

11 November 2014

The Rt Hon George Osborne Esq MP Chancellor of the Exchequer HM Treasury 1 Horseguards Road London SW1A 2HQ Agricultural Engineers Association
British Automation and Robot Association
British Fluid Power Association
British Paper Machinery Suppliers Association
British Plastics Federation
British Turned Part Manufacturers Association
Gauge and Toolmakers Association
Manufacturing Technologies Association
Printing Industry Confederation
Processing and Packaging Machinery Association
UK Industrial Vision Association

Dear Chancellor,

Autumn Statement -- Engineering and Machinery Alliance Submission

First, may I thank you on behalf of our 1,600 companies for steering the economy through four very difficult years to a point where the UK is well placed to lock in the recovery as long as the manifest risks that hang over the global scene from Ukraine to the Middle East and Europe don't coalesce into serious economic and political headwinds, dampening trade and potentially cutting access to leading markets.

Importantly, confidence, erratic at the best of times, has come back well at the moment after a significant dip over the summer.

Second, it would be at the very least churlish not to mention at the start the various initiatives put in place over the last few years which are welcomed by our membership, including: the enhanced Annual Investment Allowances, the improved R&D Tax Credits, the Patent Box, the Regional Growth Fund, the Advanced Manufacturing Supply Chain initiative, the Employer Ownership Fund (for skills), the Catapult Centres, the University Technical Colleges and many others including attempts to improve access to finance.

Third however, despite all this well-inclined activity I am obliged to point out that much is ringed with uncertainty because the perception remains that too much of the Government's commitment is temporary and will be removed in the relatively short term, compared to the company investments that may easily require three or five years, let alone ten to pay for themselves. This isn't simply a matter of the General Election looming. It's also the way the UK's EU membership is being used as a political football, which makes potential longer term investors put their pens away for the time being.

1 Summary:

- Business is OK. Access to finance is improving. But there's still a long way to go to get SMEs investing to build great growth. (pages 2/3)
- The UK's investment record as a share of GDP is the worst in the EU, despite the excellent recently introduced initiatives that are warmly welcomed by members. (page 4)
- Long term commitments on AIA and a significant increase in the writing down allowance back at least to its earlier level of 20% to cement belief in a more strategic framework. (page 4)
- The skills scene is very complicated. Clear signposting would perhaps help, but we doubt it
 would be sufficient and therefore proffer a radical simplification based on three anchor
 organisations. (page 5)
- The country's commitment to doubling the number of SMEs exporting by 2020 has been dealt an
 incomprehensible blow that seems to clearly demonstrate Government policy is awry with UKTI
 pulling TAP funding for imminent trade shows that companies and trade associations had made
 irreversible commitments to. (page 6)
- To break the inertia associated with chasing the first export success, SMEs could be usefully incentivised in a pilot scheme to complete their first meaningful export order. (pages 6)



- It would be very helpful if UKEF could be tasked to develop more products specifically to meet SME exporter needs (e.g. speed, little paperwork, simplicity) rather than adapting schemes originally developed to support big contracts. (page 7)
- The catapults are a force for improving SME performance. More could be made of this to show what successful SME collaboration looks like. (page 7)

2 Background

The Engineering and Machinery Alliance (EAMA) represents 1,600 firms from 11 different trade associations (please see the masthead) mostly SMEs in the mechanical engineering sector with sales of some £8 billion.

They account for a fifth of the UK's mechanical engineering output, and according to HM Customs' data, sector exports account for about 70% of sector sales.

Typically, our companies supply 'enabling technologies' to other sectors (e.g. automotive, aerospace, medical, power, printing and food industries) in the form of machinery, components or packages combining services and products.

3 Business environment

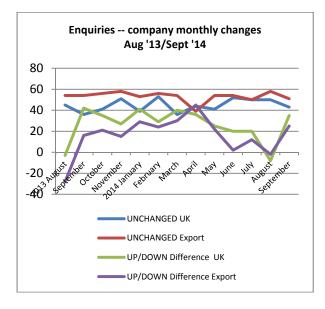
In the five years 2010 to 2014 sector business has come back in a big way. Export performance has grown, with the exchange rate restraining progress above €1.24 as price competition remains important. However, economic and political risk is having an increasing impact on demand compared with what would be expected 'under normal circumstances'.

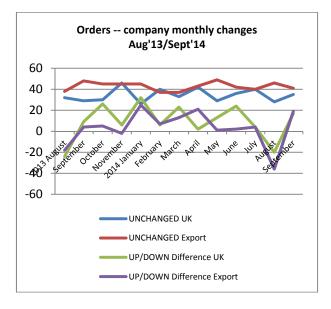
Year	Sales £ billion ¹	Exports £ billion ²	Q1 Exports £ billion ²	Q1 exchange range £:€ ³
2014			13.6	1.20-1.24
2013		29.0	14.6	1.16-1.20
2012	37.2	28.9	14.3	1.19-1.24
2011	37.8	27.8	13.7	1.13-1.18
2010	33.4	23.5	11.1	1.10-1.20

Sources:1: Annual Business Survey June 2014 2: ISSB/EAMA based on HMRC trade data 3:Monthly average X-Rates.com

Prospects and orders

Using the EAMA Monthly Business Monitor to fill in the gaps left by the Annual Business Survey, we can see that enquiry levels have held up well during the 12 months since September 2013, coming back quite strongly again after the Summer pause this year.





Order levels in the Monitor on the other hand have been more erratic. UK orders have outperformed exports, where the balances since May just managed to stay above zero, before diving negative as expected in August. However, both UK and export orders performed more strongly this September than they did a year ago.



Investing and access to finance

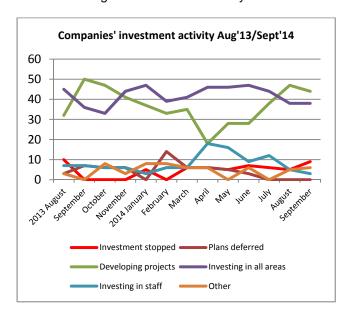
As the UK's Achilles heel is investment (see page 3/4), the Monitor's numbers, showing how sector companies are addressing the issue, are very welcome indeed, with consistently around 40% investing across the whole of their businesses, i.e. in training and in assets.

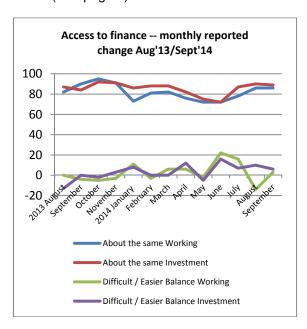
The biggest change in the last 12 months has been in access to finance. Although the improvements recorded are relatively small, the important point is that they've been consistent enough to call it an emerging trend.

The average balances, both for working and for investment finance (i.e. between those saying it's easier this month minus those saying it's more difficult) have been positive every quarter this year.

The average differences aren't big (+2 to +9). But they are significant, because they've only ever been recorded in one other quarter in the Monitor since 2009. That was Q4 2013.

Clearly this doesn't mean the problem is solved. But something is working for some companies. On the basis of a very quick and limited survey to prepare evidence for the BIS Select Committee, we believe the Regional Growth Fund may be one of those elements. (See page 4)





4 The UK's competitiveness

The EU's recently published Re-industrialising Europe – Member States Competitiveness Report (RiE) (SWD 2014/278) summarises the UK's position as: good business environment with reliable judiciary, ease in paying taxes and generally reliable administration; devoted to achieving low carbon emission economy; needs to address relatively high energy prices for business; other issues include skills gaps and deficiencies in infrastructure.

In this EU report, member states' performances are measured against the worst and best performers on 26 dimensions from productivity to administration. We refer to UK's performance on some of these in section 5.

5 Considerations and recommendations for growth

A Investment

00.1110110				
UK compared to best member state performance:				
Productivity per person employed in	Investment in equipment % GDP			
<u>manufacturing</u>				
32%	6%			

 To be competitive, UK manufacturing urgently needs to make up for the capacity losses suffered over the last 20 years in terms of both facilities and skilled personnel, otherwise it will be capacity constrained.



- According to RiE UK investment in equipment was 3% of GDP, or 6% of the EU's best performing member state. It was the weakest result of any member state. (Note the EU average is 28% of best performing).
- We have had plenty of evidence that the combination of Annual Investment Allowance, R&D Tax Credits and Patent Box has made the UK competitive with other EU alternatives as far as many UK boardrooms are concerned.

The need is for longer term, clear commitments for competitive investment

- Our contention is that we have to be more than just competitive. To attract inward investment into
 long term productive capacity the UK has to stand out as the place to put that plant designed to
 be operational for 15-30 years, where the investment environment will continue to encourage
 upgrading and the power costs are going to ensure UK based process plants are competitive.
- The concerns are beginning to coalesce, challenging economics and uncertain politics.
- The AIA is due to lapse at the end of 2015. Machinery makers see what's happened in the USA where the authorities reduced eligibility under section 179 from \$500,000 to a straight 14.29% from the end of 2013. (That's a loss of \$162,000 on a \$500,000 machine).
- US SME investment is now down 20% as a result both for machine makers and end users. The
 change has also hit SME confidence. They believe the Obama administration has let them down
 badly. The government has become increasingly unpopular in the SME manufacturing
 community, which may in part explain some of the unexpected swings in the recent US mid-term
 elections.

The AIA and the Regional Growth Fund

- The current £500,000 AIA is encouraging companies to invest. We believe that part of this success may be down to the Regional Growth Fund. In September a small snap survey (25 responses) for a submission to the BIS Select Committee for their inquiry into business support found that RGF scored very well, basically because it's simple to apply for. In part this simplicity may also be because machinery makers and banks are co-operating to help resourced-strapped SME users make their case.
- Letting the AIA lapse will send the wrong message, undermining stability and the long term commitment needed to build manufacturing capacity and turn a profit.
- It's also clear from members' feedback that there's a great deal more potential for the RGF. Current limits of £10-15,000 per job saved just don't reflect manufacturing reality and therefore often don't work, whereas a higher limit, closer to real job worth would extend eligibility and stimulate investment. (Please see Annex A for a small hypothetical example of 'job wealth' created by a £100,000 machine).

Recommendations

To meet that competitive challenge we urge you to consider:

- 1. a long term commitment to the AIA at least at its current £500,000 rate, backed by
- 2. a much more detailed analysis of the benefits the economy will derive from a substantive increase in the write down rate in the form of long term investments creating long term jobs.
- 3. for manufacturing related jobs at least a doubling of the RGF job factor to £35,000-£45,000

B Skills

UK compared to best member state performance:

Share of employees in manufacturing with higher education 70%

Tertiary STEM educated per 1000 population 83%

- Based on these broad EU comparisons the UK seems to be performing relatively well.
- Companies across the EU have problems finding suitably skilled people according to the Eurofound European Country Survey 2013, e.g.:
 - o 43% of all manufacturing companies
 - 30% of all financial services companies
 - o 60% of companies in Austria
 - o 27% of companies in the UK



- Against a background of strong business pipelines, skills shortages are the single most important issue for many manufacturing companies and have been a drag on the sector's growth since at least 2006.
- Members have welcomed initiatives such as the Employer Ownership Fund, Trail Blazers and TRS (for the redeployment of skilled personnel within the sector following cutbacks, e.g. MOD Naval Shipyards last year).

The complex skills and training scene needs tackling to make it accessible

- On closer examination, however, the UK skills scene has become a worrying mess, more or less impenetrable to any normal SME. There are simply so many good organisations plying well intentioned aims that it has become impossible for any external observer to have a clear picture of what's available and how everything relates. We would like to believe that there's a clear linking vision that can be used to signpost enquirers so that all would be clear, but we doubt it.
- The more likely treatment needed is radical simplification.

Access to skilled workers

- The industry has a problematic skills profile because of the decline in the numbers of new entrants over the last three decades. The initiatives in train are going to solve the problem but it is going to take five to ten years, meanwhile high technology SMEs are still going to need suitably qualified people wherever they can find them without pricing themselves out of business (e.g. for top cryogenic specialists from Russia, control engineers from Japan or Germany).
- Many sub-sectors identify the lack of skilled technicians as an even more pressing need currently than university educated engineers. The question arises how to capture young people's interest and imagination to increase the numbers studying subjects that lead to technician type careers. It's been shown that robots do stimulate student excitement and interest. Robotics encompasses a useful combination of different engineering disciplines, mechanical, electrical, electronic, software etc.. Robotics also lies at the heart of the industrial strategy as one of the eight great technologies.

Recommendations

- 1. To simplify the skills and training sector, we suggest organising it round three propositions, each with an anchor or lead organisation with recognised sign-posting responsibilities:
 - a. developing skills and training (e.g. UKCES)
 - b. safeguarding skills, matching people and job opportunities (e.g. TRS)
 - c. promoting STEM subjects and careers to teachers and students in schools (e.g. EngineeringUK)
- 2. That way a new idea such as introducing a clearing service for apprentices similar to the service for university graduates would have an immediate 'home base' to be evaluated and further developed e.g. so that it not only serves young people searching for an apprenticeship, but also on completion helps them find a suitable job opportunity.
- 3. It's vital that business is able to recruit from the best worldwide to raise standards in business and ultimately to help raise UK standards in further education and research establishments.
- 4. Foreigners studying for second degrees here should be encouraged rather than constrained from working here as a rapid way to fill the gaps the UK education system has thrown up in STEM subjects at advanced levels.
- 5. Working with the robotics industry, run a trial in a limited number of relevant FE colleges to test the impact of the machines on the number and quality of students opting for engineering subjects compared to control colleges without the same facilities over a three year period.

C Exporting

UK compared to best member state performance:				
Total exports as % GDP	Knowledge intensive as % exports	Number of SMEs exporting outside EU		
4%	70%	31%		

- UK exports as a share of UK GDP are amongst the lowest in the EU and only 4% of the best performing member state and slightly under a third the EU average (13% of best performing).
- The UK scores better on the proportion of knowledge intensive products in the export mix (70% of best performing, which is only slightly below the EU average of 75%).





Doubling the number of SME exporters

- A key aim is to double the number of SMEs exporting, particularly outside the EU. This is also a
 goal for many other member states and is therefore covered by the RiE report.
- In 2011, the UK had the fifth largest cohort of SMEs exporting outside the EU, 31% of the best performing member state Italy with over 61,000 SMEs. The other leading SME exporters came from Germany (29,000), France and Spain (both over 20,000).
- UKTI programmes supporting exporters are crucial to building up those numbers.
- So the sudden in year decision to pull funding for certain trade shows weeks before they were
 due to take place has done absolutely everything to undermine trust and confidence in UKTI for
 several EAMA associations.
- For machinery makers trade shows are the foundations on which to build the confidence foreign
 prospects need before they'll commit to using new machinery in their factory or in their product.
 This isn't like a consumer purchase that may be fashion based. It's an Investment Goods
 purchase where the implications, relationships and allied service are all long term and that may
 take several years of painstaking preparatory work to develop, showing off machines at shows in
 a new market.
- You may not be aware of this decision, but apparently it was made due to HM Treasury pressure.
- Companies and the associations concerned found themselves acutely embarrassed both to make sure the UK was still represented at those international exhibitions (e.g. in Mexico) and to cover their potential losses due to the withdrawal of funding.
- Suffice to say, from our perspective it was a very poor decision and leads to the conclusion that despite the words, the Government isn't serious when it comes to competing in export markets with the likes of Germany, Italy, France etc.

UK Export Finance

- UK Export Finance has improved its offer markedly over the last three years, particularly for medium size and larger companies able to employ specialists to handle the paperwork.
- Problems still remain for the smaller, highly specialised firms (employing fewer than say 70 people), particularly if those firms make high ticket items (£500,000 to £1 million) almost all of it for export. They find it extremely difficult to get the sort of support that's needed to help finance the work in progress that other countries' export credit agencies seem to be able to supply.
- Despite the progress, the system seems to fall down in terms both of product offering and of speed required to meet commercial deadlines in international markets, becoming overly bureaucratic, not wishing to engage with the end-users who are engaged with the overseas customers and their requirements.
- For example the Direct Lending Scheme has now been opened up to SMEs. The website promotes the scheme as a real solution with no upper or lower limits, but one member reports having introduced four different prospective clients only to be refused at the first hurdle each time.
- An unfortunate weakness in UKEF delivery is that it's run through the banks, who impress
 member firms with their attempts to slough off risks, either back onto UKEF or if not onto the
 (SME) exporter.

Recommendations

- HM Treasury to review the impact of UKTI cost savings alongside the challenge to double SME UK exports and compare this performance with competitor country support for their exporters (e.g. USA and Germany).
- 2. Examine Italy's programme supporting their SME exporters for possible lessons.
- 3. HM Treasury to 'test' the concept of offering a tax credit on certain SME export sales to break first move inertia (e.g. one contract, new to export minimum of £30,000).
- 4. Consider setting a three-year rolling cycle of activity focused specifically on raising exports in markets agreed with business so that export partners can plan activities in line with local capital equipment procurement practice, rather than according to HMG's budgeting cycle.
- 5. It would be very helpful if UKEF could be encouraged to develop products and services to specifically meet SME needs (speed, high responsiveness, little paper work, simple system), rather than adapting products that were originally designed to support big contracts for big companies. It may sound like heresy, but a small element of risk may be an inherent ingredient in (SME) exporting. We need to learn how to manage that risk competitively (e.g. how are the German firms dealing with the threats to their Russian contracts now and for the longer term).
- 6. The UK needs a national agency that champions UK exports and exporters.



- a. To match the best in the world this agency should be totally separate from inward investment activities and staff so that it can champion services such as finance packages for overseas customers purchasing UK goods.
- b. The regime should be far simpler, run with a national focus, and sectoral expertise.
- c. Apart from support to stimulate that first export experience, companies should be supported when they show commitment and proper preparation, not on the basis of their exporting 'virginity'.

D Innovation and R&D

UK compared to best member state performance:				
Business R&D % GDP Non-financial high growth firms % all enterprises		Innovation Union Scorecard		
43%	82%	77%		

- Innovation and R&D are areas where the UK scores well in comparison to other members states,
 e.g. on the Innovation Union Scorecard that reflects performance across 24 dimensions from
 human resources to financial support and economic effects, despite businesses' relatively low
 score on R&D as a share of GDP at only 43% of best performing and compared with the EU
 average of 51% on the same measure
- Members have welcomed the steady development of the Catapult network.
- The funding model (one third core public, one third competitive contract and one third competitive collaborative R&D funded by public and private sectors) enables some SMEs to access facilities that wouldn't be available otherwise.

Recommendations

- 1. We therefore support the recommendation in the recently published Hauser Review that the formula should be maintained.
- 2. We would also like to see more use made of the successful collaborations involving SMEs as case studies to show SMEs (and their financial partners) what successful collaborations look like to encourage further wider development particularly in areas that are fundamental to SMEs' bottom line performance such as process improvement and supply chain added value.

6 Conclusion -- access to finance

- In the RiE SME access to finance index, the UK score 66% of best performing is fractionally ahead of the EU average (62%). Some competitor countries score higher such as France and Germany (substantially higher), and other substantially less so e.g. Netherlands and Italy.
- The improvements do accord with our Business Monitor, but as stated earlier we are still a long
 way from a real solution. Banks aren't making it any easier for SME owner managers to go for
 growth and take on risk.
- It's still early days for the Business Bank, but so far its interventions haven't made things substantially easier for SMEs, rather they've helped the banks strengthen their capital reserves.

SME finance for growth

• A very small tool room in our membership serves as an example. The owner manager has been approached by several banks saying they are keen to lend and have plenty of funds. The company has plenty of business, so although the option of investing to grow and expand the business is attractive it's less attractive than developing the business organically through increased business through the door, using the company's capital, because the terms the banks want are so demanding they create unwarranted risks for the business. In the round, the MD thinks this is a pity because he sees that his company isn't taking on apprentices, training them up and generally expanding business operations at the speed he would if he went with the banks' line. In the end he wonders whether the country may be losing out. But on the other hand why should he risk the company to meet the layers of guarantees and additional costs the banks want.

Prompt payment

We support the originally trailed objectives that will highlight companies' payment performance
and make sure that it is publicised where necessary. Our membership operates across many
different supply chains, so companies have experience of many different types of contract. We
therefore support the primacy of contracts freely entered into.



However, we do believe that late payers should be hit and we hope to meet with credit rating
agencies under ICM's auspices to see how a firm's credit rating and payment performance could
be more explicitly linked in the public mind and be seen to operate clearly against the interests of
the poor payer.

With best wishes

Yours sincerely

(signed electronically 11 November 2014)

Martin Walder Chairman

cc Rt Hon Matthew Hancock MP – Minister of State, BIS Lord Livingston – Minister of State, BIS Matthew Ahmed, Matthew Gill, Claire Wren, HMT Stuart Edwards, Brian Greenwood – BIS Member associations



Annex A

The power of machines (with many thanks to John Lane of CNC Finance for sharing this example)

Assumptions

Investment value

• £100,000 for a well equipped CNC Turning Centre or CNC Machining Centre.

Income

- Rule of thumb -- a £100k machine would generate 10% of its value monthly, i.e. £10k.
- Conservative estimate allowing less for high days and holidays etc so kept to 8.33% per month in sales value. That is the £8,333.33 per month figure.
- Annual income: monthly by 12
- 10 Year Income: yearly by 10.

Conclusion

- A machine tool that costs £100,000 would bring turnover to the company of £999,999.60 over a ten year period.
- However the engineering company would hope to make a 10% net margin over those years on it so it would make £99,999.96 overall.
- This includes having paid for the machine but is fairly generous as most companies do not make 10% net after tax.

Where does the money go?

- The company must have spent the rest of the income with suppliers on metals, tooling, electric etc as well as on wages.
- Assume each company or person in the chain also makes the 10% margin then the amount generated because of the first investment grows. We also know that many people spend all their wages but the companies they purchase from get the activity.
- The income that has been spent and spent again comes to almost £10m just off one machine.
- Average salaries are £26,500 approx so one machine creates in one year enough activity in the economy to cover 37 jobs!

The calculation

Investment Value	£100,000.00
Monthly Income	£8,333.33
Annual Income	£99,999.96
10 Year Income	£999,999.60

Margin 10%	£99,999.96	
Respent	200,000.00	£899,999.64
Margin 10%	£89,999.96	
Respent Margin 10%	£80,999.97£	£809,999.68
Respent	£60,999.97£	£728,999.71
Margin 10%	£72,899.97£	
Respent		£656,099.74
Margin 10% Respent	£65,609.97£	£590,489.76
Margin 10%	£59,048.98£	2000, 10011 0
-	etc	etc
	etc	etc
Total	£999,999.60	£9,999,996.00