



UNTANGLED

Newsletter Issue 8 / February 2023

CONTENTS

From the editors 1

UNTANGLED report
on gender gaps in skills, tasks
and employment outcomes 2

UNTANGLED researchers'
findings published
as a book chapter 4

UNTANGLED WORKSHOP
facilitates exchange of ideas
on inequalities 5

UNTANGLED Conference
features 16 papers on jobs,
skills, robots and more 6

UNTANGLED Expert Café
focuses on migrants,
technology and regions 7

FROM THE EDITORS

Welcome to the first Untangled Newsletter of 2023! During the last few months, we made tremendous progress in our project. Our researchers published insightful papers, and more are on the way.

A review of the literature on the link between digitalisation and employee job quality and well-being by Ludivine Martin and Laetitia Hauret was published as a chapter in the *Handbook of Labor, Human Resources and Population Economics*. We finalised our report examining gender differences in how job tasks affect wage and skill mismatches.

We also held three events, allowing us to present our findings and learn more from discussing them with a broader audience. The UNTANGLED Midterm Conference in November was a chance to showcase our results, hear comments from experts and colleagues and also to get to know the findings of researchers working on similar topics. The fifth edition of the Open Virtual Expert Café was also a great success. During that event, researchers discussed labour-market issues, presented their work and shared information about new projects and initiatives. The year 2023 started with a workshop where we discussed how technology, migration and globalisation affect inequalities in the EU.

And we're not slowing down: you can expect a lot of news from Project UNTANGLED in the coming months. But for now, we invite you to join our sixth Open Virtual Expert Café on 14 February. More events are planned and more papers will come, so please check our website regularly for updates, and follow us on social media.



Upcoming events

14 February – The sixth UNTANGLED Open Virtual Expert Café (2.00-3.30 pm CET)

Follow us on social media or check projectuntangled.eu to make sure you don't miss out!



UNTANGLED REPORT ON GENDER GAPS IN SKILLS, TASKS AND EMPLOYMENT OUTCOMES

Our new report, “*Gender gaps in skills, tasks, and employment outcomes*”, by Laetitia Hauret (LISER), Ludivine Martin (LISER), Piotr Lewandowski (IBS), Marta Palczyńska (IBS) and Nela Šalamon (ZSI), looks into how gender differences in job tasks impact wage and skill mismatches.

The first part of the report finds that overrepresentation of women in routine-intensive jobs, which employers value less than other occupations, contributes to the gender pay gap, while legislation helps mitigate the problem.

The authors analysed survey data from 37 countries. Figures from the OECD Survey of Adult Skills (PIAAC) and the World Bank’s STEP Skills Measurement Program indicate that women earn 18.2% less than men, after accounting for differences in age, education level and skills. This is partly because women perform more routine tasks: more of them work in routine-intensive occupations, and in all occupations they do more repetitive tasks than men. Additionally, the difference in wages between routine and non-routine professions is wider for women than for men.

“Respondents described their tasks at work, and based on their judgment we classify occupations as routine-intensive,” says Marta Palczyńska. “Those jobs are paid less, and a majority of the people who do them are women. This is one reason women’s average earnings are lower than men’s.”

Even when employed in jobs that involve more complex tasks, such as creative problem solving and decision-making, women still tend to do more routine tasks than men. However, in this case the associated pay penalties are, on average, similar to those experienced by men.



UNTANGLED REPORT ON GENDER GAPS IN SKILLS, TASKS AND EMPLOYMENT OUTCOMES



The report also finds that in countries with tighter laws on gender equality and more egalitarian social norms, the influence of tasks performed on the gender wage gap tends to be smaller. In countries with laws supporting equality in parenting, the segmentation of men and women into more and less routine-intensive occupations might be less pronounced.

“When household and child care duties are equally shared with men, women can take up more responsibilities at work, and instead of performing only simple tasks can move to more analytical ones, which has positive effects on their salaries,” Piotr Lewandowski says.

In addition to social norms and labour laws, policies that promote re-skilling and up-skilling are equally important in reducing the earnings inequality that results from the difference in the type of tasks performed. With the acceleration of digitalisation, many workers are in positions where their skills do not match the requirements of their jobs. In the European Union, 45% of workers feel they do not have the right skills.

Perception of under-skilling on the rise

The second part of the report, focusing on skill mismatch, analyses survey data from 23 European countries. It finds that between 2005 and 2015, self-perception of being under-skilled increased. The change was particularly pronounced for men in Nordic countries, where in 2005 10% of men described themselves as under-skilled, while in 2015 15% described themselves this way. For women, the change was particularly pronounced in Western countries (14% in 2005 versus 18% in 2018). Women performing non-routine interpersonal tasks are particularly likely to believe they lack skills.

“The expansion of non-routine cognitive tasks, both analytical and interpersonal, induced by digitalisation can partially explain these changes,” Ludivine Martin says. “Many women switched from routine-intensive jobs to analytical and interpersonal positions,” Laetitia Hauret adds. “That sudden change caused a rise in the number of workers who perceived themselves as under-skilled.”

The paper is available [here](#).

Laetitia Hauret, Ludivine Martin, Piotr Lewandowski, Marta Palczyńska, Nela Šalamon (2023). *Gender gaps in skills, tasks, and employment outcomes* (Deliverable 5.3) Leuven: UNTANGLED project 1001004776 – H2020.

UNTANGLED RESEARCHERS' FINDINGS PUBLISHED AS A BOOK CHAPTER

Ludivine Martin and Laetitia Hauret's review of literature on the link between digitalisation and employee job quality and well-being was published as a chapter of the *Handbook of Labor, Human Resources and Population Economics* edited by Klaus F. Zimmermann.



Ludivine Martin



Laetitia Hauret

In the chapter, "Digitalization, Job Quality, and Subjective Well-being", the authors examine seven facets of job quality studied in the literature: labour income; safety at work; working time and work-life balance; job security; skills development and training; employment-related relationships; and work motivation.

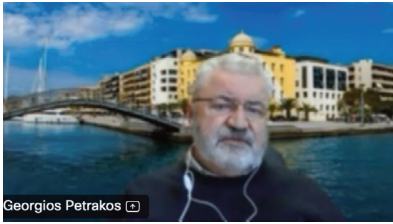
Ludivine Martin and Laetitia Hauret also review the literature on the impacts of digitalisation on subjective well-being, captured by employees' self-reported feelings at work, such as job satisfaction, occupational stress and life satisfaction. They highlight the key findings in the literature and identify relevant knowledge.

The review finds that there is substantial literature on the links between digitalisation and job quality in terms of labour income and work-life balance. However, studies on the link between digitalisation and safety at work, job security, skills development, relationships at work, work motivation and self-reported feelings remain scarce, and this calls for further empirical research. Regardless of the outcome variable, studies report mixed results. Differences in how digitalisation and outcome variables are measured and conceptualised, as well as the national and time context and employees' characteristics, may explain these divergent results and conclusions.

Ludivine Martin,
Laetitia Hauret (2022).
"Digitalization, Job Quality,
and Subjective Well-being".
In: Zimmermann, K.F. (ed.)
*Handbook of Labor,
Human Resources
and Population Economics*.
Springer, Cham.

UNTANGLED WORKSHOP FACILITATES EXCHANGE OF IDEAS ON INEQUALITIES

Scholars researching various aspects of inequalities within four EU Horizon-funded projects exchanged their ideas and findings during an UNTANGLED workshop on 1 February 2023 in Milan. The event brought together around 40 participants for lively discussions.



Georgios Petrakos



UNTANGLED Workshop
Milan, 1 February 2023

The workshop “Old and new inequalities in disruptive times” was organised by UNTANGLED researchers Roberta Capello, Camilla Lenzi and Elisa Panzera from Politecnico di Milano, with the aim of bringing together the newest research from projects: PILLARS, ESSPIN, TWIN SEEDS, and UNTANGLED.

The event, which featured presentations of seven papers, started with a keynote from Professor George Petrakos (University of Thessaly), coordinator of the ESSPIN project, who talked about drivers and implications of inequalities in Europe. He stressed that regional inequalities are rising in Europe, and interest from researchers and policymakers is increasing.

The first part of the workshop concentrated on the impact on inequalities of the radical technological transformations known as the Fourth Industrial Revolution. Camilla Lenzi presented the findings of a paper she wrote jointly with Roberta Capello and Elisa Panzera within Project UNTANGLED. The authors confirmed that wage inequalities have been rising in Europe, as an outcome of technological transformations. In regions where the digital service economy is fully developed, intraregional income inequalities are higher. Next, Robert Stehrer (The Vienna Institute for International Economic Studies) presented his paper “On the impact of ICT accumulation on labour demand growth and labour income shares”, which shows that ICT capital accumulation has no strong impact on labour demand growth.

Robert’s presentation was followed by another UNTANGLED researcher, Francesco Venturini (University of Perugia), who presented the preliminary result of his study “Firm-Level productivity effects of patents in the Fourth Industrial Revolution Technologies across European countries”, written jointly with Fabrizio Pompei. The first part of the workshop was closed by a presentation by Maria Savona (University of Sussex, SPRU and LUISS), “Emerging digital technologies and labour markets. A systemic review of technical literature” based on her research with Tommaso Ciarli, Ed Steinmueller, and Simone Vannuccini as part of the PILLARS project.

The next three presentations, discussed during the second part of the workshop, concentrated on the impact of globalisation and migration on inequalities. First, TWIN SEEDS researcher Laura Resmini (University of Milano Bicocca) talked about the territorial impact of global value chains. Next, ESSPIN Project researcher Riccardo Crescenzi (London School of Economics), in a presentation titled “Harnessing Global Value Chains for Regional Development”, discussed how regions can build, embed, and reshape global value chains for their local enhancement. The session ended with a presentation by UNTANGLED researcher Michał Burzyński (Luxembourg Institute of Socio-Economic Research, LISER), who discussed his paper “Natives Sorting and the Impact of Immigration on European Labor Markets” written jointly with Giovanni Peri.

UNTANGLED CONFERENCE FEATURES 16 PAPERS ON JOBS, SKILLS, ROBOTS AND MORE



UNTANGLED
Midterm Conference
Brussels, 9 November 2022

The UNTANGLED Midterm Conference, titled “Labour market effects and social impact of technological transformation, globalisation and demographic change”, was held on 9 November in Brussels, attracting 16 papers and 45 participants. We had four very productive sessions and a lively panel discussion.

The conference started with a keynote from Anna Salomons, Professor of Employment and Inequality at Utrecht University, who talked about newly emerging job categories (“new work”) and set the tone for the rest of the event.

The keynote was followed by four very productive thematic sessions on: Technological change and employment; Skills and education; Technology, growth and value chains; and Firms and households, as well as a panel discussion on policy featuring Mario Mariniello (College of Europe), Eric Thode (Bertelsmann Stiftung) and Thomas Ekman Jorgensen (European University Association).

“The conference provided an excellent opportunity both to showcase the work of UNTANGLED researchers and to hear from others in the fields we’re looking at,” says Mikkel Barslund, who coordinates the UNTANGLED research consortium. “We managed to attract a number of high-quality papers with findings that will certainly inspire new avenues of research, and I’d like to thank everyone who contributed to the success of this event.”



UNTANGLED EXPERT CAFÉ FOCUSES ON MIGRANTS, TECHNOLOGY AND REGIONS

The fifth edition of the **UNTANGLED OPEN VIRTUAL EXPERT CAFÉ** brought together 10 participants who discussed labour-market issues, presented their work and shared information about new projects and initiatives.

The November 15 meet-up hosted four presentations:

Ursula Holtgrewe of ZSI announced WeLaR, a new interdisciplinary research project examining the impact of digitalisation, globalisation, climate change and demographic shifts on labour markets and welfare states in Europe.

Eduard Suari Andreu of Leiden University talked about his recent research with Olaf van Vliet on worker mobility in the EU and public transfers. Using detailed administrative data, researchers calculated the benefits and allowances received by intra-EU migrants and compared them to those obtained by native Dutch citizens.

Roman Römisch of the Vienna Institute for International Economic Studies discussed the results of his research on the impact of globalisation on regional growth disparities.

Lisa Cheree-Martin of the DPRU at the University of Cape Town presented the preliminary results of an UNTANGLED case study on the impact of technological changes and work innovation on the insurance sector in South Africa.

UNTANGLED PARTNERS



UNTANGLED is a three-year interdisciplinary Horizon 2020 research project that seeks to examine the interconnected trends of globalisation, demographic change and technological transformation, and their effects on labour markets in the European Union and beyond. By engaging a broad range of stakeholders, including companies and civil society organisations, we will develop practical policy proposals to help governments cushion the negative impacts of these trends and ensure their benefits are enjoyed fairly across regions and sectors.

Follow us on social media:

 twitter.com/untangledEU

 facebook.com/UntangledEU

 linkedin.com/company/project-untangled-eu

www.projectuntangled.eu

The views expressed in this newsletter are those of the authors and do not necessarily reflect those of the European Commission.