

25 June 2015

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 Compressed Air Society
British Fluid Power Association
British Paper Machinery Suppliers Association
British Plastics Federation
British Turned Part Manufacturers Association
Gambica
Gauge and Toolmakers Association
Manufacturing Technologies Association
Printing Industry Confederation
Processing and Packaging Machinery Association
UK Industrial Vision Association

Dear Chancellor,

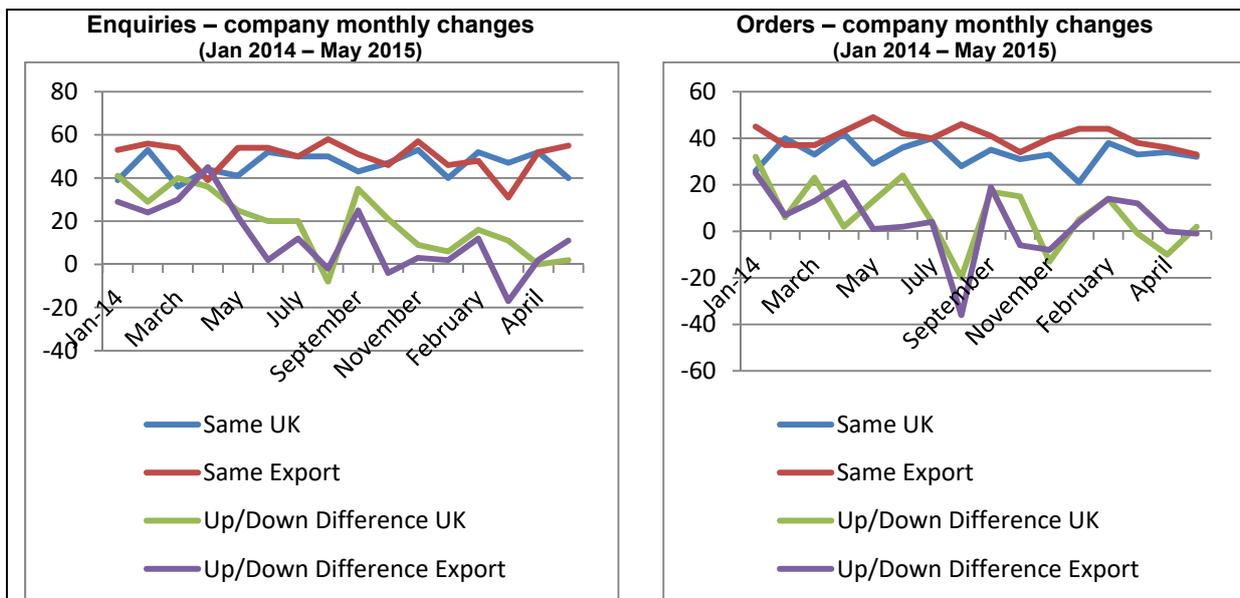
Engineering and Machinery Alliance Budget Letter

First, on behalf of the Engineering and Machinery Alliance, may I congratulate you both on your re-appointment as Chancellor of the Exchequer and your new appointment as First Secretary of State in the Conservative Government.

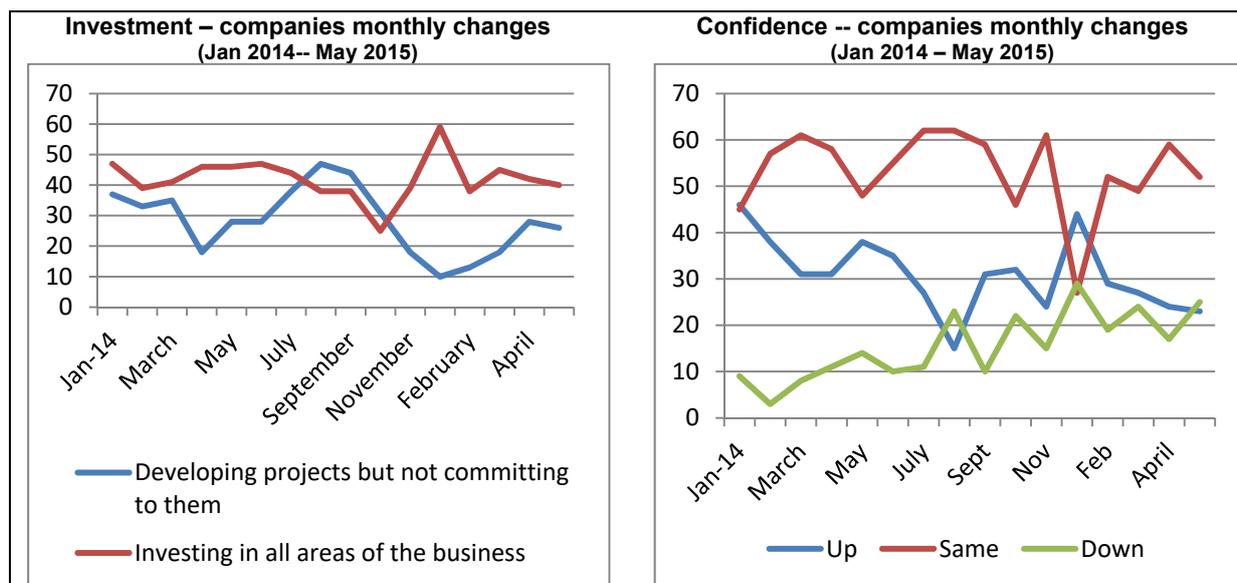
Our 13 trade associations represent 1,900+ companies, mostly in mechanical and electronic engineering, with sales of £9+ billion into the main supply chains (including automotive, aerospace, food, medicine, pharmaceutical, defence, oil and gas, offshore wind etc.), providing equipment, components and services. We have asked Cambridge University Institute for Manufacturing ECS to work with us on an innovation and productivity programme to help raise company and supply chain performance. This work has provided a number of insights which inform our submission.

Current business environment

After a big dip early in the year, enquiry levels have improved, particularly from foreign markets, but there's still a big gap between this year's performance and last year. In 2014, our monthly Business Monitor balance was averaging around +32/34, currently the three month average balance is -1 for exports and +4 for UK.



After the strong order book last year, companies have seen business soften, still positive, but not at the pace of last year at this time.



During this period, companies' investment performance has held up pretty well with, on a three-month running average, 61% of firms reporting to the Monitor that they are investing in some way, whether it's in equipment, innovation or skills and training. Confidence, erratic even at the best of times has taken a hit recently, which resulted in a modest negative balance overall (-2) in May.

The UK challenge in international context

The EU Commission's *Re-industrialising Europe* published in mid 2014 scopes out the challenge for all Member States. Table 1 summarises the UK's position on four dimensions compared to the Netherlands and illustrates the competitive task ahead for industry and national policy makers alike.

Table 1 Comparison UK performance with best in EU and EU average

Measure	Comparison EU top		UK compared to the EU average
	UK	Netherlands	
Total exports as % of GDP	4%	33%	Just one third of the EU average
Investment in equipment as % GDP	6%	31%	The weakest of all member states
Productivity per person employed in manufacturing	32%	40%	UK is better than the EU average (29% of top performer)
Business R&D % GDP	43%	37%	UK is worse than the EU average (51% of top performer)

Source: Re-industrialising Europe – Member States Competitiveness Report (SWD 2014/278)

Below we include two pieces of evidence to show how the UK is currently missing out on creating wealth that grows the whole economy, how the UK tendency to invest less in equipment and rely more on manpower flexibility, taking on more workers when demand rises and releasing them in the downturn, leaves the UK economy substantially poorer than other economies such as Germany, Sweden and France that continue to grow the totality of their manufacturing value added by investing in advanced manufacturing (Table 2).

Unfortunately there are no simple quantified data comparing different countries' performance when investing in advanced manufacturing systems and automation systems. However, there is good data that show the level of adoption of robotics in industry generally, by that we mean beyond the automotive sector, which is a heavy adopter and therefore tends to mask significant differences between markets. We believe this can be used as an indicative proxy

for automation more generally. Table 3 shows the UK's position in this more 'exposed' context, when automotive applications are excluded.

Table 2 Manufacturing gross value added comparison constant 2010 in national currencies 2003 and 2013

Country	2003			2013			% change 2003-2013		
	Sector GVA billion	Nos employed millions	Per employee '000	Sector GVA billion	Nos employed million	Per employee '000	Sector GVA	Nos employed	GVA per employee
Germany	457	7.5	61.0	554	7.4	74.5	+21	-13	22
Sweden	470	0.712	660.6	556	0.587	947.9	+18	-28	43
Italy	239	4.6	55.6	220	3.9	64.9	-8	-15	17
Spain	136	2.8	48.8	124	1.9	66.5	-8	-32	36
France	199	3.4	60.9	210	2.7	80.6	+6	-21	32
UK	148	3.2	45.6	143	2.5	57.6	-8	-22	26

Source: AMECO On-line. Note: Germany, Italy, Spain and France in Euros, Sweden in SEK and UK in GBP

Table 3 Comparative investment in robots in industry as a proxy indicator for investment in automation

	Germany	Sweden	Italy	Spain	France	UK
Non-automotive robot density (robots per 10,000 employees)	147	129	115	67	60	27

Source: IFR World Robotics report 2013

It's also worth pointing out that Tables 2 and 3 don't show that a heavier investment in robots (automation) necessarily leads to greater loss of jobs.

Productivity key to industrial and social growth

The Institute of Fiscal Studies' report published last autumn (*Living Standards: recent trends future challenges*) concluded when assessing what will help raise living standards most for all in the UK, that in this Parliament "policies that spur productivity growth will have the most significant impact" even more than changes in taxes or benefits rates.

We and other groupings are pushing for similar gains in initiatives such as our innovation and productivity strategy targeting machinery and component makers. We have invested in this work because we believe these programmes encourage firms (small ones in particular) to add a longer perspective to their plans and therefore sit well with productivity raising measures.

As the Conservative Manifesto makes clear, despite progress much remains to be done to create a strong and growing economy that's competitively strong enough to deliver for everyone at every stage of their life.

Although the UK scores well on many international comparisons such as general business environment, swathes of manufacturing capability has been hollowed out so that we are left over-reliant on a restricted number of big companies and relatively few medium sized firms with the potential and desire to grow into world leading suppliers, so an important aim must be to identify and help firms raise their game.

With that in mind we would welcome many of the Manifesto commitments, the £100 billion in infrastructure investment including road, rail and the internet over this Parliament; the exporter support to get an extra 100,000 firms selling overseas; the support for the modern industrial strategies creating high value and high knowledge jobs; the commitment to invest both in terms of R&D and in significantly raising the permanent level of the Annual Investment Allowance.

They are all important. But in the light of our experience we would ask you please to consider the vital roles of investment, financing, exporting and apprenticeships as keys to productivity growth.

Investment

- To attract investment in long term productive capacity, the UK has to stand out as the place to put plant that's 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 Annual Investment Allowance (AIA) is the flagship for such an investment friendly environment. For too long it or its equivalents at the time have been subject to short term decision making and change, sometimes on an annual basis. The Manifesto commitment to set it at a substantially higher permanent rate is welcome, but we feel bound to underline that the rate must be meaningful for manufacturers in the business of buying machines costing many hundreds of thousands of Pounds.
- The R&D Tax Credit is an absolutely invaluable support for high tech or research-based start-ups, not only helping them through the early years when they are loss making with payments that can be used on company operations but then in later years continuing to encourage innovation. Combined with the AIA at the current rate companies that assess where best to place their investments find the UK a competitive option.
- However, some industries suffer investment disadvantages from the current Business Rates system. Although plant and equipment per se aren't included in the rates, some industries are penalised by an increase in their rates if they invest in new operations such as ovens, furnaces and overhead cranes. This equipment then represents an additional fixed cost they have to meet but that their international competitors don't, with downstream implications for their customers purchasing their goods (e.g. more expensive metals, chemicals, glass) and UK-based equipment suppliers who find that their UK customers don't invest as much as others abroad, making their home base market less competitive and maybe less innovative.
- The Regional Growth Fund (RGF) and the Advance Manufacturing Supply Chain Initiative (AMSCI) were both of considerable assistance. The RGF was particularly appreciated for its simplicity. We would urge you to keep these funding channels open (for future competitive bidding rounds) to harness national schemes with local delivery for particular purposes.
- RGF might get more traction with manufacturers if the ratio on the jobs/value added were altered. A small pilot would soon indicate whether lowering the number of jobs and increasing the amount of value added would help. It would certainly be in line with the broader objectives of increasing the economy's productivity.

Financing

- Some of the new business potential identified by the sector councils for their supply chains (e.g. £3 billion for automotive) would require very substantial bulking up by any SMEs in those supply chains, perhaps by as much as 50% per annum to deliver at the scale required. Companies growing at 20% return on capital employed aren't going to be able to fund such growth unless there's particular financial 'scaffolding' in place to support the firm through that huge scale-up and turbulence that will be involved.

Skills

- To achieve dramatic scale-up in the targeted time period requires very special skills, that can really only be in the hands of people who have done it before. We certainly don't have many with such skills in the UK and we need to develop that expertise more broadly across the economy.
- In addition, all EAMA subsectors are reporting skills shortages.
- The only way to provide the required skills (managerial and technical) is to bring them in from outside the UK. In practice that may mean from outside the EU

because every other EU member state is targeting similar objectives and seeking similar resources in the internal market.

- This sits uneasily with the immigration goals. However, a clear system based on a statement of needs and roles to be filled, perhaps with some mentoring obligations to spread the expertise but also to give firms taking on the personnel first adopter advantage after a suitable period (say 18 months) when lessons have also been learned.
- Under the terms of Apprenticeships protected status there's an obligation that the apprentice should not have to pay anything towards his/her 'education'. The implication is that the employer should cover this, which will be an added cost on top of the other overheads associated with employing an apprentice until they are fully productive.

Exporting

- The target of getting 100,000 new firms exporting by 2020 to reach a £1 trillion of overseas sales is a tall order.
- We agree that more firms need to be encouraged to export and that there is merit in making new exporters particularly welcome.
- However, we don't see the rationale of limiting support to exporter virgins.
- We recommend, HM Treasury 'tests' the concept of offering a tax credit equivalent to certain export sales (e.g. SMEs, one contract, new to export, in excess of £25,000; three year exporter five different countries in one year over £25,00 in each)
- 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.

Deregulation

- There are now so many SIC codes to select from that it is entirely possible for two different firms to record quite faithfully the same products under many different headings when it comes to filling out the export paperwork.
- Having useful data is invaluable. But having data that misleads is dangerous. Electronic systems should be able to facilitate a deep analysis of the problem and hasten a reasonable outcome.

With best wishes

Yours sincerely



(signed electronically 25 June 2015)

Martin Walder
Chairman

cc Rt Hon Anna Soubry MP – Minister of State BIS
Lord Maude of Horsham – Minister of State BIS
Matthew Ahmed, Matthew Gill, Claire Wren -- HMT
Stuart Edwards, Briand Greenwood -- BIS
Member associations