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#### **Executive summary**

This paper reports the results of a nationally representative survey of how the UK public views manufacturing, carried out in January 2012, providing for the first time an evidence base for the discussion on the image of manufacturing in the UK. Much of this discussion to date has been anecdotal, with little formal evidence on how public opinion has changed towards manufacturing over time.

According to successive governments the image of manufacturing is a major issue. Even before the credit crisis ministers and leaders in industry worried that younger people would not be attracted to careers in manufacturing due to how it was perceived by the public at large. Following the credit crisis and the continuing problems in the financial sector, manufacturing is now back in vogue. From the Prime Minister down the rebalancing of the economy through strengthening manufacturing is thought to be a key element of achieving more sustainable growth.

The results of the survey indicate that the public have a nuanced view of manufacturing. The UK public believe manufacturing to be high tech (50% agree) and that the share of manufacturing in the economy needs to increase significantly (72% agree). However, there is low agreement that manufacturing jobs are well paid (16% agree) and a concern that manufacturing jobs are the first to be moved overseas (74% agree).

The results of the survey suggest a number of areas where the UK government may need to place greater emphasis if it is to be successful in its long term aim of rebalancing the economy.

- Efforts to improve the image of manufacturing should acknowledge that the public has a clear image of manufacturing as being high technology and demanding high levels of skills
- Future campaigns on manufacturing need to address the current public narrative of low wages and low job security so that careers in manufacturing are represented accurately
- The public agrees (62%) that sectors of national importance should be targeted
- Only 29% of the public currently agree that government understands what is needed to strengthen and grow the economy

Compared to the United States, the public in the UK are less positive about jobs in manufacturing, with lower levels of agreement on whether manufacturing is well paid, highly skilled and high tech. Whereas one in three American respondents would encourage their child to pursue a career in manufacturing, only 1 in 5 UK respondents would do the same.

This report provides an evidence base for the ongoing conversation on the role of manufacturing in the economy. However it does not argue for a specific position on rebalancing. The aim of the paper is to ensure that the dialogue on manufacturing policy is well informed and based on the best evidence available.

#### Introduction

Much has been made of the need to rebalance the UK economy following the credit crisis and recession of 2008/2009. Prime Minister David Cameron, in what he himself called his first major speech, placed it front and centre for the Coalition. "Our economy has become more and more unbalanced, with our fortunes hitched to a few industries in one corner of the country, while we let other sectors like manufacturing slide." <sup>1</sup>

However there is an ongoing concern about the image of manufacturing and whether an overly negative image of manufacturing is hampering efforts to encourage manufacturing growth. As the share of manufacturing in the economy fell and employment in manufacturing declined strongly over the past thirty years newspapers appeared to be full of stories on the decline of manufacturing and the rise of the post-industrial society.

After nearly two years of the Coalition government how does the public think about manufacturing and the efforts of the government to rebalance the economy? This paper provides a summary of a nationally representative UK poll carried out by the IfM, University of Cambridge, in partnership with YouGov-Cambridge in January 2012. Based on 1,452 responses from adults across the country it paints a detailed picture of how people in the UK think about manufacturing, providing clarity on what has mainly been discussed anecdotally to this point.

This briefing paper presents an overview of the evolution of the policy narrative on manufacturing, focusing on how policy documents have portrayed the issue of manufacturing, and contrasts this to the opinions expressed by the public through this survey. A comparison is also made to a similar survey which has been carried out in the United States since 2008. Detailed data is presented as an appendix, as well as summary data on the survey sample.

The picture that emerges from this survey is a subtle one, showing that the public's views of manufacturing are closer to reality than some of the pessimistic voices in the media. But it also raises concerns about the viability of a rebalancing strategy based on a misinterpretation of how the public thinks about manufacturing.

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<sup>&</sup>lt;sup>1</sup> Full text of the Prime Minister's speech from May 28<sup>th</sup> 2010 is available on the Number 10 website at <a href="http://www.number10.gov.uk/news/transforming-the-british-economy-coalition-strategy-for-economic-growth/">http://www.number10.gov.uk/news/transforming-the-british-economy-coalition-strategy-for-economic-growth/</a>.

## Concern about the public's perception of manufacturing

The decline of manufacturing, and more specifically a worry that the public view manufacturing as no longer a part of the UK economy, has been a concern for many governments. The last Labour government came back to the issue a number of times, with the aim of improving the perception of manufacturing in order to strengthen employment in the sector. The current Coalition government has, following the credit crisis, similarly positioned manufacturing as key to UK growth and prosperity.

Why do policymakers believe that manufacturing suffers from a negative image problem? Between 1990 and 2009 the share of the economy (GDP) attributed to manufacturing fell from 22% to just over 11%, while employment in the sector fell from 5.2 million to 3.1 million.<sup>2</sup> This led to a stream of newspaper articles on how manufacturing was declining, what has been termed the deindustrialisation of the economy and the rise of the post-industrial society.<sup>3</sup> The context surrounding manufacturing policy was highly negative, and made worse by the repudiation of the term 'industrial policy', caricatured as picking winners, by successive governments since Margaret Thatcher.<sup>4</sup>

According to the 2004 Review of the Government's Manufacturing Strategy "Manufacturing matters to us all in the UK, but its importance can be hidden by a negative public image". Beyond whether the public understood manufacturing, a stronger claim was made – that "...widespread poor public perception of manufacturing industry [is] a root cause of a number of problems facing the sector ." This position appears to be an outcome of interviews with a large number of stakeholders within the manufacturing sector (from research institutes, through trade bodies, to individual companies). However, this is the sector's perception of the public rather than the public's perception of the sector.

The theme of poor public perception of manufacturing was revisited in the next iteration of government's manufacturing strategy in 2008. In a similar manner to the earlier document, the need for change was stated without significant evidence beyond the anecdotal. At this point it was thought that "We need to improve fundamentally the image of manufacturing for future generations." As a response to this perceived need the *Manufacturing Insight* programme was founded in order to make "...the public perception of manufacturing reflect the reality of a successful, modern and broad sector and ensuring young people are aware of the exciting career opportunities available."

<sup>&</sup>lt;sup>2</sup> BIS (2010) Manufacturing in the UK: Supplementary Analysis, Economics Paper 10B.

<sup>&</sup>lt;sup>3</sup> The term post-industrial is most associated with Daniel Bell and his 1976 book *The Coming of Post-Industrial Society*, Harper Colophon.

<sup>&</sup>lt;sup>4</sup> "... the 1980s saw the discussion of a positive industrial policy slip off the agenda for discussion in the UK ..." Beath, J. (2002) UK industrial policy: Old tunes on new instruments, *Oxford Review of Economic Policy*, vol. 18, no. 2.

<sup>&</sup>lt;sup>5</sup> DTI (2004) Review of the Government's Manufacturing Strategy, Department of Trade and Industry.

<sup>&</sup>lt;sup>7</sup> BERR (2008) Manufacturing: New Challenges, New Opportunities, Department of Business, Enterprise, and Regulatory Reform.

The context for manufacturing and the economy as a whole changed radically with the credit crisis and subsequent recession in 2008. Since then manufacturing has been portrayed in a much more positive light, almost as the antithesis of the excesses of some elements of the financial sector. More importantly, manufacturing's role in reinvigorating growth in the UK economy became recognised at the highest levels of government. Vince Cable, while speaking about new industrial policy for the UK, stated that "One of the first decisions I took was to put manufacturing at the centre of our long term economic vision. I did so because it is the most important tradeable sector and, if we are to rebalance the economy, there has to be a shift of resources to tradeable goods and services ..."8

Since the election of the Coalition there have been significant investments in manufacturing, with the first Catapult Centre dedicated to High Value Manufacturing<sup>9</sup>, the launch of the Make It In Great Britain campaign 10, as well as the announcement of a new Foresight project on the future of manufacturing. 11 Again the public perception of manufacturing is seen as an issue, as Mark Prisk commented "The corrosive notion that the UK is a post-industrial economy has gone unchallenged for too long." 12

However, while there has been this ongoing concern about the image of manufacturing there has been little evidence on what the public actually thinks about manufacturing. Most of the discussion is based on anecdotal evidence at worst and interviews with leaders in the manufacturing sector at best. This paper aims to fill that gap, by providing an evidence base for how the public views manufacturing in the UK. With a clearer understanding of public perception government and other support agencies can target their efforts more clearly and have a greater impact on the outcomes of such interventions for the economy.

<sup>&</sup>lt;sup>8</sup> Speech by Vince Cable MP at Policy Exchange, 26<sup>th</sup> October 2011 available online at http://www.bis.gov.uk/news/speeches/vince-cable-industrial-strategy.

<sup>&</sup>lt;sup>9</sup> For further details see <a href="http://www.innovateuk.org/deliveringinnovation/catapults/high-value-manufacturing-">http://www.innovateuk.org/deliveringinnovation/catapults/high-value-manufacturing-</a> catapult.ashx.

10 For details see <a href="http://makeitingreatbritain.bis.gov.uk/">http://makeitingreatbritain.bis.gov.uk/</a>.

<sup>&</sup>lt;sup>11</sup> Initial project details available online at <a href="http://www.bis.gov.uk/foresight/our-work/projects/current-">http://www.bis.gov.uk/foresight/our-work/projects/current-</a>

projects/future-of-manufacturing.

12 Speech by Mark Prisk MP at Cranfield University, 25<sup>th</sup> May 2011, available online at http://www.bis.gov.uk/news/speeches/mark-prisk-national-manufacturing-debate.

## Main messages from this survey

In partnership with YouGov-Cambridge the Centre for Industry and Government carried out a UK nationally representative survey early in January 2012. The aim of the survey is to have an evidence based understanding of how the public at large view manufacturing. There were 1,452 respondents in the sample which was carried out online between 2<sup>nd</sup> and the 9<sup>th</sup> of January 2012.

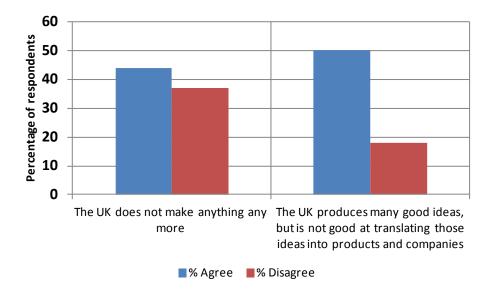
A number of key messages emerged from the survey and these are summarised below and discussed in more detail in the following sections.

- The public have a confused picture of whether we have a manufacturing base or not, with many saying we don't make anything anymore but the majority overestimating the share of the economy, in terms of GDP, that is manufacturing related
- Contrary to the expected narrative, the public have a good sense of manufacturing as being high-tech and requiring high levels of skills
- However, there is a lack of faith in manufacturing jobs, as they are thought to be the first to leave the country and not to pay as well as other industries
- Even in that context, the public overwhelmingly agree that we need a strong manufacturing base and that rebalancing can be achieved
- However, they do not have faith that either the government or industry know what to do to strengthen the manufacturing base
- Compared to a similar sample in the US, the US public has a significantly more positive impression of manufacturing, in terms of it being high-tech and being well paid
- Labour, Liberal Democrat and Conservative voters agree that the Coalition is not doing enough to support manufacturing and support the targeting of sectors of national importance

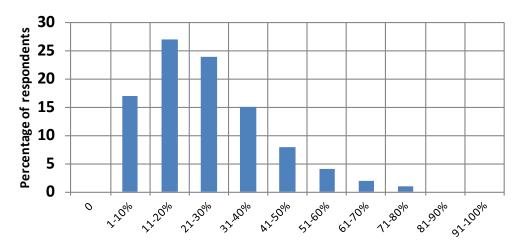
The following sections discuss each of these points individually, showing the data from the UK survey and where possible existing evidence from other sources on each of the points raised.

## Confusion over the contribution of manufacturing to the economy

Just under half (44%) of this sample agree that the UK does not make anything anymore. Given the decline in manufacturing employment and share of GDP over the past twenty years this may not be surprising. However, a more worrying element of the narrative of the UK economy is that the UK is good at invention rather than exploitation. This view is strongly held by the public with half of the sample agreeing that the UK produces good ideas but is not good at turning these into products and services.



When asked what percentage of the economy is based on manufacturing (based on intervals of 10% from 0 to 100), respondents were more positive with 54% of respondents overestimating manufacturing's share of gross domestic product (GDP).

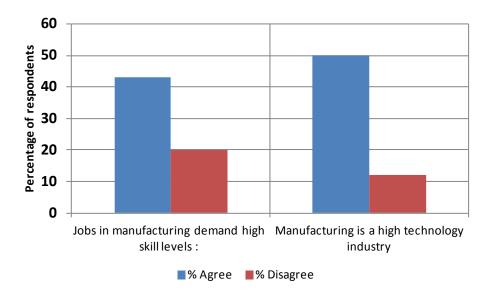


■ What percentage of the overall economy (the entirety of the UK economic output), from zero to 100%, do you think manufacturing makes up in the UK?

Manufacturing currently represents approximately 11% of GDP (based on 2009 figures) and so while the peak of this distribution is roughly correct, there is a significant tail to out to respondents who indicated that manufacturing represents over 50% of GDP. If policymakers believe that there is a need to correct negative images of manufacturing, there is also a responsibility to have the relative shares of economic activity accurately represented.

## Manufacturing is seen as high-tech, demanding high skills

The day to day nature of manufacturing in the UK appears to be well understood by the public, with 50% agreeing that it is a high-tech industry and 43% saying that jobs in manufacturing demand high skills.



There has been a significant shift in the skills base of manufacturing since the mid 1990s, with the percentage of those employed in manufacturing educated to degree level or equivalent rising from 9.7% to 17.1% between 1994 and 2009. The reality of manufacturing as a high-skilled and high-technology sector does not appear to be an issue for the public. Rather there are concerns with job security and salary levels, as discussed in the following section.

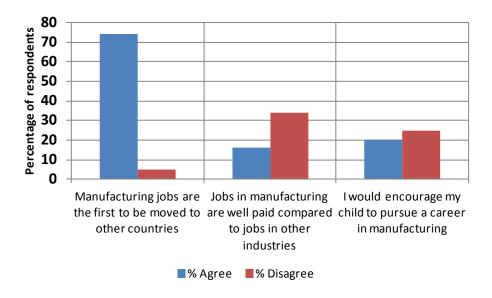
The classification of certain elements of manufacturing as high technology has been problematic, as parts of a sector may depend on high technology products and other may not. The OECD breaks manufacturing into four categories in terms of technology level (high, medium high, medium low, and low)<sup>14</sup> and using this definition in 2008 high technology sectors represented 42% of gross value added (GVA) in UK manufacturing.

<sup>14</sup> For details see OECD (2011) ISIC Rev.3 Technology Intensity Definition available online at http://www.oecd.org/dataoecd/43/41/48350231.pdf.

<sup>&</sup>lt;sup>13</sup> BIS (2010) Manufacturing in the UK: Supplementary Analysis, Economics Paper 10B.

## But jobs in manufacturing are thought to be unstable and low paid

Only 16% of the public agree that manufacturing jobs are well paid compared to other industries and three quarters believe that such jobs are the first to be moved overseas. Perhaps most importantly for the long term health of the sector, only 20% of respondents would encourage their child to pursue a career in manufacturing.



As discussed above, the decline in manufacturing employment has been significant since 1990, with the number of people working in manufacturing dropping from 5.2 million to 3.1 million. This is probably the root of the perception of jobs leaving the UK and should not be minimised. However, the statistics on inward foreign direct investment (FDI) show that "... the long-term trend for foreign-owned establishments is that of steady or even slightly increasing employment ..." While employment overall has fallen, employment in foreign-owned manufacturing companies in the UK has at least held steady.

The public's perception of manufacturing salaries does not appear to be supported by the data. As the Department of Business, Innovation and Skills (BIS) commented -

"Median salaries in the manufacturing industries are greater than overall median salaries in the UK economy and the median across all services industries. While there are several industrial sectors with median salaries greater than manufacturing (the larger ones including the financial and insurance sector and the professional, scientific and technical sectors) on average salaries in the UK manufacturing sector are comparable to other industries." <sup>16</sup>

Median gross annual salary in manufacturing in 2009 was approximately £25,000, according to the report, whereas the median for all service industries was close to £20,000.

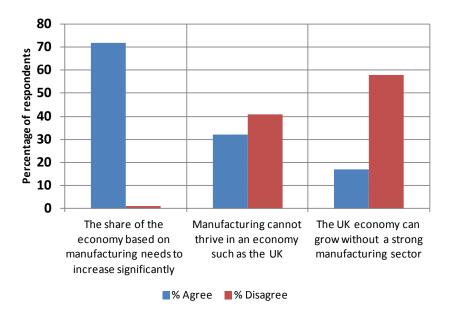
<sup>16</sup> Ibid.

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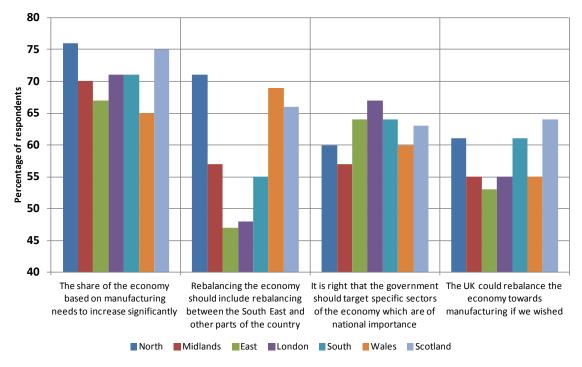
<sup>&</sup>lt;sup>15</sup> BIS (2010) Manufacturing in the UK: Supplementary Analysis, Economics Paper 10B.

## Manufacturing is seen as key to the growth of the economy

Far from being out of the public eye or disregarded, manufacturing is thought to have a key role in future growth in the UK economy. When asked if the UK could grow without a strong manufacturing sector over half (58%) disagreed. But a third of the public don't believe manufacturing can thrive in an economy like the UK.



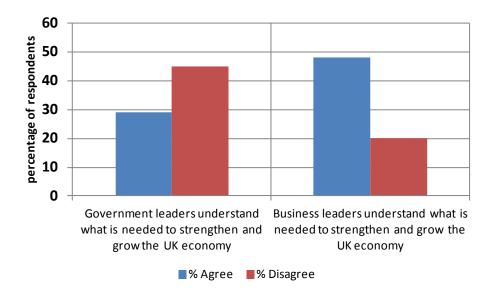
The UK public strongly agree (72%) that there the share of the economy based on manufacturing needs to significantly increase and that such rebalancing needs to include a geographic rebalancing between the South East and the rest of the country (59% agree).



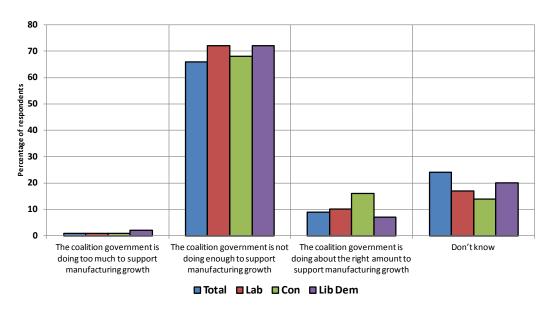
As might be expected there are strong regional differences in whether geographic rebalancing is necessary, with the North having very strong agreement (71%) compared to a much weaker response from the East (47%) and London (48%).

## Business thought to understand how to rebalance the economy more than government

About two-thirds (58%) of the public are optimistic that the UK can rebalance its economy, if it wishes to do so. Where the leadership and impetus will come from for the rebalancing is more difficult, as less than one-third agree that government leaders understand what is needed to strengthen and grow the economy, compared to 48% who think business leaders understand growth issues for UK manufacturing.



When asked whether the Coalition government is doing enough to support manufacturing twothirds of respondents said that the current government is not doing enough to support manufacturing growth.



This appears to be a response which cuts across party boundaries, as the level of agreement is similar across those who would vote for Labour (72%), Conservatives (68%) or Liberal Democrat

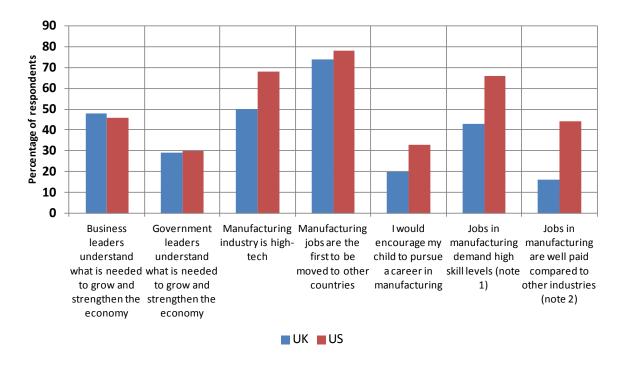
(72%). It may be that rebalancing and the necessary improvement in growth in the UK economy is where all parties can agree, at least on the aim if not the means.

Given the long standing opposition to industrial policy, and the so called practice of 'picking winners', across government since the late 1980s, it is surprising that 62% of UK adults agree that the government should target sectors which are of national importance. This may indicate that a reluctance to be more targeted in the support of specific sectors is a Whitehall conversation that is not reflected in the mind of the public.

#### Comparing US and UK perceptions of manufacturing

A survey of public attitudes to manufacturing has been carried out by Deloitte and the Manufacturing Institute for the past three years in the United States. <sup>17</sup> A number of questions for this survey were based on the US survey in order to provide a comparison between public attitudes in the US and the UK.

While some indicators show very similar responses (for example trust in the leadership of government), others show strong differences between the two countries.



Note 1: US question wording "Manufacturing requires well educated and highly skilled individuals"

Note 2: US question wording "Manufacturing jobs are higher paying than jobs in other industries"

There is broad agreement in the latest US survey and this survey on levels of trust in government and industry to understand what is needed to grow the economy, as well as agreement on the movement of manufacturing jobs to other locations.

However, there are strong differences on the perception of manufacturing itself. A greater number of US respondents view manufacturing as high-tech (18% higher), with better wages (28% higher) and requiring high skills (23% higher). Perhaps most worryingly is that while 33% of US respondents would encourage their children to have a career in manufacturing, only 20% of UK respondents would do the same.

The credit crisis and the recession have led to a very high profile public discussion on the need for manufacturing, characterised as a need to rebalance the economy. The US survey did not ask about rebalancing directly rather it asked respondents whether manufacturing is important to economic

<sup>&</sup>lt;sup>17</sup> The survey was carried out by Deloitte and the Manufacturing Institute based on a sample of 1,000 adults. See <a href="http://tinyurl.com/6n5cfvg">http://tinyurl.com/6n5cfvg</a> for further details.

prosperity. A very significant majority, 86%, agree or strongly agree with this statement. This can be compared to the UK sample's response to the statement that the UK economy can grow without a strong manufacturing sector, which 58% of the sample disagreed with. The perceived need for manufacturing in the UK, while high following this period of uncertainty, is still much lower than that in the United States.

## Implications for policy

Overall, while the public believe manufacturing is important and that we can rebalance the economy, there is a lack of faith in manufacturing jobs. Such jobs are not believed to be well paid and are thought to be the most likely to be offshored. Possibly due to these perceptions, only 1 in 5 of this survey's respondents would encourage their child to pursue a career in manufacturing.

The results of the survey suggest a number of areas where the UK government may need to place greater emphasis or tackle directly if it is to be successful in its long term aim of strengthening and increasing manufacturing in the UK.

- Efforts to improve the image of manufacturing should acknowledge that the public has an image of manufacturing as being high technology and demanding high levels of skills, and build on the public's understanding as the *Make it in Great Britain* campaign does in some respects
- Future campaigns on manufacturing should address the current public narrative of low wages and low job security so that careers in manufacturing are represented accurately
- Government should be less concerned with being seen to 'pick winners'. The public agrees (62%) that sectors of national importance should be targeted
- Government needs to improve the trust of the public that it has the understanding and the
  vision to strengthen and rebalance the economy. Initiatives in the US, such as the development
  of the White House Office of Manufacturing Policy, should be tracked to see if such high level
  visible commitment can improve the effectiveness of government action to support
  manufacturing

This survey has provided an initial evidence base for the public's perceptions of manufacturing in the UK. Such a survey might profitably be repeated on an annual to bi-annual basis in order to track progress on the issue of the image of manufacturing and to ensure that government action is targeting the narrative that the public have, rather than the perception of the manufacturing sector of the public's views.

There is an underlying concern for the future of the UK economy, reflected in the low level of agreement (24%) that the UK will remain a leading economy in the coming 20 to 30 years. This low level of optimism is unsurprising given recent economic conditions. Beyond specific attempts to change the industrial structure of the country, either in terms of manufacturing's share of GDP or the geographic spread of activities, the ability of government to improve this expectation will have a significant impact on the outcomes for the economy as a whole and for manufacturing within the economy.

## Appendix – results of the public perceptions of manufacturing survey

The following figures show the headline results for the survey, indicating the percentage of respondents who agreed or disagreed with the statements in the survey. The percentage neither agreeing nor disagreeing or indicating that they did not know is not shown, therefore figures do not sum to 100%. All figures, unless otherwise stated, are from YouGov-Cambridge. Total sample size was 1,452 adults. Fieldwork was undertaken between the 9th and the 20th of January 2012. The survey was carried out online. The figures have been weighted and are representative of all UK adults (aged 18+).

Figure 1 – Public perception of manufacturing

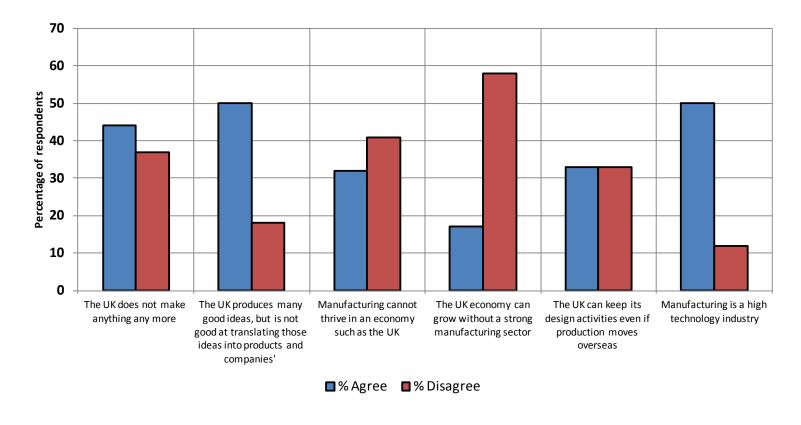


Figure 2 – Public perceptions of jobs in manufacturing

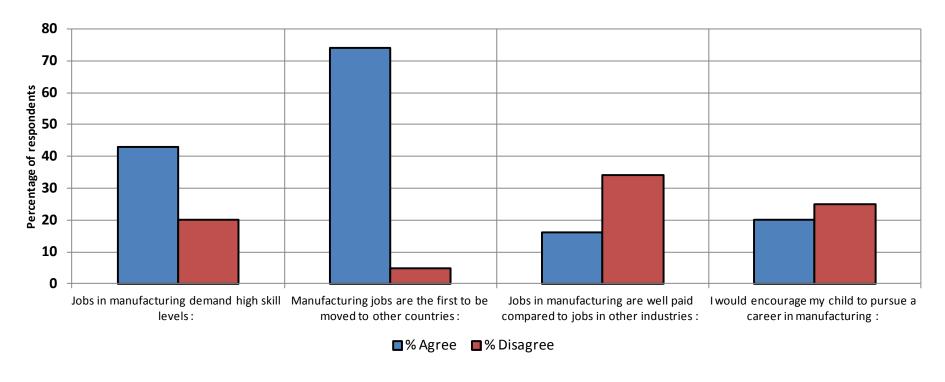


Figure 3 – Public perceptions on rebalancing and growth

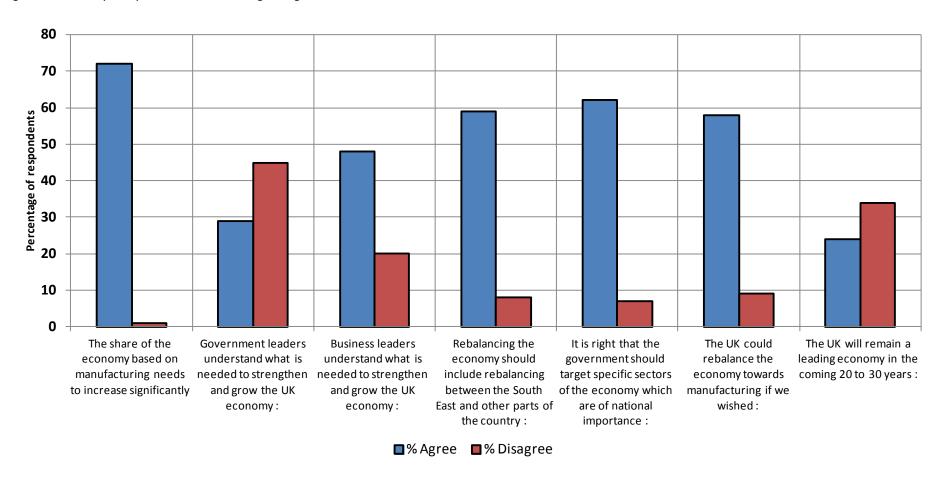


Figure 4 – Perception of the Coalition government's efforts to support manufacturing

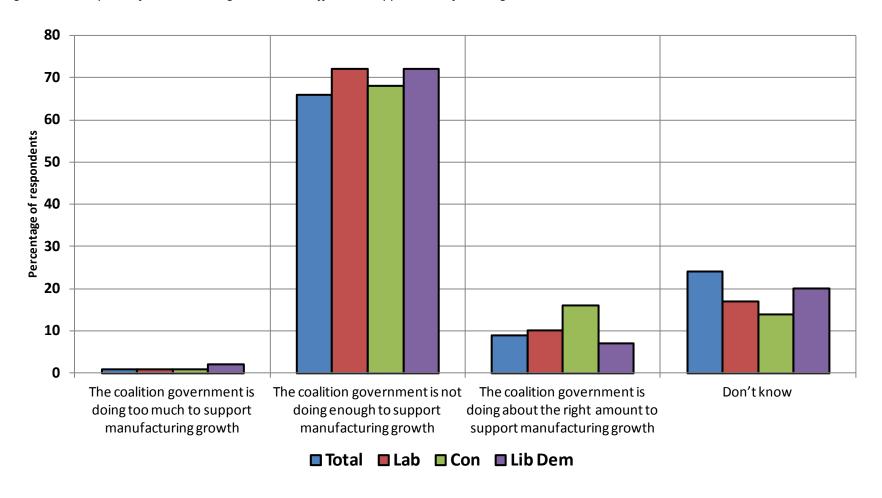
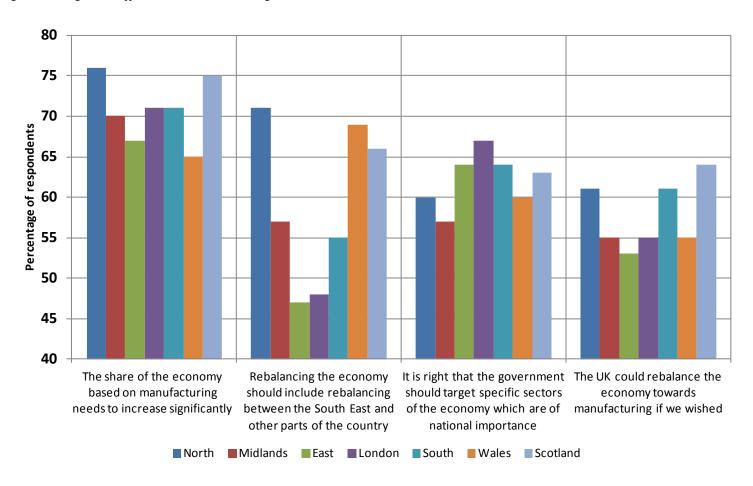


Figure 5 – regional differences on rebalancing







#### The Institute for Manufacturing

The Institute for Manufacturing (IfM) provides a unique environment for the creation and sharing of new ideas and approaches to modern industrial practice. Part of the University's Department of Engineering, it takes a distinctive, cross-disciplinary approach, bringing together expertise in management, technology and policy to address the full spectrum of industrial issues. The IfM integrates research and education with practical application in industry. It disseminates its research findings via a University-owned knowledge transfer company, IfM Education and Consultancy Services Ltd.

#### YouGov-Cambridge

Cambridge University and YouGov the pollster have teamed up to create a new kind of think-tank, uniting polling experts with top-tier academics and their brightest students to co-produce world-leading survey research. Through the YouGov-POLIS Programme and related collaborations with the University, the YouGov-Cambridge Team works directly with the Cambridge research community to co-design surveys and to co-analyse the results, thereby gaining the best of two powerful worlds with duel-access to the public square and the experts' staffroom. This allows us to produce a unique flow of research and reports on hard-to-reach issues from Pakistani insider-politics to Eurozone austerity-traps, thereby analysing both what publics think and experts say on the same given issue — and perhaps even more importantly, how the two compare and contrast. An equally important ambition of YouGov-Cambridge and the YouGov-POLIS Programme is to help tomorrow's graduates to engage directly with the increasingly networked public sphere of the 21st Century, through their own polling studies and written contributions to the YouGov-Cambridge website.

For further details of the survey or to discuss the results please contact –

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