Arms conversion and the Covid-19 crisis - Webinar notes

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- *Industrial conversion* very much 'in vogue' at the moment. For example, we're seeing shifts:
 - o From fossil fuels to renewable energy
 - o From energy-hungry technologies to energy-efficient ones
 - From human-controlled tech to computer-controlled robots
- Some of this is to help tackle environmental problems, like climate change, in proposals like the Green New Deal
- Some of this is mainly for economic reasons
- One shift we hadn't heard much about until the Covid-19 crisis was arms conversion
- But now there are media stories about arms companies retooling to:
 - Make ventilators to help intensive care patients breathe more easily
 - Use 3-D printers to make personal protective equipment (PPE)
- What's the story behind these efforts? And what do they tell us about future possibilities?
- First, some *jargon* and *a bit of history*
- *Jargon* two types of industrial conversion:
 - 'Company conversion' also known as 'factory conversion'
 - o 'Economic conversion'
- Company conversion as its name suggests, take place at a single company
- Economic conversion is shift in the regional or national economy
- Some of the best recent examples of arms conversion from the *end of Cold War* in early 1990s
- Reductions in national military spending coupled with company mergers and greater 'capitalisation' of manufacturing led to major drops in employment in arms industry
 - Some governments e.g. Germany ran specific conversion programmes with individual companies. Particular successes:
 - MAK, tank manufacturer, converted to build train locomotives
 - Airbus Helicopters moved from 100% military to 80% civilian
 - Over 10y to realise these
 - Success due to partnership between government (national/ regional), companies and trade unions
- Similar partnerships currently operate in the USA to deal with fluctuations in regional employment due to changes in funding of military contracts (but is used both to when military funding falls and when it rises!)

• UK situation is different

- o Economic conversion has been the main route: two examples
- First example: national transition since 1985
 - Large arms industry jobs decline
 - Over 100,000 jobs lost in 10y (1985-95); 20,000 fall since
 - But since about 2000, massive growth of jobs in energy efficiency tech and renewables has more than compensated for losses
 - Latest figures:
 - 'Green industrial' sectors: 215,000 jobs; arms industry: 135,000
 - All figures 'direct' jobs
- Second example: Humberside transition
 - 2012: 850 jobs lost at BAE Systems
 - 2016-17: 1,000 jobs created at Hull Green Port manufacturing wind turbine blades
- o Also Lucas Plan which other speakers will cover
- Now let's look at Covid-19 activities in the UK
 - Company/ factory conversions are happening for medical equipment
 - o Uncommon situation for UK
 - Limited details have been released so far but some info available
 - Ventilators
 - Complex machines to help intensive care patients breathe more easily
 - Fears of national shortage led govt to put out call for engineering companies to help produce thousands of new ones
 - Regulatory approval so far given to one consortium:
 - Ventilator Challenge UK
 - 29 companies involved including specialists in medical tech, cars, IT, aircraft and arms
 - 7 of them major producers of arms and other military equipment
 - Co-ordination of this consortium is by a public body:
 - High Value Manufacturing Catapult
 - Four sites chosen for production:
 - Including Airbus plant in Wales
 - o None of the sites manufacturing military equipment
 - Trade unions heavily involved in conversion work
 - Orders for minimum of 15,000 ventilators
 - Regulatory approval pending for proposal from:
 - Babcock International leading UK arms corporation, involved in UK nuclear weapons programme
 - Regulatory approval rejected for proposals from Dyson and others
 - PPE numerous UK engineering companies have started producing PPE, including masks, visors, using 3-D printers – including arms companies, e.g.:
 - Airbus, Babcock, BAE Systems
 - o Isolation pods for air ambulances newly developed by Babcock

- Some implications for the future developments
- UK can do company level industrial conversion, involving arms companies, when govt, companies and trade unions work together towards a common goal
 - For Covid-19, it's been on a small scale, with very limited arms industry involvement – but such programmes could and should be scaled up for climate change, air pollution, and other socially-useful goals
- Such initiatives should be part of Green New Deal proposals what some have called Green New Deal 'plus'
- A specific govt agency should lead this process Defence Diversification Agency
- Since pandemics and climate change are considered major threats in the govt's National Security Risk Assessment, these initiatives would have security benefits

Thank you for listening!

Notes

- UK industrial employment (direct fte)
 - UK arms industry (MOD/ ADS)

1985/86: 260,0001995/96: 155,0002018: 135,000

- UK Low carbon and renewables industries*
 - **2018**: 213,000

Breakdown: 20% renewables; 65% energy efficiency tech; 10% low carbon veh.

- * Not including nuclear power
- Including 'indirect jobs' in totals would roughly double them
- More details on Ventilator Challenge UK consortium
 - Two agreed designs of ventilator
 - o Four manufacturing sites:
 - Penlon in Oxfordshire; Airbus in Wales; Ford in Essex; Mclaren in Surrey
 - The latter three are 'conversion' sites

Key references

ADS Group (2020). https://www.adsgroup.org.uk/industry-issues/facts-figures/ Babcock International (2020). https://www.babcockinternational.com/news/ Office of National Statistics (2020).

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