



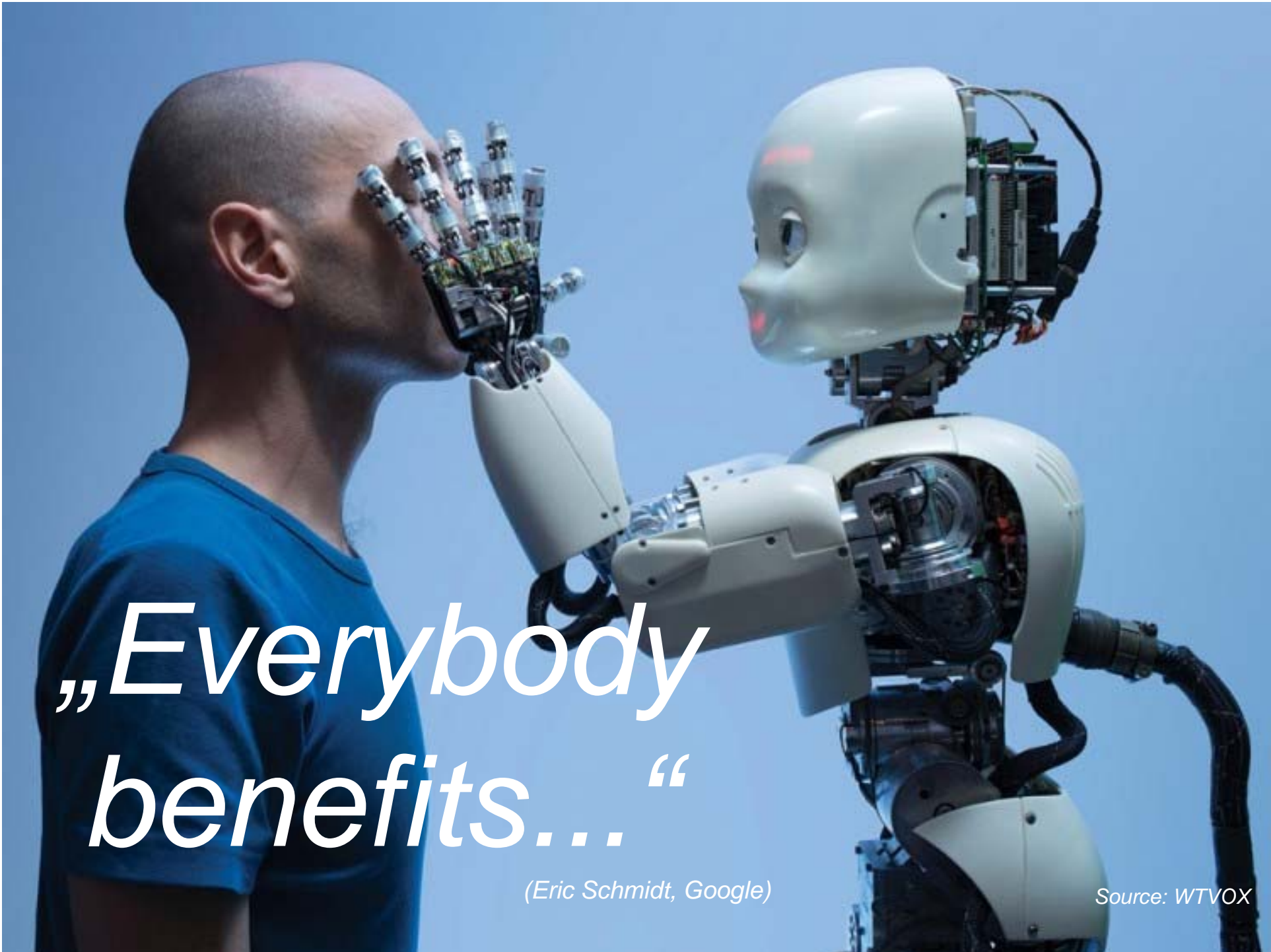
RETHINKING THE BASIS OF THE WELFARE STATE UNDER THE DIGITAL PARADIGM

*Seminar on „INDUSTRY 4.0 – Challenges for productivity,
employment and inclusion”
(DIE, UN ECLAC)*

Bonn, May 29, 2018 / Daniel Buhr



4.0



*„Everybody
benefits...“*

(Eric Schmidt, Google)

Source: WTVOX

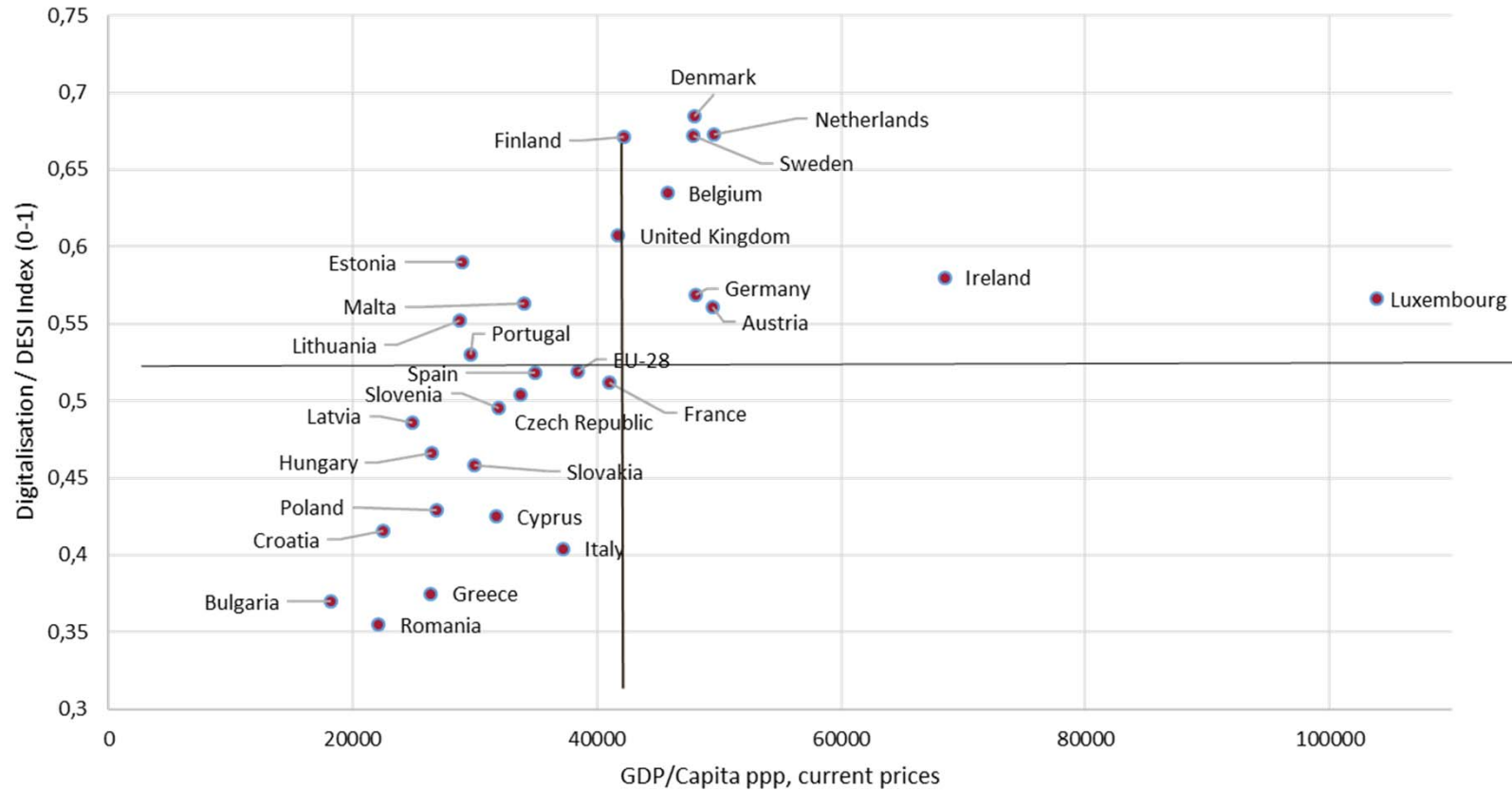


Digitalization – Risks:

- increasing concentration of data in the hands of a few monopolies able to evade state control and taxes;
- Loss of data and privacy (data safety & security; social scoring)
- “On-demand jobs and crowd work”: Platform economy companies avoid employer responsibilities – paying by task
- “greater flexibility” means also: lower job security, higher income volatility, lower access to social protection, more responsibility for skills development;
- acceleration and intensification of work and more stress;
- intensification of the digital divide and the polarisation of society, the continuing erosion of jobs but also of the boundaries between work and private life
- loss of a whole range of abilities and skills (physical, manual but also intellectual);
- job loss ...



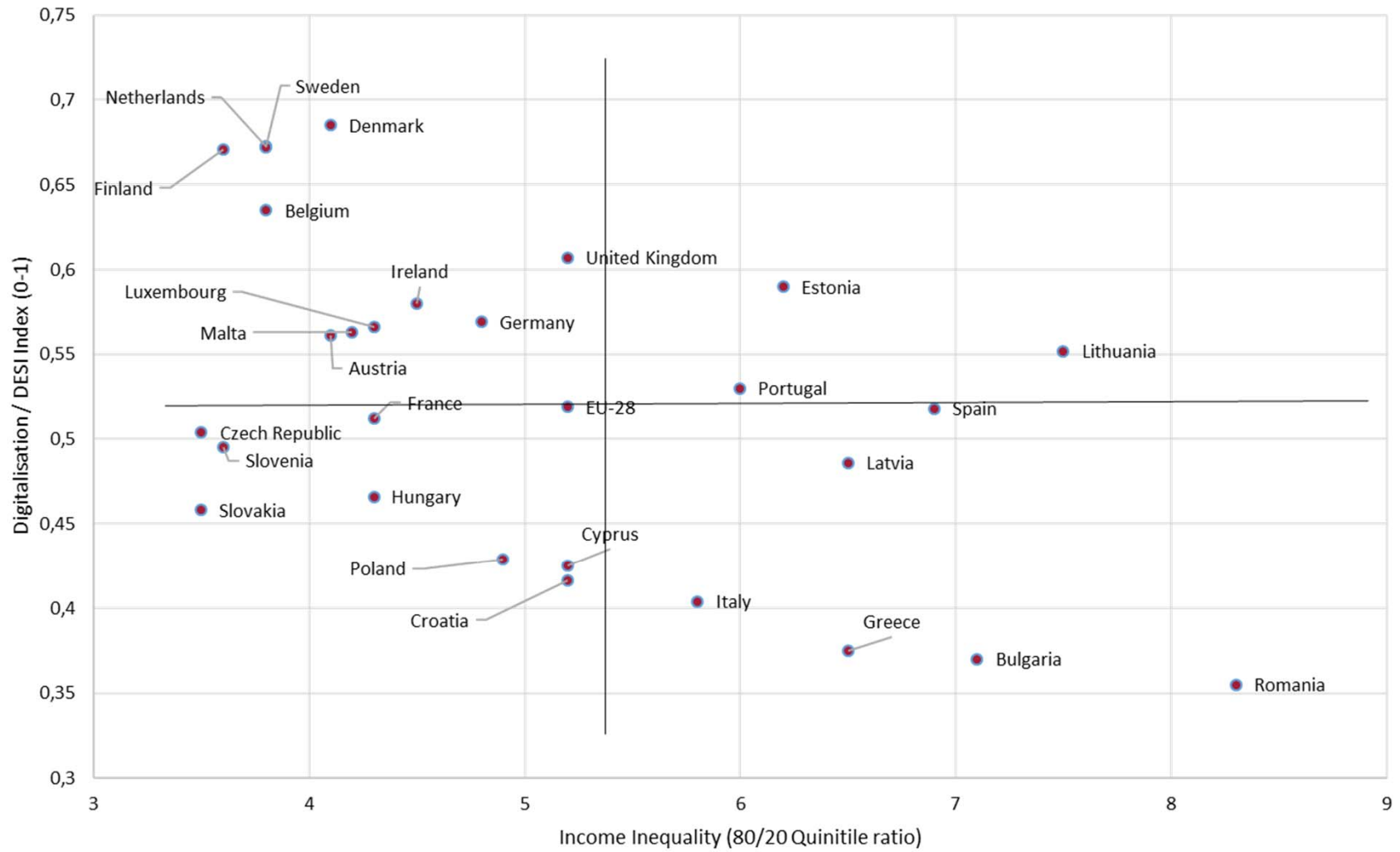
Digitalisation and GDP



The **DESI** is a index consisting of five dimensions. It examines how EU states are developing to become a digital society. The index developed by the EU Commission (DG CNECT) comprises connectivity, human capital, internet usage, integration of digital technologies and digital public services (e-government). The index varies between 1 and 0, with 1 as the highest score. Source: <http://ec.europa.eu/digital-agenda/en/digital-agenda-scoreboard>; 28 September 2016.



Digitalisation and Income inequality





Digitalization – Opportunities:

- Smart Cities, Smart Grids, Smart Health, Smart everything...
- Real-time networking of industrial processes makes production cheaper, sustainable and efficient.
- Digital networking allows the direct involvement of customer demands and the cost-effective customization of products and services.
- The world of work could be made more humane.
- Beyond all that, digitalization (i.e. Industry 4.0) could provide enormous potential for new products, services and solutions that could enrich people's everyday lives.
- ...

What needs to be done to ensure that technical innovation can also lead to social progress?

**Good
Work**



**FAIR WORK
COMMISSION**





Digitalisation and Welfare State

Two Dimensions:

1. Digital transformation is creating a new age of industrial production (i.e. Industrie 4.0) = external modernisation effect

By altering production and disseminating information and communication technologies and automation, new demands arise for labour in general and for employees in particular. The processing of these changes and challenges need to be supported by the welfare state.



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2. Digitalisation of the welfare state redistribution regime is causing internal modernisation effects (i.e. E-Health/TeleCare; Labour 4.0)

Digitalised provision and administration of welfare services (Health, Care, Labour/Education, public services).



Modernisation and social inequality

		Modernisation	
		external	internal
Social inequality	low		Sweden
	medium	Germany France	United Kingdom
	high	<i>Italy</i> Spain	<i>Estonia</i>

Source: Buhr et al 2016

“Social standards are not downsides for economic growth, but rather form the foundation of innovative societies in which both producers and users benefit from faster, more successful and more customised innovations.” (Andersson et al. 2016)



**How can we use digitalisation
for modernising the welfare
state?**



Three points to start with.

1. „we need to connect everyone to the Internet” (OECD 2016)
2. we need to invest in providing everyone with the digital skills necessary to use that access productively and to be able to foster open and social innovation (“soft” skills)
3. we need to modernize our (welfare)states by digitizing society, economy and governments (public services: health, education etc.)
=> an active state that tries to better align and orchestrate its innovation policy i.e. with healthcare and labour market policies (demand side)

Ten points regarding innovation policy for Industry 4.0 (Buhr 2015)

Point 1: If we want Industry 4.0, we have to promote systems.

Point 2: If we want Industry 4.0, we have to critically evaluate the ‘high-tech obsession’.

Point 3: If we want Industry 4.0, we have to rely on social progress.

Point 4: If we want Industry 4.0, it has to grasp social innovation first and foremost.

Point 5: If we want Industry 4.0, the ‘German model’ (coordinated market economy) should be strengthened.

Point 6: If we want to make better machines, we have to think about humans.

Point 7: If we want Industry 4.0, we must build up Europe.

Point 8: If we want Industry 4.0, we need data privacy, protection and security.

Point 9: If we want Big (Industry 4.0), we have to think above all about the Small.

Point 10: If we want system innovation, we have to promote coordination.



Thank you.

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