

4 March 2016

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  
Solids Handling and Processing Association  
UK Industrial Vision Association

Dear Chancellor,

**Engineering and Machinery Alliance Budget Letter**

Our 14 trade associations represent circa 2,000 companies, mostly in mechanical and electronic engineering, with sales of £10 billion into the main user supply chains, providing equipment, components and services. I write briefly amplifying the thrust of our Autumn Statement letter, on the state of trade, automation, skills and exporting.

***Despite many uncertainties, the year started quite well but confidence remains constrained***

1. Our Business Monitor records monthly changes in trends, not the size of business recorded, so the data are indicative. January is always expected to be a good month. This January, the returns on enquiries are very positive for UK (+29) and for export (+21), which is encouraging. UK orders are also strong (+27). The export trend remains weak (-4). Investment positive, but muted.
2. So the start to the year is promising, but confidence is constrained with an overall balance of '0' for the month and averaging -4 per month since August 2015.

***Productivity plus total GVA growth are the real keys to societal wealth creation. Automation could be key to productivity in many sectors, especially in manufacturing***

3. We mustn't repeat the mistakes of the past where lean practices, became a 'read-across' for successful wealth creation based simply on an increase in GVA output per worker.
4. UK manufacturing GVA per employee increased 49% in the period 1998-2007 (Germany 38%). But total UK manufacturing GVA only grew 3% (from £151 billion to £155 billion in constant 2010 money) compared with GVA growth in Germany (+30%), Netherlands (+27%) and France (+23%). The USA even achieved a 37% gain in its manufacturing GVA. (Note: all these data are in national currencies on the same basis, source AMECO Online 5 May 2015).
5. Barclays Bank's report "*Future-proofing UK Manufacturing*" is based on an analysis by consultancy Development Economics, comparing UK and German attitudes to automation (<https://www.barclayscorporate.com/content/dam/corppublic/corporate/Documents/research/automation-report.pdf>) amongst 700 manufacturing middle managers and above.
6. Their economic modelling shows that a moderate increase of £1.24 billion in automation could raise UK manufacturing GVA to the economy by £60.5 billion over the next decade. In addition to these direct effects, "accelerated investment in automation and robotics would have an indirect impact on the supply chain and on the wider economy" which the study estimates could amount to an extra £2.5 billion a year by 2020 and £3.9 billion by 2025.
7. And that's not all. The report estimates the automation investment could help create and safeguard more than 100,000 jobs by 2025. It could help upskill employees too – 57% of respondents believe that it would.

8. The main constraints they see are very little or no support (36%) and a lack of both internal funds (23%) and external grants and other sources of finance (15%). Suggested solutions include: increased support and advice from suppliers (36%); increased engagement with HVM Catapult (22%); national awareness campaigns (21%); as well as grants and other financial support (37%).
9. Automation and robotics are part of the digitally based suite of technologies that are transforming many different sectors of the economy, but particularly manufacturing: e.g. Additive Manufacturing, Servitization and Smart Manufacturing.
10. Smart Manufacturing techniques (Industry 4.0, Industrial Internet of Things) are set to transform not only working practices but also business models in manufacturing over the next decade in many cases in ways which potentially work disproportionately well for the UK. We need to join other countries in supporting an education and training initiative by establishing three Technology Demonstrator sites (Living Laboratories) across the UK. Industry is currently raising up to £15m to part-fund this exercise but we will need matched funding from government to make this a reality.

***Long term investment in skills, innovation and plant and machinery is more likely to flourish where there's a clearly articulated strategy that's seen to underpin and sustain those activities***

11. To better our competitors' performances requires long term policy continuity, encouraging investment in skills, R&D and innovation, as well as productive capacity through the cycle, even when margins are very thin (e.g. in automation and new processes to achieve better yields, increased precision and more cost effective outcomes).
12. We regret to have to observe that slashing the Annual Investment Allowance by 60% to £200,000 is a misstep. (However, it would be churlish were we not to welcome the fact that it's eight times the previous permanent level, but note: that paltry level simply showed makers around the world the UK wasn't serious about developing a wealth creating manufacturing economy.)
13. It sent the wrong message to long term capital intensive investing industries, just as the UK rating system does particularly for the 'foundation' industry companies where investment in fixed plant raises their rates bills so that perversely such investments in the UK morph into increased fixed costs for manufacturers and make them less competitive because companies making similar investments in other countries (e.g. The Netherlands) don't face the same burdensome approach.
14. We understand this anomaly is being reviewed. We would welcome a change that supports investment, not only for the increased take up in plant and machinery, but for the wider boost to UK manufacturing productivity generally.

***The UK needs a culture change in its attitude to skills and training, not solely on apprenticeships but for training more generally***

15. Of course many firms rely on apprentice-based skill-sets. But many others rely on technician skills at less refined levels than the typical engineering three-year apprenticeship. Training at technician level also requires employer commitment at a level, which in some other sectors would be regarded as equivalent to underwriting a one or two-year apprenticeship.
16. We hope that, as the Apprenticeship Levy consults prior to launch, these sorts of inconsistencies can be addressed constructively, so that out there companies welcome a system that's designed to help them to build for the future of the company, their sector, their employees and the economy as a whole. Such a positive approach will help fuel the necessary culture change and make it easier for trade bodies to engage with enthusiastic audiences when they ensure that member companies are fully aware of how the system works to meet their skills needs in practice.

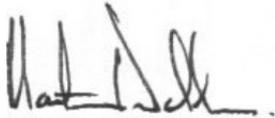
***Doubling exports to £1 trillion is an ambitious goal that requires an ambitious policy response***

17. The task to raise the UK's export ratio to GDP (31.4%) from one of the very lowest in the EU to even a middle ranking performance (EU average 44.9%) also requires a culture shift (EU Commission data *Member States Competitiveness Report 2014 SWD [2014] 278*). Without it we risk a declining standard of living because we currently import so much.
18. For many smaller machinery and component companies exporting is a necessity because the UK market is too small -- the required economies of scale can only be achieved by adding sales overseas. To substantially increase the number of firms exporting will require an infrastructure that's:
  - a) flexible enough to support very different types of exporters through very different 'exporter journeys' (some typically lasting several years before a sale)
  - b) sufficiently incentivised to encourage a company to tackle exporting wholeheartedly and maybe for the first time.

19. UKTI is a 'marmite' organisation. Some firms love it. Some don't. In our opinion when it comes to exporting, its twinned objectives (for FDI as well exporting) and the frequent changes required of it don't help.
20. A national export agency with a single focus and a consistent policy framework would go a long way to galvanising companies in their exporting effort.
21. If government appears to flip-flop on exporting, because it keeps changing the nation's priorities and messages, companies that do little or no exporting aren't going to feel particularly motivated to commit further resources, and so the 'culture shift' doesn't take place.
22. Witness the mechanical engineering sector, which is one of the UK's most successful export sectors, producing a positive trade balance year on year (according to ONS Monthly Trade Bulletins). It relies very heavily on trade shows to create, develop and maintain markets and yet UKTI support for trade shows seems to have been specifically cut without reference to the groups involved. That doesn't inspire confidence amongst non-exporters and makes little sense to those that do, given the international commitments that have to be made to foreign representation months/sometimes years in advance. Radical, late changes smack of indifference and low priorities to exporters and their customers overseas. It's important that these false impressions are dealt with (e.g. through greater collaboration and flexibility).
23. If UK export support and finance guarantee services were seamless, companies might find it easier to engage, particularly if their relationship were managed holistically.

With best wishes

Yours sincerely



*(signed electronically 4 March 2016)*

Martin Walder  
Chairman

cc Rt Hon Anna Soubry MP – Minister of State BIS  
Rt Hon Lord Maude of Horsham – Minister of State BIS  
Matthew Ahmed, Ollie Popescu, Claire Wren -- HMT  
Stuart Edwards, Adrian Barker -- BIS  
Member associations