

## Work, Well-being, and Sustainability: Survey-based Economic Analyses

張, 馳

<https://hdl.handle.net/2324/4475105>

---

出版情報 : Kyushu University, 2020, 博士 (工学) , 課程博士  
バージョン :

権利関係 : Public access to the fulltext file is restricted for unavoidable reason (3)

氏 名 : 張 馳

論 文 名 : Work, Well-being, and Sustainability: Survey-based Economic Analyses

(アンケート調査に基づいた仕事、厚生及び持続可能性に関する経済分析)

区 分 : 甲

## 論 文 内 容 の 要 旨

Work holds collective significance to human well-being and sustainability. Despite technological developments, undesirable work-related issues persist. Unemployment remains high; large amounts of people are still excluded from the labour market due to discrimination and social norms. Some workers do not have sufficient work, while on the other end of the spectrum are workers who work excessive hours. Females remain underrepresented in the world of work. Balancing maternity and family responsibilities with work continues to be a challenge that constrains females' labour market entry and work engagement, exacerbating gender inequalities in the workplace. Furthermore, the negative labour market effects of technological progress and the challenges of population aging add to the strain.

In 2015, the United Nations launched the 2030 Agenda for Sustainable Development, establishing “decent work for all” as the centerpiece of Sustainable Development Goal 8 (SDG 8). The efforts toward SDG 8 will also mutually reinforce many of the other SDGs. This Thesis aims to provide evidence-informed implications for delivering SDG 8, as well as the closely related SDGs of promoting human well-being (SDG 3) and gender equality (SDG 5).

This Thesis consists of five chapters. **Chapter 1** gives an overall introduction, detailing the background, motivation, and objective of the Thesis.

**Chapter 2** presents a study investigating the time dimension of decent work and its impacts on well-being from a multinational perspective. The study takes advantage of an original large-scale survey dataset that covers 37 countries to estimate the effects of working time mismatch on workers' subjective well-being (SWB). The estimation adopts the sorted partial effect method and the characteristics of the most and least affected subpopulations are explored using classification analysis and set inference. The results show SWB losses from working time mismatch. Workers most affected by (i.e., having the largest SWB losses from) overemployment are more likely to be in Brazil, Turkey, and Australia, while those most affected by underemployment are more likely to be in Japan. Workers most affected by overemployment tend to be younger, while workers most affected by underemployment tend to be older. The age difference between the most and least affected groups is the most significant compared with the differences in other individual-level characteristics. No significant difference has been found regarding education, household income, and the number of children. The results also highlight

persisting issues such as gender inequalities, blurred work and personal life, and involuntary part-timers in the world of work. Practical implications for addressing these challenges in the digital age and post-COVID-19 period are discussed.

Shifting from multinational analyses, the Thesis moves to policy assessments on two work-family policies recently implemented in Japan. As gender roles and the nature of households, markets, and societies continue to evolve, work-family policies are crucial to achieving a world of work with gender equality. Relevant topics figure prominently in public policy debates for sustainable development.

**Chapter 3** focuses on the improved availability of early childhood education and care (ECEC) services triggered by a policy implemented by the Japanese government in 2015. The study estimates the effects of the ECEC availability on maternal employment using a dataset combining official municipality data and individual-level survey data for 2015, 2016, and 2017. Maternal employment statuses are modeled by multivariate logistic models and the identification for the maternal employment effects is based on the variation across municipalities and over time in the pace of ECEC expansions. The empirical results show that improved ECEC availability increases the working probability of mothers with preschool children. The overall increase in working probability is almost entirely explained by the increase in nonregular employment rather than regular employment and is mainly driven by mothers with low education. A new type of ECEC service established under the new policy has a sizable effect exclusively on the nonregular employment of mothers from three-generation households. The findings underline the importance of ECEC provision as an instrument of public policy for stimulating maternal labour force participation. A comparison between the findings and that for the 1990-2010 period by previous studies is discussed, providing interesting discussions that would deepen the understanding of the childcare effects.

**Chapter 4** focuses on a paid parental leave (PPL) reform in Japan. The insufficient provision of ECEC services continues to be an obstacle for Japanese mothers' reinstatement and reemployment and stresses mothers who cannot settle childcare arrangements before the end of parental leave. In 2017, the Japanese government implemented a PPL reform to entitle an additional 6-month extendable PPL period to parents with childcare arrangement difficulties. The study investigates the stress-relief effect of being eligible for the new entitlement using an observational dataset collected before and after the policy intervention. The analysis employs coarsened exact matching as a data preprocessing method to balance the pre- and postintervention observations. The policy effect is identified by comparing the pre- and postintervention maternal stress of the balanced policy-relevant observations; the unconfoundedness assumption, which validates the identification strategy, is tested by analyzing a policy-irrelevant sample. The analysis finds robust evidence of a relief effect of being eligible for the additional PPL period on maternal low-level stress; however, the effect is moderate, and the eligibility is found to have a null effect on high-level stress. This suggests that PPL policy can reduce maternal stress by functioning as a supplement to ECEC support, but it is more important to continuously improve ECEC availability through urban planning.

The Thesis concludes in **Chapter 5**, summarizing the research findings and the recommendations for future actions on advancing the related SDGs.