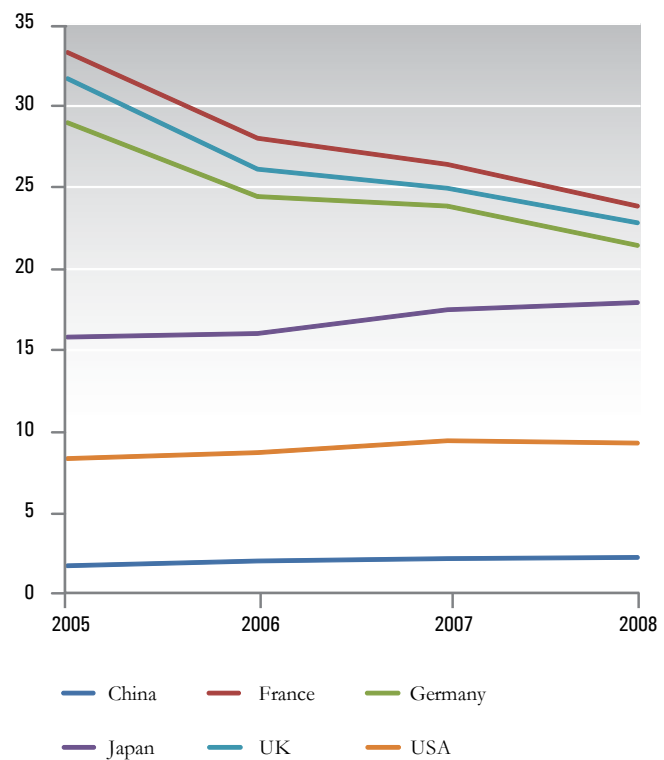
It should be noted that, similar to other sectors, there are two to three very significant R&D spenders in the food group with R&D spends many times greater than all of the other companies in the sector. However, there are over 20 food and drink companies who have strong R&D spends (i.e. just below to over £1 million) showing the distributed nature of the industry's R&D. The skewed nature of R&D spending appears to be repeated across other sectors, possibly reflecting the industrial structure of the UK. This high level of R&D skew is a concern beyond the food and drink sector and should be addressed at the national level.

### Although brand strength may be weakening

Intangible assets such as brand have risen in importance as companies vie for shorter and shorter attention spans from consumers with less and less loyalty. The UK food industry had only two food brands in the top 500 global brands (Unilever and Cadbury) in 2009.<sup>xiii</sup> The country with the largest number of food brands in the top 500 was the United States (with 5). Aside from food companies, UK retailers maintain strong positions with Tesco's at 20th globally, Sainsbury's at 97th and Morrison's at 144th.

At the same time the international position for UK food trademarks has softened (see figure eleven). The UK has been a leading user of international trademarks, but over the past five years this has weakened as the number of trademark applications connected to food has consistently fallen. This is in comparison to Japan and China which have had year on year increases in the number of international trademark applications. This may be due to food manufacturing moving away from the UK and to the Asian market, but it appears to point to a soft decline in branded food production strength for the UK and appears to agree with the widening trade deficit.

Figure Eleven – international trademark applications per million population related to food and drink<sup>2</sup>



<sup>2</sup> These figures are for NICE classification classes 29, 30, 32, and 33 by country of origin, taken from WIPO statistics available at [www.wipo.int](http://www.wipo.int)

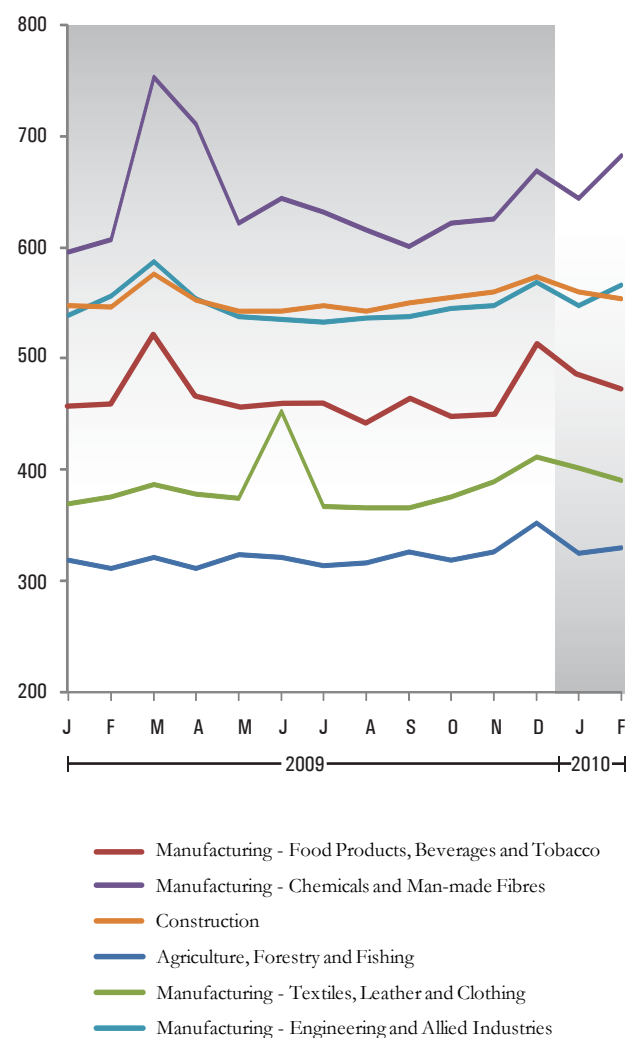
### Food and drink provides high quality jobs with long tenure

As discussed above, the food and drink industry is a progressive industry, with a growing innovation base and stability in output. Jobs within the sector reflect this changing nature, with those holding A-levels or further qualifications (level 3 or above) rising from just over 28% in 2007 to just under 35% in 2008.<sup>xiii</sup> The companies who responded to our survey have on average 20% of their employees educated to degree level.

Contrary to the image portrayed in much of the media, food and drink manufacturers do not have many temporary employees. In 2009, 94% of employees in the sector were permanent employees. The surveyed companies indicated that the average tenure for their employees was just under 9 years, indicating a high level of stability in employment. However, the industry is still male dominated (67% of employees are male) and has approximately one third of employees over 45.<sup>xiv</sup>

It appears that workers in the food and drink industry are relatively well paid, being in the middle of average weekly earnings across a number of industries, as shown in figure twelve. Looking at the average weekly wage for 2009, across the economy workers were earning £445 per week compared to £466 for the food and drink sector.

Figure Twelve – comparison of average weekly earnings across industries (not seasonally adjusted)<sup>xv</sup>



### And the sector has had a strong positive response to environmental and health issues

The environmental impact of food is spread across the food chain, from farming, through production and transport to the customer, to the impact in consumption. According to 2006 figures, the overall food chain impact in terms of green house gas emissions was 160 million tonnes CO<sub>2</sub> equivalent, of which the food and drink industry was responsible for 13 million tonnes, compared to 15 million tonnes for transport and 10 million tonnes for retail activities.

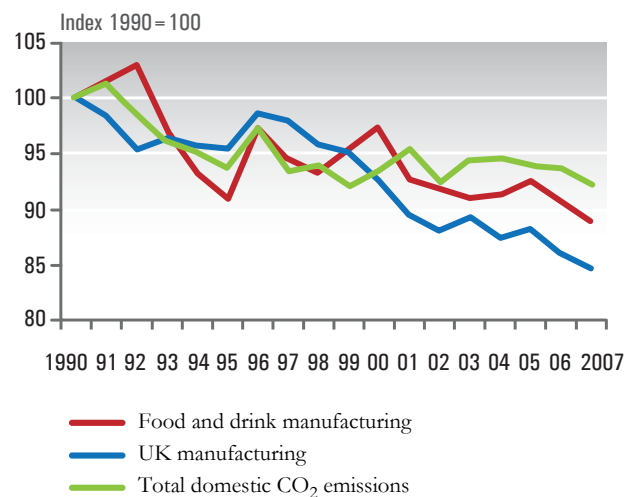
Since 1990, in line with other industries, there has been a significant reduction in emissions from the industry (figure thirteen).

There are encouraging signs that this trend in emissions reductions will continue, as the food and drink industry works towards the second Courtauld Commitment and works with agencies such as WRAP to reduce the impact of packaging.

As our knowledge of diet and health continues to improve the food and drink industry has been responding strongly. For example of the 5,000 products that were launched in 2009 in the UK, 24% were marketed as a health proposition.<sup>xvii</sup> The UK is seen as a leading source of new foods with health claims, as in 2007 36% of the EU's new product launches with a health claim originated in the UK (although the definition of health claim is not yet stable at the EU level).<sup>xviii</sup> This focus on healthy foods will need to continue, along with assisting consumers to eat responsibly, as according to the Cabinet Office "Studies have estimated that food-related ill health cost the NHS £6 billion each year (9% of its budget) ..."

The cost of food is extremely important to ensure that there is availability of high quality food at affordable prices. Since 1995 there has been a consistent decrease in the percentage of household disposable income spent on food and drink, from just over 10% to the current level of just over 8%. This indicates that prices have been declining and that households are under less pressure to meet their food needs.

Figure Thirteen – trends in CO<sub>2</sub> emissions for UK food and drink manufacturing 1990 - 2007<sup>xvi</sup>



### 3.1 SUMMARY OF VALUE IMPACT

The food and drink industry has impacts on the UK economy far beyond its significant contribution to GDP and employment. As shown above, the industry provides jobs of relatively long tenure, which demand significant skills and are paid above the average for the economy as a whole. The sector as a whole has been resilient in the face of the recent recession and exports have increased over the past decade. Finally, the sector has a large R&D spend and generates a significant number of new products each year.

However, there are a number of areas of concern for the food and drink sector and for the UK economy. The fall in international trademarks related to food and drink and the widening trade deficit point to a problem in attaining a measure of food independence and in being able to contribute to reducing the overall trade deficit for the UK economy. Also, the ongoing desire for positive social outcomes, in terms of health and environment, imply a need to support the industry as it attempts to continue to reduce emissions and provide high quality food at accessible prices.

Figure Fourteen – value map for the UK food and drink industry

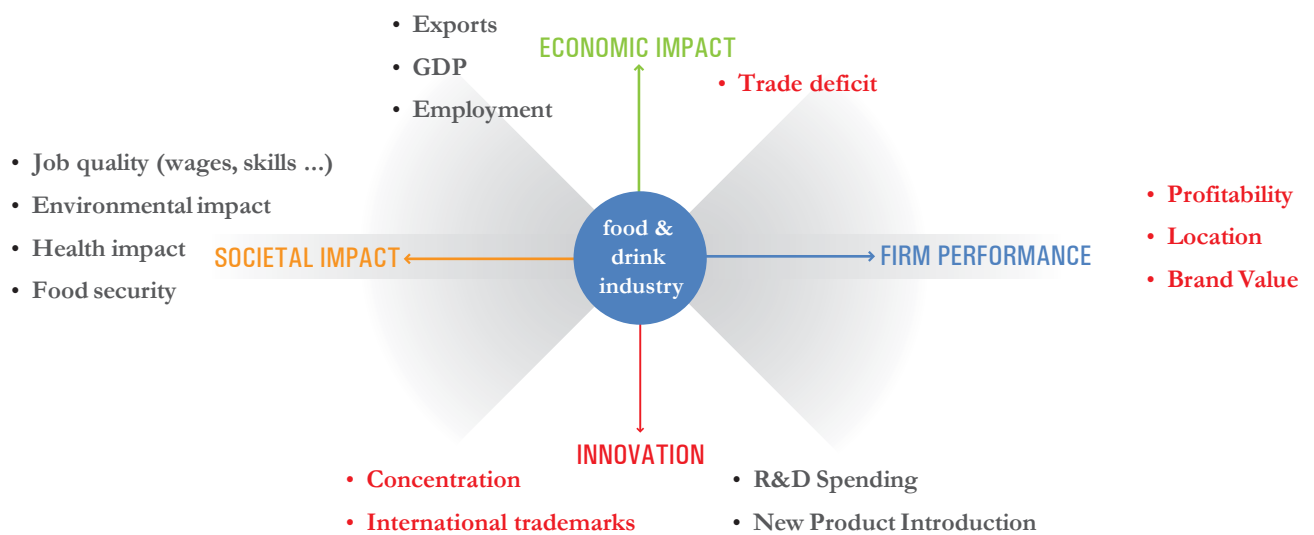


Table Three – summary positives and negatives for the food and drink

Positives	Negatives
<ul style="list-style-type: none"> <li>• Significant contribution to manufacturing turnover, GVA and employment</li> <li>• Strong export performance</li> <li>• Overall well-paid positions with high skill demands</li> <li>• Increasingly contributing to innovation/R&amp;D</li> <li>• Very resilient</li> <li>• Good improvements in environmental impact and response to health demands</li> </ul>	<ul style="list-style-type: none"> <li>• Lower than average productivity improvements</li> <li>• Concern over control/ownership (and therefore location decisions)</li> <li>• Trade deficit</li> <li>• UK control of brands, declining level of trademarks related to food</li> </ul>



## Moving forward



## 4. FUTURE IMPORTANCE OF THE FOOD & DRINK INDUSTRY

The food and drink industry will continue to be an important industry for the UK, not only in financial terms but also for its strategic and social importance. This is due to its size relative to the rest of manufacturing, its link to improving societal outcomes for health, the potential rise of the need for food independence and the link to environmental impact for food production and logistics.

Firstly the food and drink industry remains a significant part of manufacturing, both in terms of GVA and employment. A loss of strength in the food sector would have a strong negative effect on manufacturing output and employment. It would also take a significant contributor of R&D spending out of the economy at a time of strengthening competition based on innovation and knowledge.

Secondly, the potential fragmentation of global supply chains will imply a greater need for sourcing of raw materials and finished food products within the EU, if not within the UK itself. If the sector has not been maintained in the coming years, it will be difficult to reinstate it at the point it is needed for local production.

Why might there be a fragmentation of global supply chains? According to the UK Energy Research Centre “There is a growing consensus that the age of cheap oil is coming to an end”<sup>xxix</sup> and the argument on the future of oil has moved from whether there is a peak to oil production to when it will occur. It is likely this peak will occur between 2020 and 2040.<sup>xx</sup> There is already significant variability in projected oil prices. The Energy Information Administration yearly outlook for oil

prices is based on three scenarios based on different assumptions about economic growth and other factors. “In the high price case, world oil prices (in real 2007 dollars) climb from \$68 per barrel in 2006 to \$200 per barrel in 2030 ... In comparison, world oil prices rise to \$130 per barrel in 2030 in the reference case.”<sup>xxxi</sup> Coupled to the significant probability of more stringent emissions regulations this implies that global supply chains will become much harder to sustain.

This also feeds into the food and drink sector’s role in reducing carbon emissions. This reduction needs to embrace reduced global logistics, as well as working with the agriculture sector to reduce their emissions and working with consumers to reduce packing waste. The industry will be one of the first to feel the full force of increasing environmental regulation and declining oil availability which will lead to more local production and less global sourcing.

Finally, the food and drink industry will be a key element in achieving positive healthcare outcomes for large numbers of people within the UK. Achieving these goals demands a combination of changes in consumer behaviours and changes in the production of food, as well as maintenance of food variety available to consumers.

Due to these factors, the food and drink industry will both be a bellweather, as it adjusts to environmental and market pressures, and a strategic priority for the UK through its contribution to health outcomes, innovation investment and emissions reductions.

## 5.0 CONCLUSION

This report has discussed the value of the food and drink industry to the UK, using a broad definition of value that extends beyond pure economic impact. Using this framework it is apparent that the food and drink industry –

- Is a significant contributor to manufacturing turnover and the R&D spend of the UK
- Provides employment with above average wages and significant tenure
- Has responded positively to the need for emissions reductions

However, there are a number of concerns for the industry including –

- A rising trade deficit
- Falling level of international trademarks
- Lower than average productivity improvements

There are a number of limitations in this work that should be noted. The data that has been used is based on the best available public data supplemented by a brief survey of a small sample of food and drink manufacturers. Such data does not address a number of issues that could be included in this type of analysis, such as changes in ownership across the food and drink supply chain and brand value and impact beyond the global 500 level. It is hoped that the report will start a conversation on industrial impact both in this sector and across the UK economy.

There are a number of open questions from this work which should be addressed both in the industry itself and by the public agencies that are supporting the development of the industry. These include how changing ownership is affecting decisions in larger food and drink manufacturers, how to maintain and improve levels of innovation across the industry, and how productivity can be improved at a rate closer to the levels in the rest of the manufacturing sector.

The report shows that many descriptions of the food and drink sector are oversimplified, both in terms of what the industry's impact is in the UK and what the sector could provide in the future, ignoring the resilience of the sector, the innovation contribution, the strong environmental improvements and the link to societal health of food manufacturers. Seen in this way, the food and drink sector is a key element of future strength for the UK, providing value to the national economy in financial, strategic and social terms.



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## END NOTES

<sup>i</sup> For example, see BERR (2008) Manufacturing: new Challenges, New Opportunities available online at <http://www.bis.gov.uk/files/file47660.pdf>.

<sup>ii</sup> This framework was developed as part of the High Value Manufacturing report, which clarified how to think about the term and has helped the UK government to develop their approach to support for HVM. See Livesey, F. (2006) Defining High Value Manufacturing available online at <http://www.ifm.eng.cam.ac.uk/cig/documents/DefiningHVM.pdf>.

<sup>iii</sup> Annual Business Inquiry 2008 – 2009, Office of National Statistics.

<sup>iv</sup> Figures from the Office of National Statistics detailed index of production accessible online at <http://www.statistics.gov.uk/statbase/product.asp?vlnk=6230>.

<sup>v</sup> Figures from Leatherhead (2010) UK food and drink export performance.

<sup>vi</sup> DEFRA (2009) Food Statistics Pocketbook 2009.

<sup>vii</sup> DEFRA (2010) Agriculture in the United Kingdom, see in particular Chapter 8 Overseas Trade

<sup>viii</sup> Figures from Leatherhead (2010) UK food and drink export performance.

<sup>ix</sup> HMRC figures <https://www.uktradeinfo.com/index.cfm?&hasFlashPlayer=true>

<sup>x</sup> Figures from Mintel GNPD.

<sup>xi</sup> BIS (2010) The 2009 R&D Scoreboard. It should be noted that these figures do not include food retailers as they are contained in a separate category within the scoreboard.

<sup>xii</sup> Brand Finance (2009) Global 500 leading brands. .

<sup>xiii</sup> Figures from Improve (2010) Labour Market Information Profile 2009/10.

<sup>xiv</sup> Ibid.

<sup>xv</sup> Figures from ONS AWE release <http://www.statistics.gov.uk/statbase/product.asp?vlnk=14015>.

<sup>xvi</sup> Reproduced from DEFRA Pocketbook of Food and Drink Statistics 2009.

<sup>xvii</sup> Mintel Global New Products Database.

<sup>xviii</sup> Ibid.

<sup>xix</sup> UK Energy Research Centre (2009) Global Oil Depletion: An assessment of the evidence for a near-term peak in global oil production.

<sup>xx</sup> See EIA (2004) Long term oil scenarios online at

[http://www.eia.doe.gov/pub/oil\\_gas/petroleum/feature\\_articles/2004/worldoilsupply/oilsupply04.html](http://www.eia.doe.gov/pub/oil_gas/petroleum/feature_articles/2004/worldoilsupply/oilsupply04.html).

<sup>xxi</sup> EIA (2009) International Energy Outlook 2009.

## **VALUE OF FOOD & DRINK MANUFACTURING TO THE UK**

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