

Discussant for Work Package 6:
Innovation and job quality in three sectors in
Europe

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The core research question

- **How and why companies do (or do not) succeed in reconciling innovation with ‘more, better and inclusive jobs’.**
 - Impact of product/service innovation and technological process innovations on job quality broadly defined (working conditions, careers, employment security).
 - Emphasis on technological process innovations
 - The way work organisation and company HRM policies support the development of innovative workplaces (notably in Aerospace with discussion of lean strategies and incremental innovation)
 - But more on the first question which perhaps reflects pervasive concerns across Europe and the world more widely with the impact of emerging and perhaps disruptive technologies on employment and jobs. (Industry 4.0, Fourth Industrial revolution)
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Explaining the innovation/JQ nexus

- A focus on the drivers of change what are often referred to in future oriented studies as the “mega-trends”: digitization and new automation technology, globalisation and value chain restructuring, demographic and social changes (eg. ageing workforce, gender related issues)-
 - Comparative analysis in order to identify the diversity of employer strategies which impact on the innovation/JQ nexus
 - A focus on the institutional setting and regulatory framework conditions that mediate the impact of change on JQ. An important corrective to the technological deterministic visionary accounts that identify ‘radical structural breaks’ or ‘tipping points’ leading to a future with few points in common with the past.
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Remarks on chapter 1 on virtuous circle

- A useful overview of the ideas the developed in comparative systems literature notably by Streeck (diversified quality production) and Hall and Soskice (VoC literature). Importantly develops the idea that institutions matter and points to limits of technological determinism
 - Would have been useful to develop this section a bit more theoretically with a discussion of the notion of institutional complementarities and how they account for differences.
 - Given the sample of countries, useful to add a discussion of the 'Nordic' model characterised by relatively encompassing or inclusive systems of social protection and an emphasis on unemployment benefit combined with active labour market expenditures to reduce the risks associated with employment transitions and to foster skills renewal.
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What's missing?

- Concepts and indicators:
 - A discussion of the concept of job quality. What is meant by job quality and how do we measure it? Relation to work on employment quality indicators developed in the context of the European Employment Strategy, (Laeken indicators) but also working conditions/job quality indicators developed through Eurofound (EWCS).
 - Other relevant literature:
 - Inclusive innovation literature. This question was already central in Danish DISKO project (1999). There are a variety of reasons for thinking that learning and innovation can result in increasing inequalities at different levels. Central question in recent policy discussions (eg. OECD 2017)
 - An overview of the skill-biased technical change literature and the more recent task-based research on routine-biased technical change. More generally take position relative to future oriented literature on Industry 4.0. Relevant to the impact new technologies on employment and jobs.
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Methodological issues to develop

- Who was interviewed? More information on the interviewees and who was targeted? Were there contradictory assessments? Differences between trade unions reps. and employers? Differences between CEO and those lower down on the hierarchy? Were any shop floor employees interviewed? In general an assessment of the reliability of the information.
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Lessons learnt

- Confirms the importance of national settings/models. Institutions mediate the effects of technical change through their impact on employers' HRM strategies and decision making. Technologically deterministic accounts are misguided. Thus, even if lean is pervasive amongst OEM aerospace producers, lean in the Swedish context has a distinctively DL cast.
 - But sector dynamics or sectoral systems of innovation also matter (e.g. Malerba; K. Lee). One key difference appears to be related to the difference between 'mature industry' with long product life cycles and few changes in the underlying technology and products (aerospace) versus sectors where there have been new products/services and associated business models disrupting markets (eg. FINTECH or 3PL linked to e-commerce) putting incumbents under pressure to adapt with differing degree of success
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Types of conclusions to be developed

- Implications for Industry 4.0. What are the impact of new and emerging technologies on employment and the quality of jobs?
 - What policies and intervention can be made to increase the changes that new technologies will be adapted in a way that favours positive outcomes? Connect to research agenda on inclusive and sustainable innovation
 - What are the lessons for unions and worker organisations on action/strategies to defend workers from possibly negative impacts of change?
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