

**Business, Innovation and Skills Committee Inquiry  
Government Assistance to Industry  
Engineering and Machinery Alliance Submission**

**Background to the Alliance**

1. The Engineering and Machinery Alliance (EAMA) represents the following trade associations:
  - Agricultural Engineers Association
  - British Automation and Robot Association
  - British Paper Machinery Suppliers Association
  - British Plastics Federation
  - British Turned Part Manufacturers Association
  - Confederation of British Metalforming
  - Gauge and Toolmakers Association
  - Manufacturing Technologies Association
  - Printing, Papermaking and Converting Suppliers Association
  - Processing and Packaging Machinery Association
  - UK Industrial Vision Association
2. They represent 1,600 firms in the mechanical engineering sector with sales of £8 billion.
  - Based on the Office of National Statistics (ONS) new criteria for the sector they represent a third of the UK's mechanical engineering output.
  - Using HM Customs' data, sector exports account for about 70% of sector sales.
  - And again according to ONS comparisons, mechanical engineering is one of only two manufacturing sectors to regularly contribute a positive trade balance to the UK economy -- over £3 billion in 2008.
3. Typically our companies supply 'enabling technologies' to other sectors (e.g. automotive, aerospace, medical, power and food industries) in the form of machinery or packages combining services and products.
4. This is the preserve of small and medium sized niche or specialist companies (SMEs). Important, large companies are also involved, as are many innovative entrepreneurial SMEs, all pushing the boundaries of factory performance, extending the envelope of the physically feasible to new levels in terms of speed, precision and migration into novel technologies and materials.

**Summary**

5. There is a danger that in assessing the effectiveness of Government policy we might mistake the shape and size of the policy need with what the most immediate and accessible support activities provide.
6. The facts are that the UK has not suffered the white collar recession that all feared in 2008/09.
7. But manufacturing has been hit again, this time while actually helping to save the banks, paying more for services and still providing banks with a source of good business. After all it is in the nature of manufacturing to be capital intensive.
8. BIS policies and support have been instrumental in any success achieved, even if quite a few manufacturers feel they have been in an unequal battle with the banks.
9. But there may now be a real danger of a double dip. Investment action take now can help to stave off that threat and in doing so help prepare the UK for the future.
10. Based on what our EU competitors have been doing for the last ten years, the prize could be a substantial addition to UK manufacturing GVA that would then flow through the economy into other sectors.
11. This will not be achieved through BIS support schemes alone. But it will not be achieved without BIS acting in its crucial role as a champion for industry across Government, particularly with HM Treasury, and with stakeholders across the country.

**The role of BIS in supporting industry**

12. Basically, UK (industrial) competitiveness is what should matter to BIS. The Department's remit may be determined by Government policy, but ultimately it's the UK's place in the world economy that sets the challenges and the opportunities that support can open up, because:
  - The UK is deeply dependent on trade. The World Trade Organisation says 58% of UK GDP is trade dependent (compared with Japan 26%, USA 29%, France 55% and Germany 87%)

- UK domestic demand represents a fairly small market, so manufacturing typically has to export to benefit from the economies of scale to warrant further innovation and investment
  - Industry faces constant competition both in the UK and overseas.
13. BIS's core tasks supporting industry therefore include:
- Representing industry at Cabinet level and across Whitehall where business is directly involved (e.g. on competitiveness, exporting, investment), where it contributes to the efficient workings of Government, (e.g. on the collection of PAYE) and where it plays a key role in delivering on economic, environmental, education and health matters as well as generating the nation's wealth
  - Stopping other departments promoting policy positions that unwittingly undermine UK interests (so that the investment, jobs, taxes and GDP do actually remain in and therefore benefit the UK)
  - UK representation on EU industrial matters
  - Trade negotiations and export promotion.
  - The ability to put over a strong vision for the role and scope of the Department and the wealth creating section of the economy (namely business in general and manufacturing in particular) helps inject confidence and vigour into this important area of Government policy.
14. This means that the more successful BIS ministers from an industry perspective tend to be visible and involved, visiting plants and talking up the sector and its achievements and discussing future plans. Labour's last Business Secretary was a particularly successful exponent of generating publicity for industrial initiatives round the country.

### **Effectiveness of existing Government assistance**

#### ***Impact of previous policies***

15. The Manufacturing Advisory Service (MAS), the Enterprise Finance Guarantee, R&D Tax Credits and UKTI's support for exhibitors overseas all have their place. The question that arises is 'do they go far enough?' In a financially unconstrained world the answer would be 'no'. And manufacturers would argue that even in these difficult times of financial constraint, the answer is still no.

#### ***Manufacturing Advisory Service***

16. MAS has undoubtedly been helpful in implementing 'lean' manufacturing concepts, but its regional structure made introducing new national schemes very complicated and time-consuming, especially for organisations themselves run on lean lines.
17. For example, it took us 18 months to complete a series of presentations to MAS consultants in every region.

#### ***RDAs and supply chains***

18. The RDA focus created other problems too. Their limited regional remit has unnecessarily complicated industry initiatives such as the Manufacturing Resource Centre ([www.manufacturingresourcecentre.co.uk](http://www.manufacturingresourcecentre.co.uk)) where OEMs and supply chain firms work together to strengthen sector supply chain competitiveness which nearly always extends beyond one region. OEMs like JCB and Boeing report the same difficulties in their own right. We need a simpler framework.

#### ***Enterprise Finance Guarantee***

19. The Enterprise Finance Guarantee is a well designed scheme. As of April 2010 it had helped nearly 10,000 firms through the recession. But it is also the refuge of last resort. A company is only eligible if all personal guarantees are used up in the loan process. So it's not going to stimulate investment. Nor will it help firms take advantage of opportunities as they arise.
20. One of the reasons why the EFG works in this way is because of the way the 'sliding scale' is applied to the 75% Government-backed guarantee to make sure that the banks don't provide loans to 'failing' companies. If it turns out to that a bank's portfolio of loans includes some that turn sour, that bank will find its 75% guarantee from public funds reduced so that the bank takes some of the knock for its poor analysis and decision-making. As a result banks ask firms for a personal guarantee that 'occasionally' extends beyond the 25% that is not covered by Government.

### Research and Development

21. According to the Government's latest R&D Scorecard (March 2010) the UK's top 1000 R&D companies invested an extra 9.2% in 2008 compared with a 7% increase amongst the world's top 1000 corporate R&D investors.
22. Just 100 companies accounted for 81% of the £27 billion spent in the UK on R&D. The three leading UK sectors were pharmaceuticals, aerospace and banking (£12.9 billion).
23. Many UK mechanical engineering SMEs supply 'one-off' products tailored to resolve problems in a unique manner. The sale may even be dependent on the firm coming up with a novel solution, which itself has to be tested.
24. To grow its manufacturing base, the UK needs to improve its ability to test and commercialise innovation, not only from the larger companies but also for SMEs. Policy and support should:
  - Make it easier (less expensive) for SMEs to take part in leading innovation-focused organisations such as the Technology Strategy Board (TSB) and the Manufacturing Technologies Centre.
  - Extend TSB funded projects to cover the pre-production phase so that a proportion of the customers' costs associated with testing and evaluating prototypes or demonstrators supplied by SMEs can be covered (e.g. agricultural machinery for a low carbon future).

### **The performance and role of UKTI and the Export Credit Guarantee Department**

#### ***Exporting – finding and developing new customers***

25. Budgetary pressure on UKTI has reduced its capability just as global competition is increasing and the UK is more dependent on trade (see 12 above).
26. There's plenty of good work going on at UKTI and elsewhere to help exporters, but unfortunately companies often say that the paring back makes the UK presence look smaller, less professional and therefore less competitive when compared to the likes of Germany, France and Italy.
27. These and other countries also want to increase their exports as world trade picks up. They are not relying on a weak currency to underpin their efforts. Their governments are investing heavily in support at trade shows and on missions. Their ambassadors attend the shows and extol the strengths of the countries' manufacturing capabilities. In short they sell themselves very well.
28. For example, the Obama administration's National Export Initiative (NEI) aims to double US exports in five years. According to the Commerce Department the main effort will:
  - Educate US companies about opportunities overseas
  - Connect companies directly with new customers
  - Improve access to credit for SMEs that want to export
  - Create an Export Cabinet, reporting directly to the president.
  - Increase the Ex-Im Bank's budget for SMEs by 50% to \$6 billion.

#### ***The UK experience***

29. There is a view that the UK lags both in its promotion of the UK brand and in the range of different services to involve companies of different sizes in exporting across the world as a positive benefit to the economy as a whole. Work is progressing, but:
  - The UK needs a national agency that champions UK exports and exporters. To match the best in the world this agency should be totally separate from inward investment activities and staff.
  - The regime should be simpler, run with a national focus, not subservient to regional priorities.
  - Companies should be supported for their commitment and professionalism to exporting, not for their exporting 'virginity'.
  - The Export Credit Guarantee Department's cover needs to be remodelled to be competitive across a far wider range of business.

#### ***Trade Credit Insurance***

30. UK exporters, particularly SMEs need a far more flexible system of cover, particularly if they are to penetrate new, dynamic markets as well as the traditional ones. Following Treasury pressure, ECGD's offer has been so scaled back as to be ineffective for most of our members needs. Indeed for many SMEs the Trade Credit Insurance Top Up scheme stopped at the frontier and so excluded exports.

Bank guarantees for customer deposits paid on orders placed with UK companies

31. In mechanical engineering it is standard practice for a customer to pay a 30% deposit to confirm their order. It happens all over Europe and in the USA. In return for the deposit, the customer expects to receive a guarantee, normally from a bank, that they will receive the machine they have ordered or their money back.
32. Whereas French, German and US banks provide the guarantee for a small charge, UK banks also charge and also often deduct the deposit from the company's facility with the bank, so that the manufacturer is no better off for having received the deposit. There's no benefit to company cash flow.
33. Apparently such difficulties do not arise in other countries, because they run a 'Bond Support Scheme' with government backing, so that any orders where the deposit may be too big to be handled by the usual channels, can be covered competitively.

Following Treasury pressure UKTI is charging SMEs unreasonably for certain services

34. Trade associations supporting exporters do the same sort of thing as UKTI but get charged for the privilege if they use in-country services provided by staff who are paid out of the public purse. The quality and cost of services are not consistent across posts. Some have completely priced themselves out of the market and seek to exploit exporters because of HMT pressure.
35. The real need is to help SME manufacturers to make and maintain contacts with prospects.

Trade association export offices

36. Several trade associations have their own offices overseas to support their members' export activities. These offices are sector specialists and could be harnessed as part of the professional UK export network.

Enterprise Finance Guarantee

37. Currently this scheme excludes exporters. However, the Business Committee observed in its recent inquiry that other Member States such as Holland were able to negotiate a way round the EU restrictions while the UK preferred to leave their exporters without cover and therefore uncompetitive.

**The relationship between Government, industry and the banks**

***UK manufacturing investment performance***

38. If we step back for a moment and compare UK performance with some of our near neighbours we can get a glimpse of what the UK could achieve with a more robust and consistent framework encouraging manufacturing investment.
39. According to the Office of National Statistics, UK manufacturing investment declined 40% while gross value added (GVA) increased by 5.3% and numbers employed in the sector fell by nearly over 30% in the ten years 1998 to 2007.

**Table 1 UK manufacturing performance 1998-2007**

Year	GVA basic prices £ billions	Average numbers employed (millions)	Net investment £ billions	No of companies
1998	150	4.4	20.4	169,376
1999	150	4.3	18.1	170,196
2000	149	4.1	17.0	167,289
2001	145	4.0	16.3	164,718
2002	144	3.8	13.2	162,212
2003	142	3.5	12.7	157,894
2004	149	3.4	11.7	154,967
2005	147	3.3	11.3	153,262
2006	152	3.2	11.4	151,365
2007	158	3.1	12.0	149,101

Annual Business Inquiry June 2009

40. Using the EU's AMECO ECFIN database we can compare French, German and Spanish performance on a similar basis.<sup>1</sup>

<sup>1</sup> Unfortunately UK data on this database is only available up to 2005, hence the need to use data sets from two different sources. Although it's not ideal this approach does provide useful indicators as we observe changes in performance within the data sets.

41. Thus, over the same 1998 to 2007 period, French, German and Spanish manufacturers grew their manufacturing GVA in 'constant' 2000 Euros by three to five times the UK rate and in doing so kept their manufacturing employment levels significantly higher than the UK.
42. As a result France, Germany and Spain have all benefitted from an additional 15-25% rise in national wealth which has flowed through their economies, creating extra demand for other sectors as well as of course making an extra contribution to Government coffers.

**Table 2 Manufacturing gross value added comparison constant 2000 Euros 1998 to 2007**

Country	1998			2007			% change 1998 - 2007		
	Sector € billion	Nos employed millions	Per employee € '000	Sector € billion	Nos employed million	Per employee € '000	Sector GVA	Nos employed	GVA per employee
Germany	395	7.7	52.3	494	6.7	72.8	25	-13	39
Spain	98.5	2.6	36.1	115.1	2.9	39.8	17	+12	10
France	188	3.7	51.3	216.8	3.2	66.7	15	-14	30

Sources: AMECO ECFIN

### **Productivity versus value added**

43. For historic reasons, and as a comparatively open economy, UK policy mainly focused on productivity and competitiveness. GVA has only come into focus more recently.
44. And the policy had some success. Government initiatives such as the Manufacturing Advisory Service pushing lean manufacturing techniques have vastly improved UK productivity growth and at over 50% (GVA per employee) outperformed increases in France, Germany and Spain (10-39%) over the period in question.
45. But basically this improvement has been achieved by paring back and cutting employment numbers, whereas Spain actually increased manufacturing employment and France and Germany reduced their proportions (13-14%) by under half the UK drop (-30%) and invested for the future.

**Table 3 UK GVA and investment performance 1998-2007 per employee and per company**

Year	GVA per employee £000	Investment per company £000	Investment per employee £000	Ratio £GVA to £investment
1998	34	120.4	4.6	7.35
2007	51	80.5	3.9	13.17
Change %	+50	-33	-15%	+79

Source: workings based on Table 1

46. The nub of the issue here therefore is the tax framework and what BIS can do to ensure that this recognises and rewards the type of long term investment that characterises manufacturing.

### **Taxation, capital allowances and investment**

47. Manufacturers working on improving their performance know that improvement usually means having to do something that they have never done before. Often that means investing in new skills, new procedures and new equipment and of course risk.
48. In the UK, businesses' Corporation Tax liability is assessed before they write down any machinery unless there is a special allowance for the type of investment they make. Other countries treat this depreciation differently.
49. The UK's capital allowances have varied quite considerably over the last 13 years making investment planning more complex and in essence encouraging a short-term approach. (For a description of the myriad of changes in UK capital allowances please see HMRC website <http://www.hmrc.gov.uk/manuals/camanual/CA10040.htm#IDAVKIKI> )
50. In an interesting paper *Tax Reform – A manifesto for a balanced economy* EEF shows UK manufacturers using the 20% capital allowance will take 30 years to fully depreciate their investment against tax on the reducing balance basis that applies in the UK. This 30 year tax depreciation period for manufacturing machinery in the UK compares with radically shorter periods in competitor countries e.g. USA 3-10 years; France 10-20 years, Germany 10-16 years. Note: if the capital allowance is reduced to 12½%, the tax related write down extends out to 53 years.

### **Conclusions**

51. Bounded on the one hand by a relatively unfavourable and oft-changing investment tax regime and on the other by banks that require entrepreneurs to put their own homes up as security, SME manufacturers in particular have preferred in part to manage improvement through their ability to change the size and configuration of their workforce, training for specific workshop needs or, where that's not been possible, by taking on foreign workers.
52. Meanwhile the challenge to increase the UK's productive capacity grows.
53. The typical replacement cycle for modern manufacturing machinery has now shrunk to five to eight years. But the UK tax system is still working as if it were on 30 years.
54. UK factories are underinvested compared with the high value adding producers in Europe, USA and Japan.
55. Increasingly they face a threat from newly industrialising countries such as India and China.
56. In the current economic environment the step change in approach requires Government leadership to ensure awareness and a coherent pan-Whitehall longer term manufacturing investment friendly policy framework. The battle for lean manufacturing must continue but now it must be yoked to strategies for manufacturing growth and expansion, as well as competitive survival.
57. In line with the benefits that will flow from such an improvement, this step change will need to involve all manufacturing stakeholders from finance and customers to future employees and local government, all of whom will find their own challenges in the new technologies involved.

### **SME manufacturers and the banks**

58. Our experience is that SME owners/MDs are often experts or 'technicians' in the products and processes they use. They may not be experts in finance. For that they rely on third parties (e.g. accountants) whom they may see only three or four times a year (having to pay for the privilege) and that these advisers/consultants may not know the business that well.
59. If the bank that the firm has been with for many years turns a request down or imposes somewhat stiffer charges, the SME tends to take it for granted that since this is the bank that knows the business best, this is the best offer that's going to be available and that other banks will only offer tougher conditions.
60. A local or mutual provider or bank may overcome this, but so might 'nudges' through business groups and trade associations highlighting the more competitive deals achieved by peer businesses.

### **Banking Sector Environment**

61. EAMA members believe that banks have forgotten how to do business with manufacturers. Manufacturers are good sources of business for banks because they typically have longer term requirements across a wide variety of services (e.g. deposits, overdraft, transmission and investment).
62. In the past OEMs used to show their (SME) suppliers what they needed to do to develop a successful relationship with them. If the banks' approach is one of relationship building (rather than management) then they should offer guidance in a similar vein.

### **Personal guarantees**

63. UK banks have a strong preference for personal guarantees (see also under Question 15 EFG below). Their view is that statistically they get a much better outcome on loans where the main protagonist has put up some personal guarantees as collateral. This is a fact of life for most SME owners. But of course putting your family's home on the line may simply be too much for many, particularly in uncertain times and so goes to undermine confidence and increase wariness and caution, particularly when the banks can so easily change your arrangements overnight as they did on 2008/09.

### **Addressing Future Risks**

64. The banks hold the whip hand when it comes to their dealings with SMEs.
65. From the SMEs point of view, in 2008/09 the banks imposed new, arbitrary, one-sided conditions. Finance dried up over night. The risk of that happening again is very real to SMEs. They want a sustainable banking relationship, but are doubtful whether it's achievable.

### **UK – EU comparisons on access to finance and associated costs**

66. Eurobarometer's *Access to Finance Report* (published in September 2009) covers many industries (60%), such as manufacturing, construction, distributive trades and logistics, as well as services (40%) with a particular focus on SMEs (92% of all responses).
67. The report indicates that banks play a more central role as supportive business partners in Germany, France and Italy (countries all with a similar or higher level of dependence on trade) than they do in the UK, where firms use a greater variety of sources placing perhaps a greater demand on cash flow.
68. To summarise this study shows:
  - UK suppliers may have had more pressure on their cash flow than their competitors in France Germany and Italy. Standard payment terms are much shorter for example in Germany.
  - Banks are much more closely involved with their business clients, with bank loans far more prevalent in the other three countries than in the UK.
  - French and German companies are more likely to be benefiting from financing terms that have been maintained at pre-crisis levels. Terms for UK and Italian firms are much more likely to have got tougher.
  - One of the key changes for UK companies was the cut in the amount they could borrow. German, French and Italian firms were not hit to the same degree.
  - Loans in Germany, France and Italy are more likely to go on fixed investment, where the plant can be used to pay off the loan. UK companies are more likely to spend it on running the business, with more than two in ten using it for R&D and training.

### **Investment**

69. Companies supplying into innovative or high value added markets have to keep investing to innovate and upgrade performance in plant and skills. If they don't they fail. And where they fail they threaten the supply chain that depends on them all the way up to the original equipment manufacturer (OEM).
70. So banks must be encouraged to step up as partners to facilitate investment not just with the OEMs but with these crucial supply chain link SMEs. Without that investment UK firms and the supply chains that depend on them will be lagging competitors who are installing the latest equipment now.

### **Technology**

71. Looking forward, manufacturing faces a period of considerable change, including rapid technological innovation in production processes and associated machinery.
72. Technology life cycles are shortening. Machines that have a fully functional life of 25 years may only be fully competitive for a much shorter period, so technological advance is actually eroding machinery's residual value. As a result:
  - Leasing is becoming more important.
  - Ownership is not such an issue.
  - Business models are changing/need to change.
73. It's important to understand how banks are going to go about this changing model when Government policy will provide less favourable terms for manufacturing investment (i.e. withdrawal of investment allowances) -- what criteria will the banks use in the assessment platform on which sound judgment will be made.
74. If the UK is to promote high-tech industry and exports then it's crucial that the financing framework is able to tackle these changes on an internationally competitive basis.
75. A recent four-country EAMA automation survey found that the other countries (Germany, Spain and Sweden) all offered a wider menu of financial support for example.