

# Lean versus Learning? Work Organizations, Innovation and Job Quality in the Aerospace Industry in France and Sweden

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To cope with fierce competition in an increasing globalized context, many companies tend to reduce wage costs and intensify work, adopting what could be labelled as social dumping strategies, with negative effects on job quality (JQ) - this term encompassing compensation, employment status, work conditions, but also training and promotion opportunities. Innovation - defined here as any significative and valuable change in product, process, marketing or organisation - is often presented as the solution to break this potential vicious circle. Still, this positive view must be assessed. To do so, we need to open the "black box" of firms, to analyse more precisely the nature, the motivation, the modes of implementation, and the outcomes of innovation, by scrutinizing all the mechanisms at play. The paper focuses here on the interplay between innovation and JQ, in a specific industry, Aerospace, which is an innovation leader, with numerous spill-over effects on other manufacturing industry. Our study relies on qualitative empirical evidence from in-depth firm case studies, carried out in two countries that are good illustrations of different varieties of capitalism, France and Sweden.

The firms under study have introduced a wide range of technological process innovations, such as 3D Computer-Aided-Design and different forms of Computer Aided Manufacturing and automated processes - from Computer Numerical Control (CNC) machines to robots. If there were some common features concerning the impacts in terms of JQ, there were also differences related to organizational and managerial choices across firms - whether because organization mediated the impact of technological changes, or because these changes were highly interlinked with organisational ones. There were indeed important organizational changes in the firms of our sample, recent or still going on at the time of our study. These changes were sometimes considered even more important than technological innovations. One important change was the introduction of "lean" principles. But the way "lean" was implemented was in fact quite different across the different cases, with different consequences in terms of JQ. A quite rigid top-down "lean", dominant in France, contrasted with a more flexible form, more compatible with the "learning" type of organization witnessed in Sweden. One interesting difference between the two types of organization was the role of trade-unions in the "innovation-JQ" nexus. Still, in France, a growing concern about the limits of existing organisation was arising, as (better) work organisation was more and more identified as a key determinant of an innovative workplace - defined as a work environment that provides a fertile ground for innovations of any kind. Some organizational innovations (sometimes quite radical) were put in place to improve JQ, in particular in terms of worker's autonomy and involvement, to move from a "lean" to a more "learning" type of organization. Overall, our contribution highlights some key mechanisms of the interplay between work organization, JQ and innovation, and sheds light on some hotly debated issues concerning the impact of new technologies on the quality of jobs.