

# What are the issues affecting tertiary education (and in Slovak Republic) and what policy options choices exist?

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**Prof Andy Westwood November 2016**

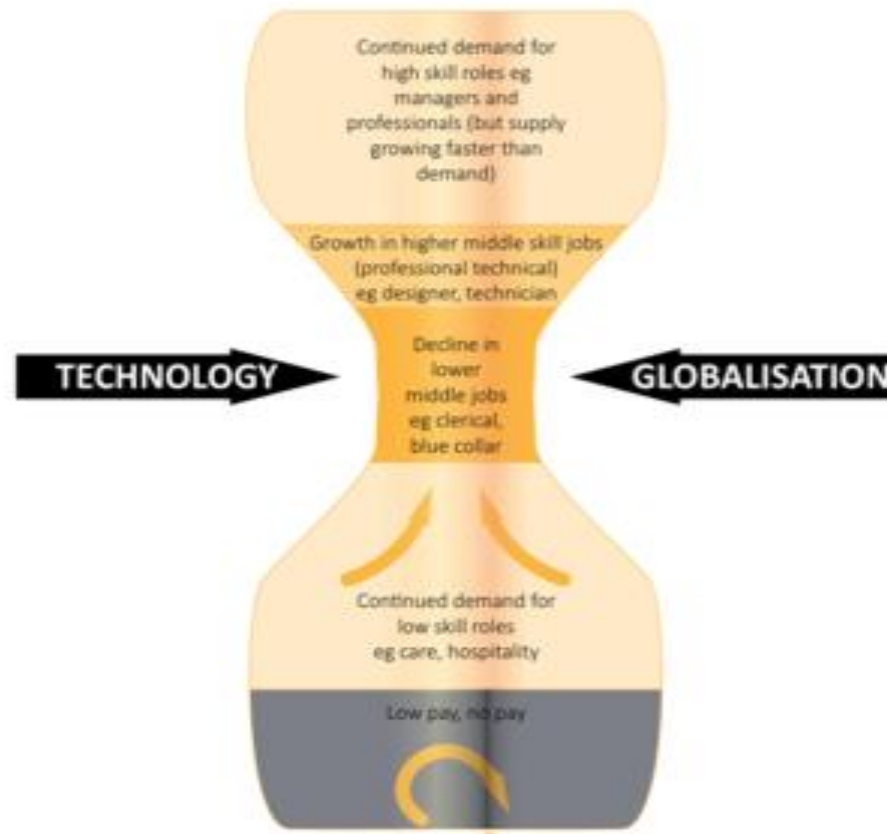
# Tertiary/'Third Level' issues

- Interest in growing human capital (across different routes) in order to support economic growth and the funding systems that incentivise and recognise that?
- Industrial or regional strategy, capital investment in new (and old) institutions, applied research facilities (eg Fraunhofers in Germany and Catapults in England)?
- How different countries (particularly UK) have tried to develop regulation, funding and quality models that manage state costs & offer high rates of private return to individuals, firms?

# Main issues confronting policymakers?

- Affordability of mass Higher Education?
- Ensuring quality of graduates and research outputs?
- Ensuring value for money in/from sector?
- Capturing and improving impacts from HE (graduates, research) at national and local levels
- Improving/accelerating economic growth?
- Catalysing industrial strategy and local regional economic development?
- Skills utilisation in firms/organisations?

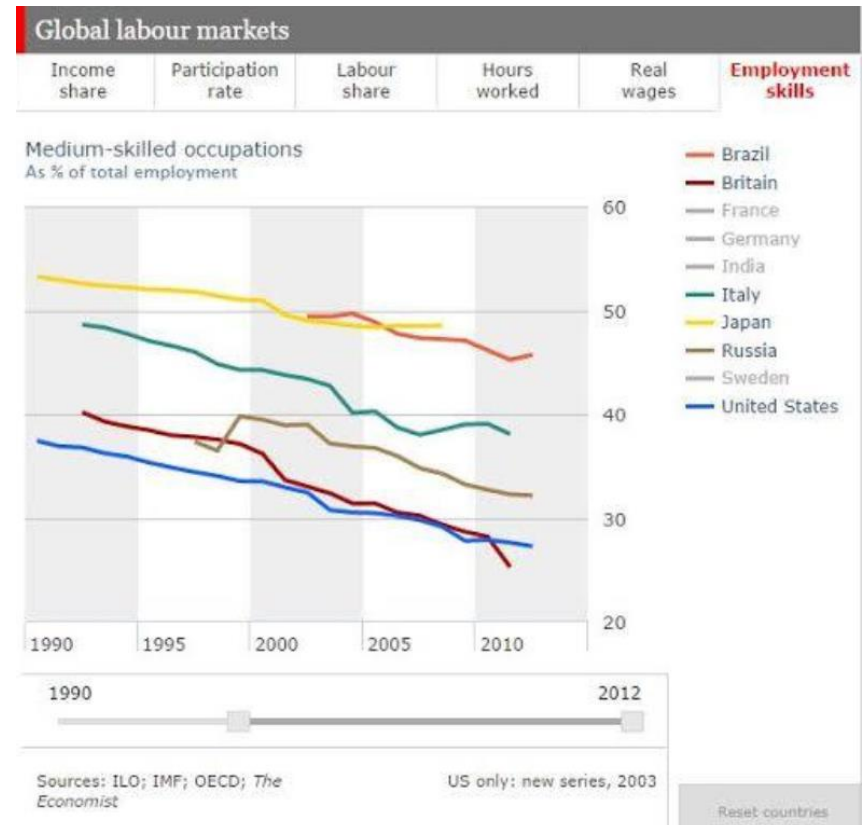
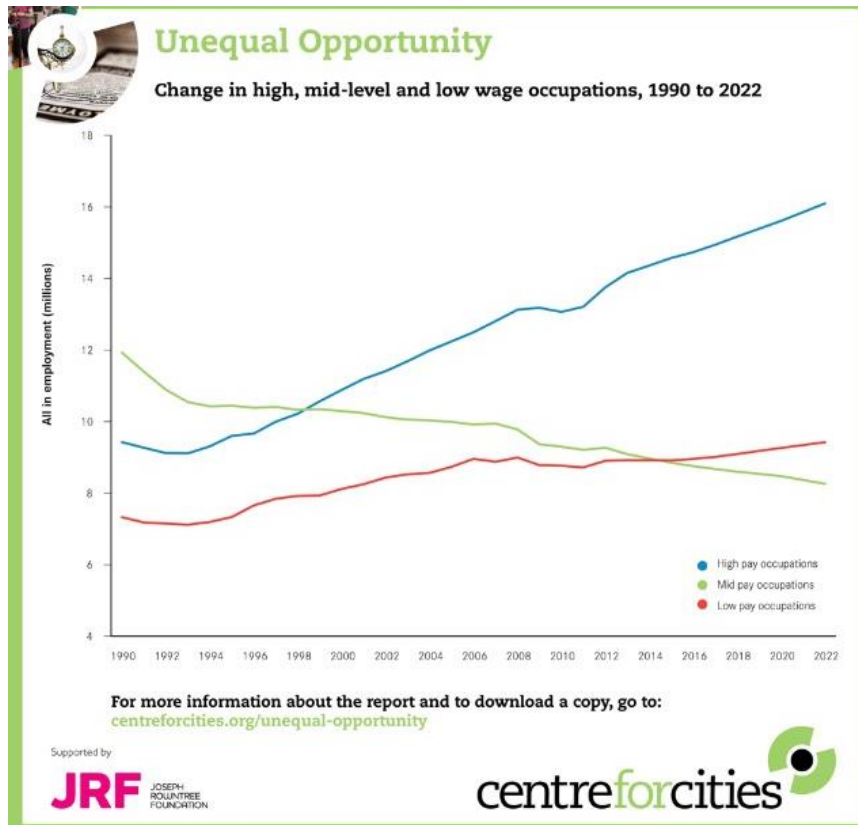
# But first some broader issues: polarised economic growth



# Polarised job growth in UK cities

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# Longer term occupational and sector change likely?

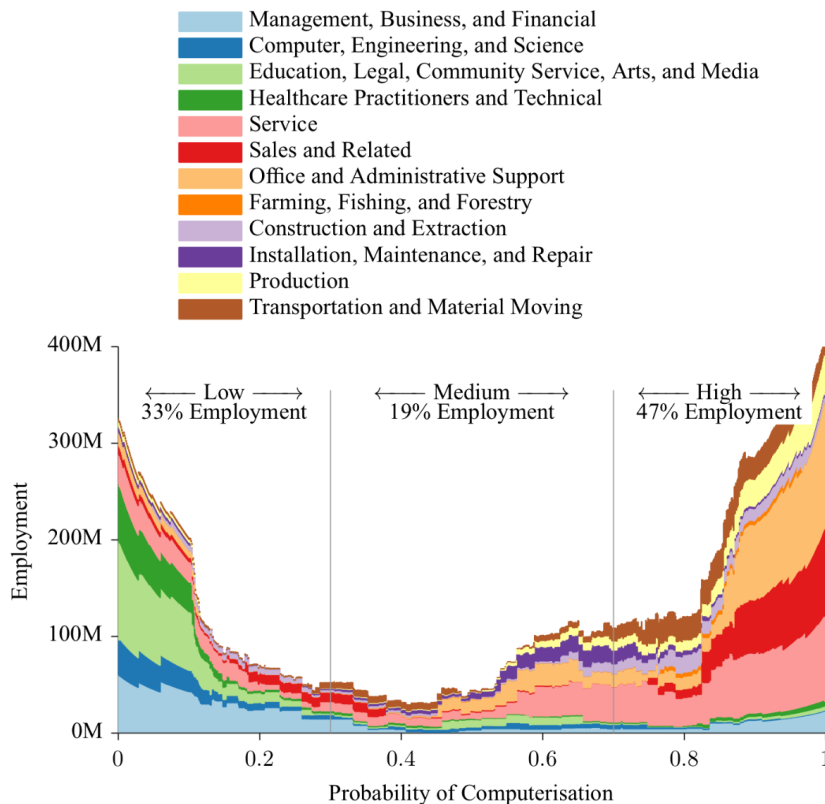


FIGURE III. The distribution of BLS 2010 occupational employment over the probability of computerisation, along with the share in low, medium and high probability categories. Note that the total area under all curves is equal to total US employment.

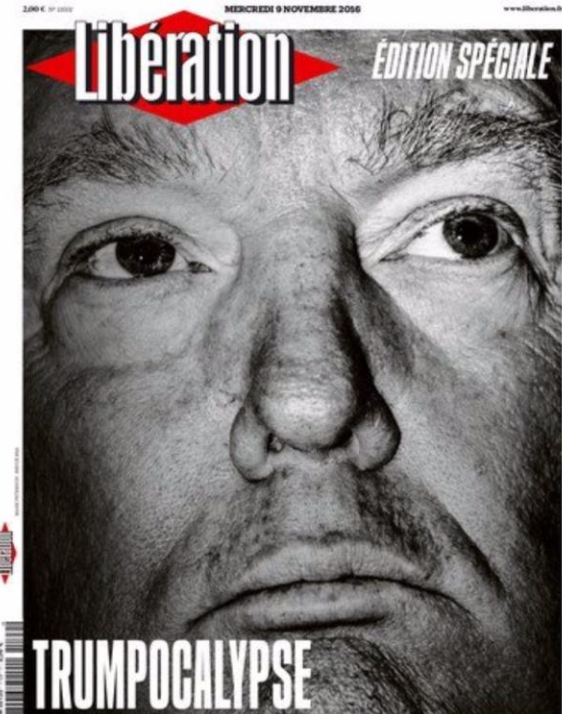
- *Globalisation*
- *Technological change*
- *Automation*
- *Ageing population and workforce*
- *Jobs and sectors of 2015-2020 unlikely to look same in 2030...?*



# 'Brexit' & the 'Trumpocalypse'

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# Globalisation, Technology & 'Blue Collar' jobs (1)

*'We are going to bring these steel jobs back...'*

Donald Trump (Jonestown, Pennsylvania, 2016)

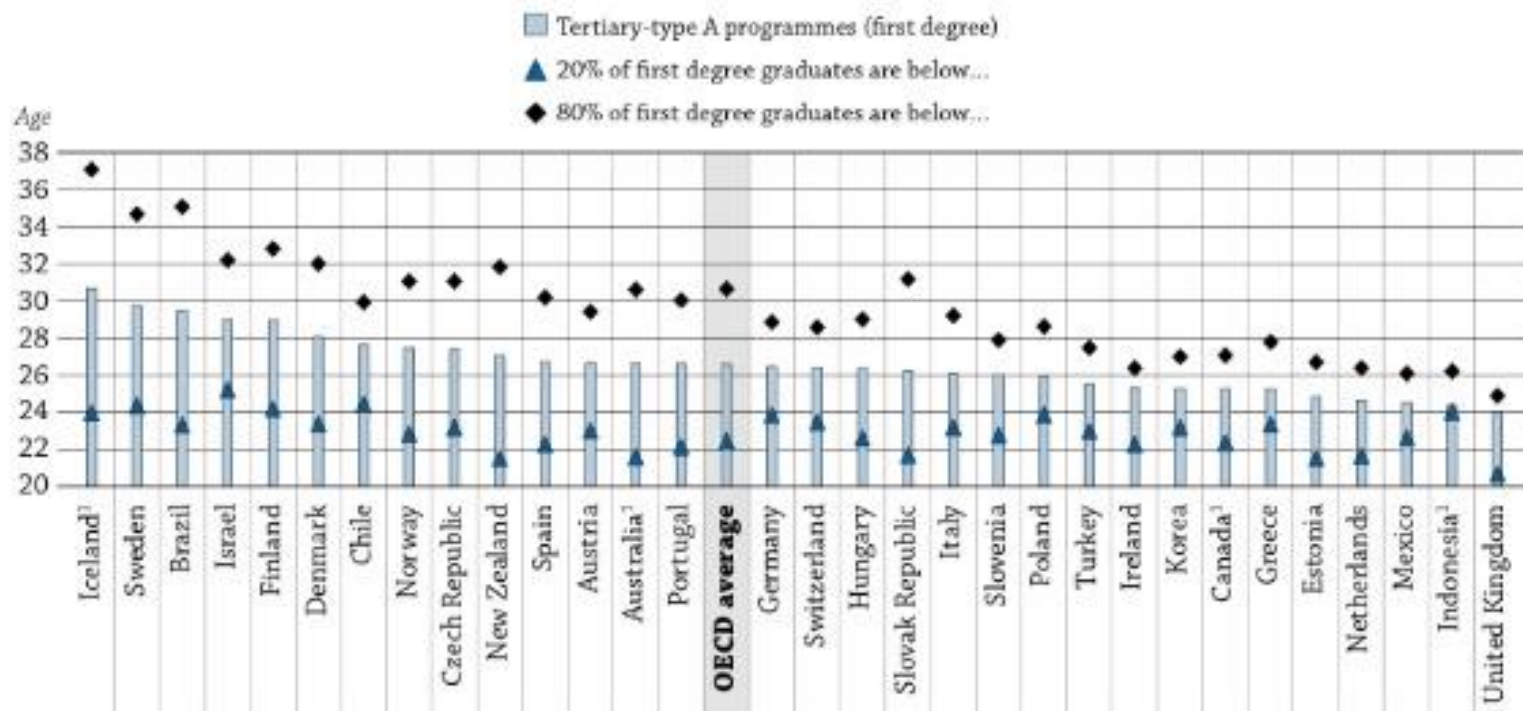
*'No politician can bring these shipyard jobs back. Or make your union strong again. No politician can make it the way it used to be.'*

Bill Clinton (North Carolina, 1992)



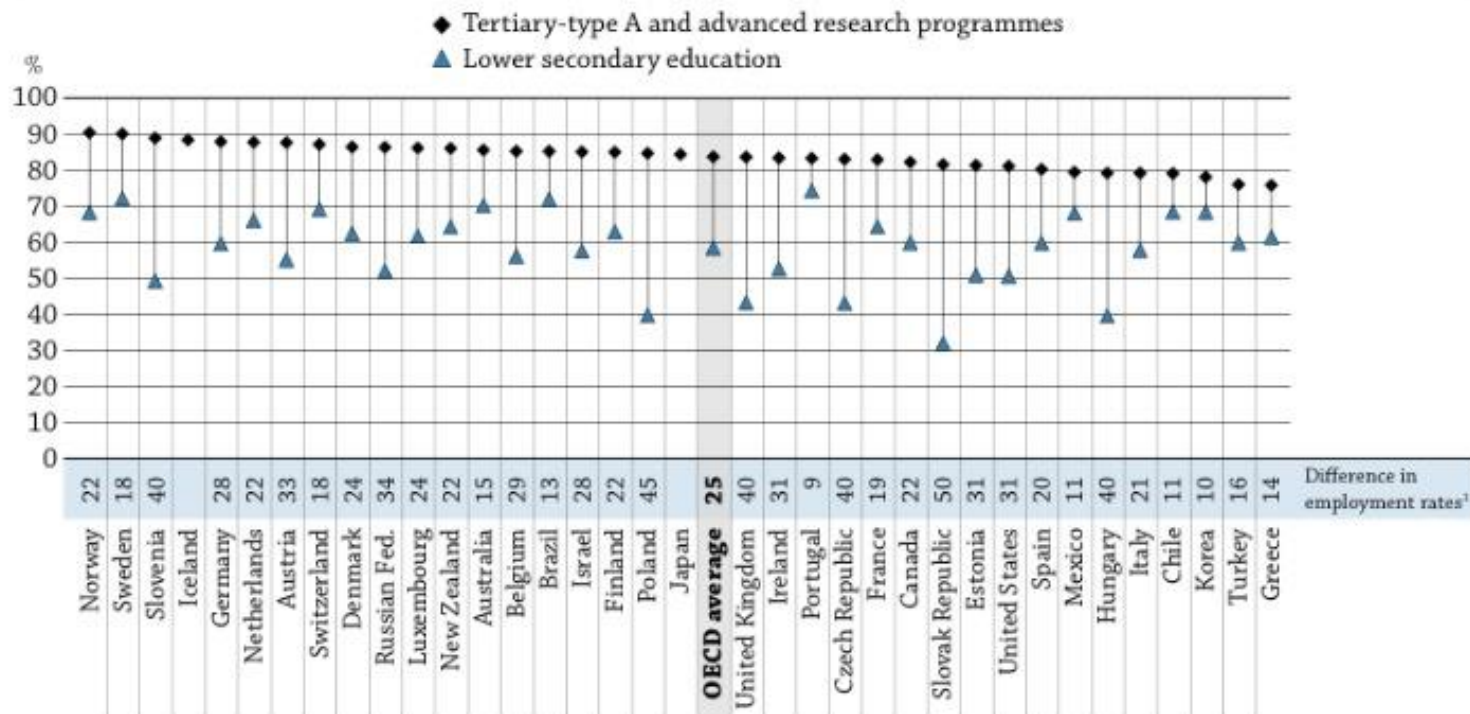
# Who goes to university (OECD)?

**Chart A3.1. Average age of graduates at ISCED 5A level and age distribution (2011)**



# Why do people want to go to university?

**Chart A5.1. Employment rates among 25-64 year-olds, by educational attainment (2011)**



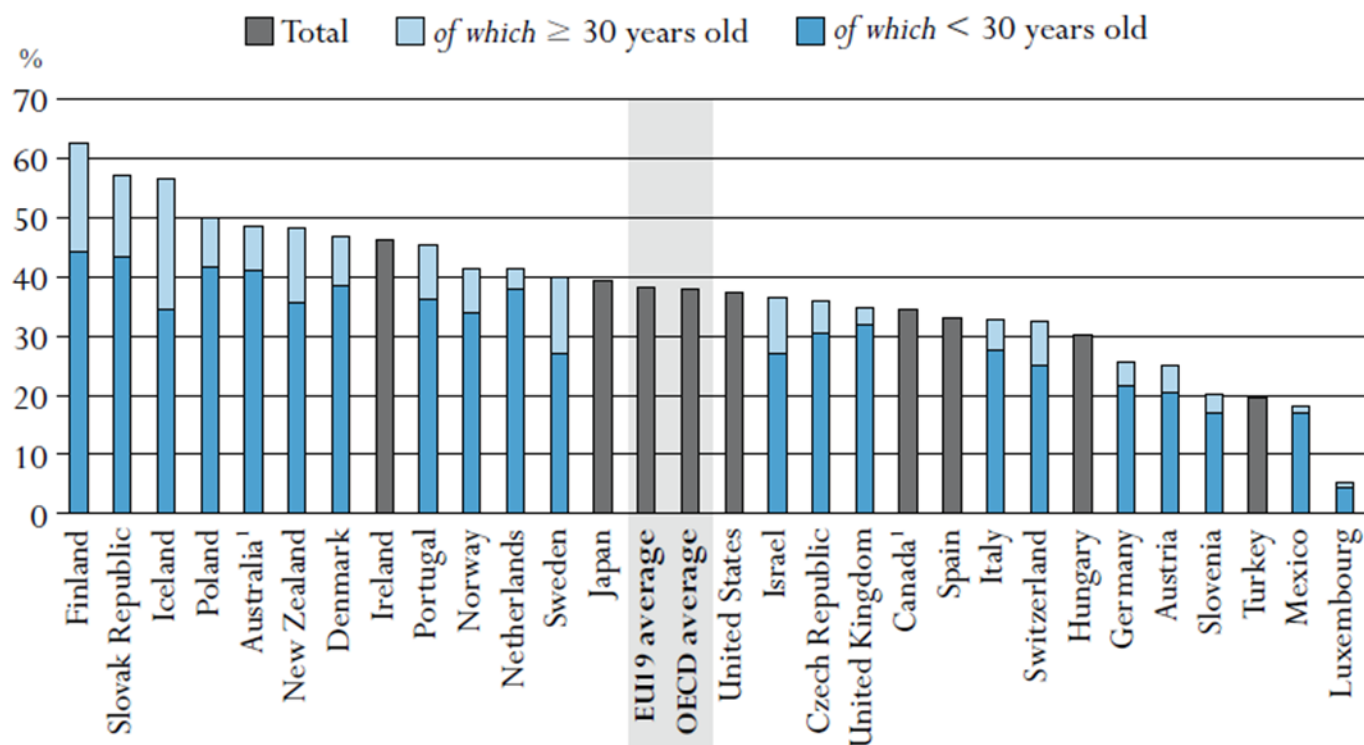
1. Difference in employment rates (in percentage points) between tertiary-educated adults and those with only lower secondary education.

Countries are ranked in descending order of the employment rate of tertiary-educated 25-64 year-olds.

**Source:** OECD. Table A5.1a. See Annex 3 for notes ([www.oecd.org/edu/eag.htm](http://www.oecd.org/edu/eag.htm))

**StatLink** <http://dx.doi.org/10.1787/888932846481>

# Do too many people go to 'university?'



1. Year of reference 2007.

Countries are ranked in descending order of the graduation rates for tertiary-type A education in 2008.

Source: OECD, Table A3.1. See Annex 3 for notes ([www.oecd.org/edu/eqa2010](http://www.oecd.org/edu/eqa2010)).

# The 'pipeline' problem (or just thinking about the supply side)...

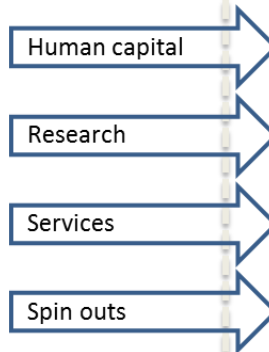
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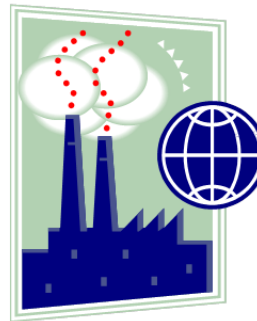


# Disappearing model of HE?

## Supply side (‘disinterested’ model)



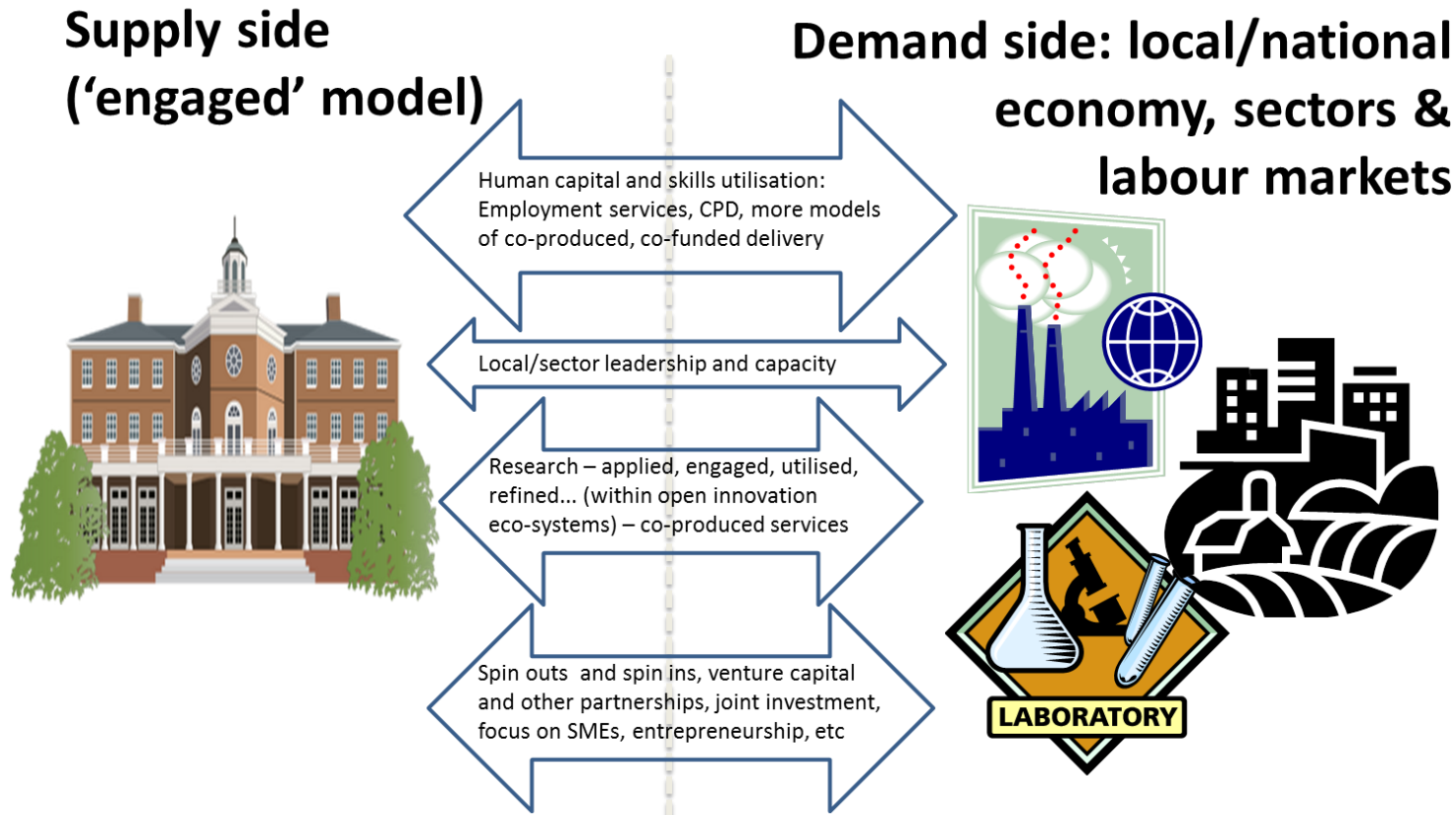
## Demand side: local/national economy, sectors & labour markets



Supply side activity (neo liberal economic framework incentivises and sustains a ‘supply push’ or ‘disinterested’ producer model)

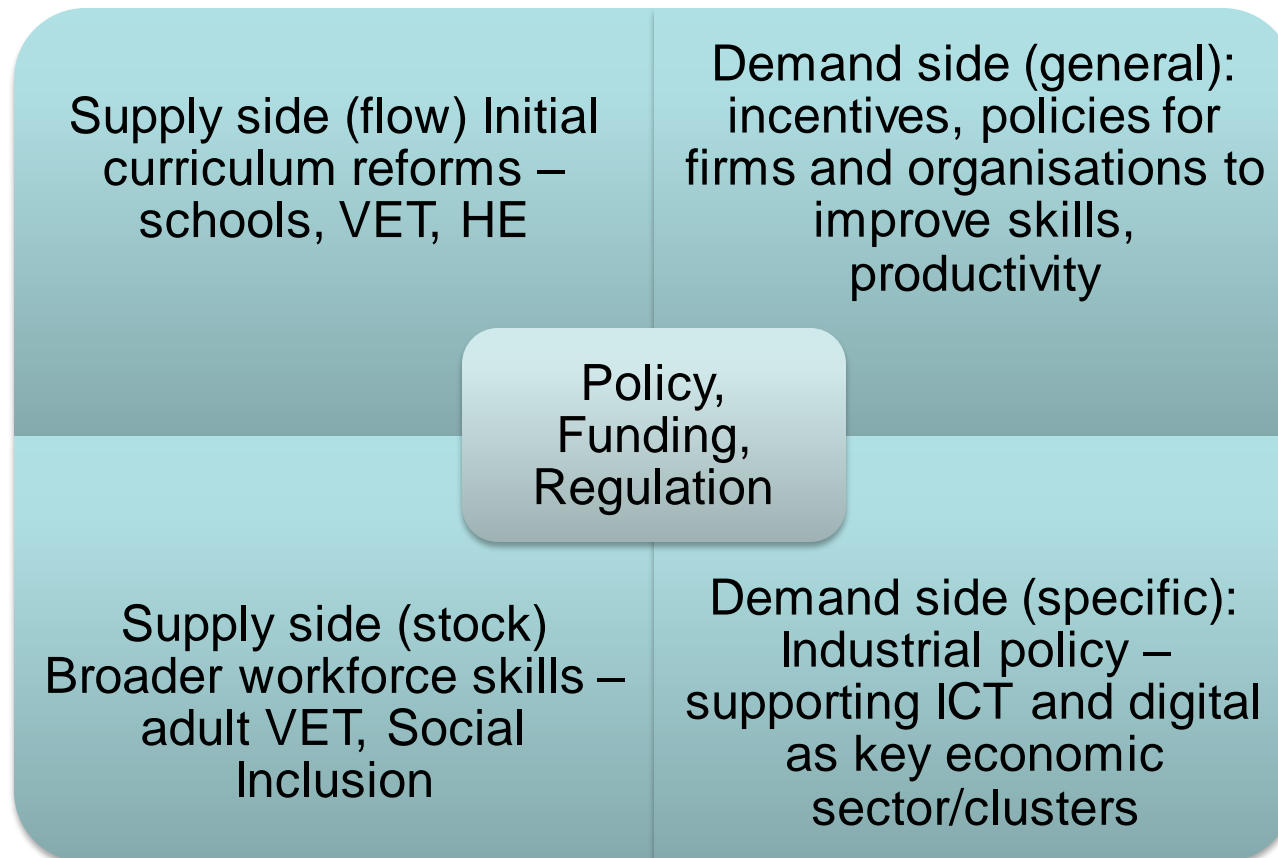


# Engaged (or regulated/directed) model for HE?



Supply and demand side model (post neo liberal economic framework with incentives and expectations of demand side intervention): industrial policy, skills utilisation, innovation, economic development

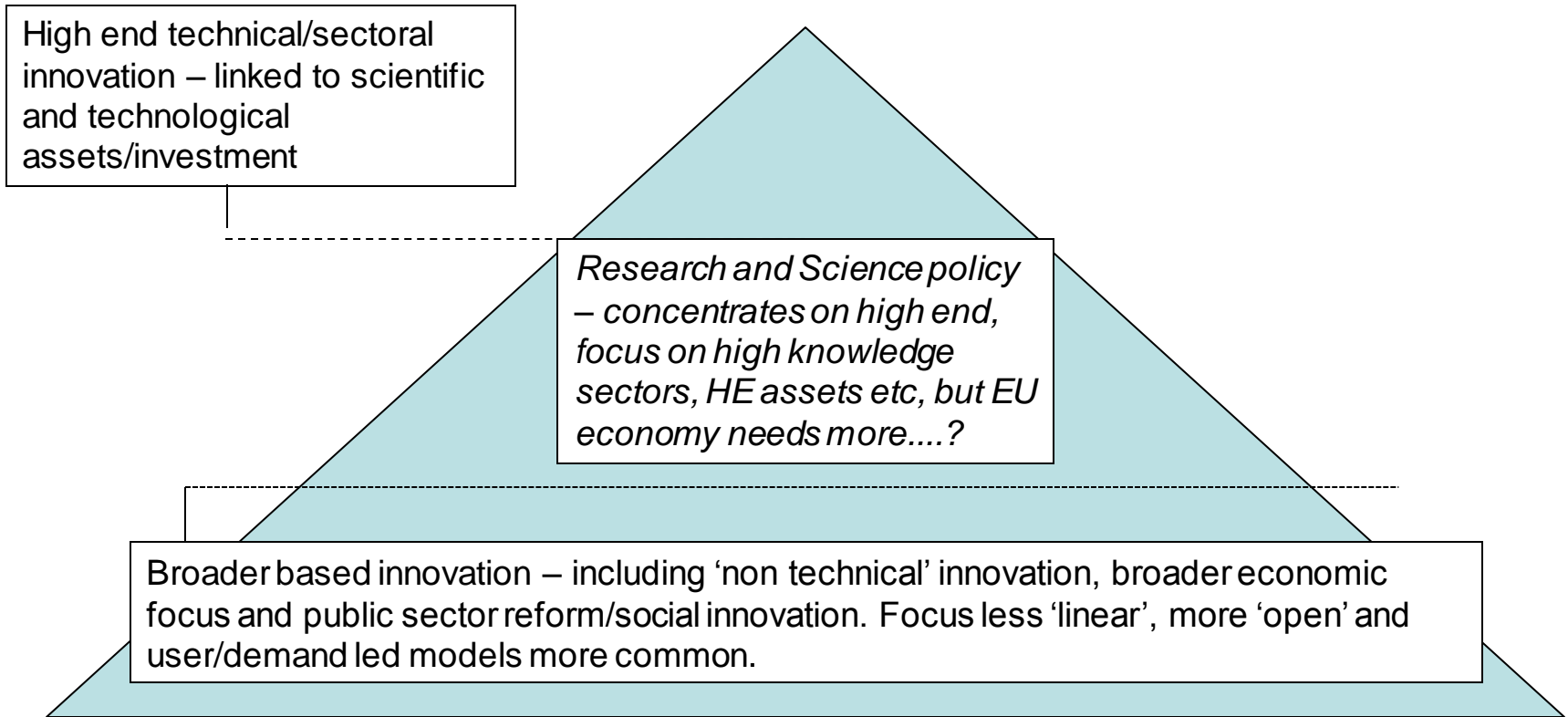
# Policy Framework: where best to focus and add value?



# Industrial & Regional Policy

- Supporting key sectors and locations through range of fiscal and other policies (including science/research investment, technical skills etc)
- Focus spending on supply chains/clusters (NB acknowledging EU 'State Aid' rules)
- Demand side interventions (innovation support, 'Industrial Strategy Challenge Fund', R&D Tax Incentives)
- In UK (and US?) a big focus on low productivity/growth cities and regions (in wake of Brexit vote and focus on 'left behind')

# Building innovation capacity?



*Prioritisation of some key sectors including advanced manufacturing, life sciences, renewable energy, creative industries, agri-business, science and new technologies*

# Global Innovation Index 2012

Sweden, Finland, Denmark, **Norway**, the Netherlands, Belgium and Ireland can be considered as “Creativity leaders”;

**United Kingdom**, Switzerland, France, Germany, **Spain**, Italy, Austria, Greece, Slovenia and Hungary might be defined “Creativity followers”;

Portugal, **Italy**, Czech Republic, Estonia, Latvia and Croatia “Moderate creative countries”;

Lithuania, Bulgaria, Slovakia, Poland, Cyprus and Romania “Modest creative countries”.



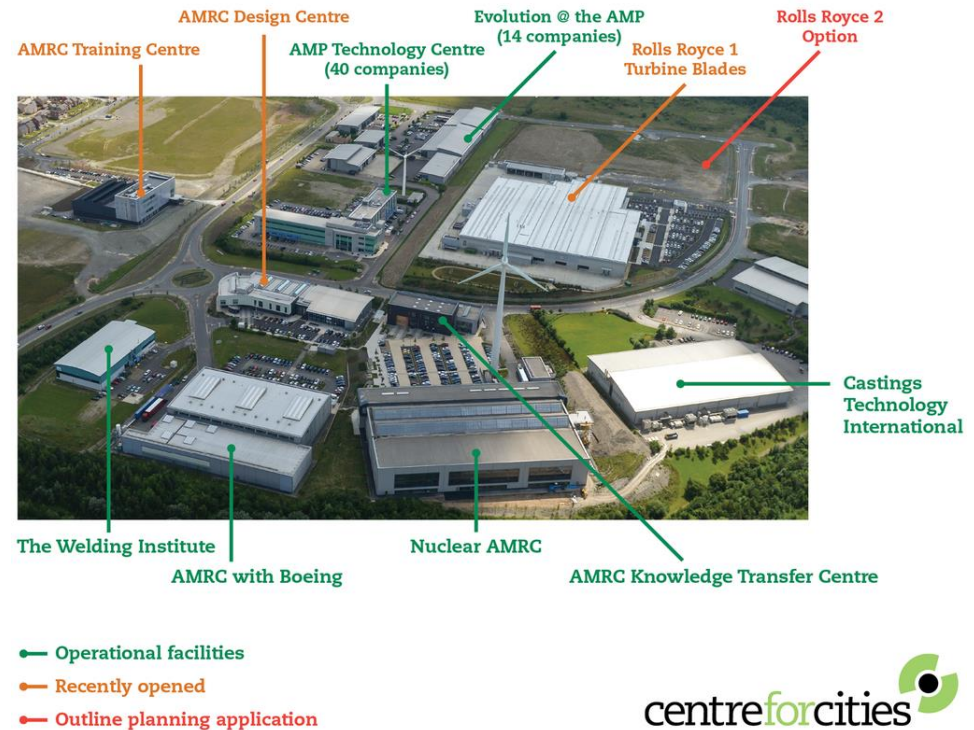
# Applied (or Translational) Research Centres

- Fraunhofer Centres – Society founded in 1949 in West Germany, now with 67 Research Centres (part funded by state and business) include cell therapy, advanced engineering, digital tech, wind energy, applied polymers, optics etc
- Catapult Centres in UK – founded in 2012, 10 centres including digital, transport, precision medicine, advanced manufacturing

# What does specialist technical provision look like (UK – AMRC)?

- Higher level technical – Levels 3 – 6/7
- Applied research
- Engaged ‘demand side’ – employers, employer investment Rolls Royce, Boeing
- Flexible qualifications, frameworks and pathways including FT, PT and WB

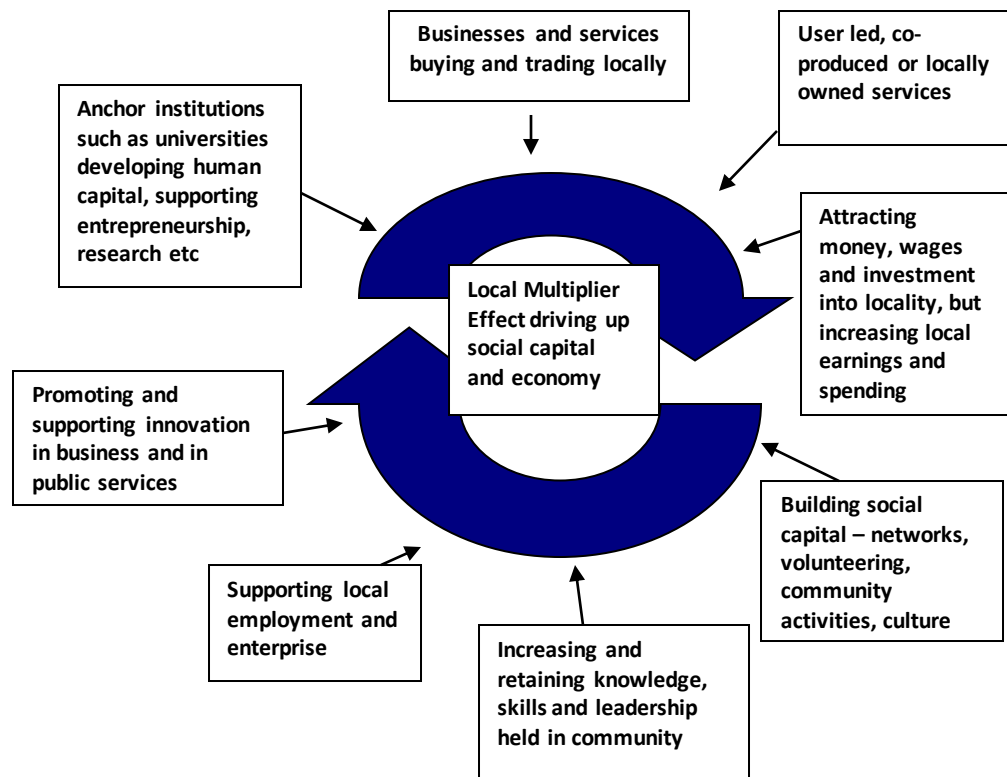
Making It: The advanced manufacturing economy in Sheffield and Rotherham  
The Advanced Manufacturing Park, Sheffield-Rotherham



# HE, Research and Regional Economic Development

- Building, retaining and utilising human capital
- Maximising role and capacity of ‘anchor institutions’ including public, private and third sector organisations
- Explicit role for universities and technical schools/colleges
- Supporting entrepreneurship
- Support social economy
- Build infrastructure, connectivity

# Stimulating growth in disadvantaged local economies?



# Active Labour Market Policies

- What is context for job creation/economic development?
- What organisations are delivering ALMP? (see private and non profit firms in US, UK, Australia for example)
- What (if any) compulsion, sanctions or requirements exist within benefits regime?
- What opportunities are there to support training/retraining?
- What opportunities are there to support entrepreneurship and the social economy?
- Training in sectors linked to industrial policy – ensuring capacity in technical education institutions