





EMANES ANNUAL CONFERENCE 2024 - POLICY SESSION REPORT

DIGITALIZATION SKILLS AND THE FUTURE OF LABOUR MARKET IN EUROPE, THE MEDITERRANEAN, AND AFRICA: EXPLORING MOBILITY AND OPPORTUNITIES

12th December 2024

Hosted at the Euro-Mediterranean Economists Association's HQ, Recinte Modernista de Sant Pau, Barcelona











BACKGROUND

The digital transformation sweeping across Europe, the Mediterranean, and Africa is reshaping economic landscapes and labour markets, presenting both opportunities and challenges for workforce mobility. Digitalization is not only transforming existing jobs but also creating new roles that require specialized skills. As these regions navigate the complexities of digital transformation, the need to address digital skills gaps and promote mobility becomes crucial for inclusive and sustainable economic growth.

In Europe, efforts to integrate digital skills into education and training programs are underway, while the Mediterranean and African regions are at a pivotal moment to harness digitalization for economic development and mobility. This session aims to explore how digital skills can be leveraged to enhance labour mobility between Europe, the Mediterranean, and Africa, addressing the potential for cooperation, skills development, and policy harmonization.

On December 11th-13th, 2024, the Euro-Mediterranean Economists Association (EMEA) o-organised at its Headquarters in Sant Pau, Barcelona, the 2024 EMANES Annual Conference, entitled "Navigating New Frontiers: Digitalization, Labor Markets and Societal Transformation in Europe, the Mediterranean and Africa." The event brought together an international group of experts across many sectors for an in-depth and insightful discussion. As part of the conference program, on the 12th of December a policy session entitled "Digitalisation Skills and the Future of Labour Market in Europe, the Mediterranean, and Africa: Exploring Mobility and Opportunities" was held.

The moderator of the session and Senior Research Fellow at the Centre for European Policy Studies, Dr. Cinzia Alcidi, opened the event by sharing insights from her ongoing work developing a policy toolkit, which is aimed at addressing structural challenges in the labour market. She emphasised the shifts reshaping labour dynamics and underscored four major transformations driving these changes, namely digital transformation, green transformation, changes in globalisation, and migration flows. These mega trends are creating both opportunities and challenges for the labour market. Dr. Alcidi stressed the importance of identifying these trends to understand their specific impacts on the labour market before developing effective policy responses.







Dr. Alcidi then introduced the panel of speakers:

- **Charles Crevier**, Manager of the Social Protection, Governance and Tripartism Programme at the International Training Centre of the ILO
- Ekkehard Ernst, Chief Macro-economist at the International Labor Organization
- Jorge Miguel Bravo, Universidade Nova de Lisboa & Université Paris-Dauphine PSL and BRU-ISCTE
- Ummuhan Bardak, Senior Human Capital Development Expert, ETF
- **Hon. Nikolla Camaj**, Member of the Montenegrin Delegation to the Parliamentary Assembly of the Mediterranean (PAM)
- **Inès Duarte**, Project Manager at the Energy and Climate Action Division of the Secretariat of the Union of the Mediterranean.

SUMMARY OF THE DISCUSSION

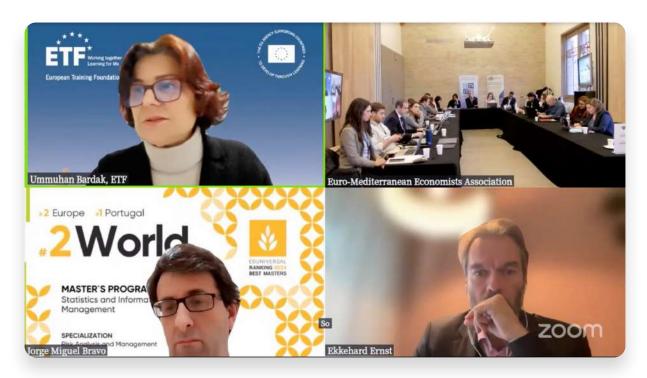
Ms. Ummuhan Bardak, Senior Human Capital Development Expert at ETF, began her intervention by stressing the interconnected nature of global megatrends. While climate change, globalization and digitalization are indeed transformative forces, they should not be understood in isolation. Ms. Bardak noted that the ways these transformations intersect, shaped by geopolitical shifts, fragmented globalization, and concentrated wealth, are critical to understanding their combined impact on the labor market. However, she pointed out that there is a significant gap in data and evidence regarding these intersections, leading to uncertainty about their outcomes.







Ms. Bardak highlighted several critical labor market trends shaped by these global shifts. She noted the rise of job destruction due to automation, the transformation of job tasks toward intellectual and social activities, and the polarization of the labor market with declines in middle-skill roles. She also discussed the emergence of new jobs driven by technology, the stratification of knowledge work, and the rise of non-standard employment patterns such as gig work. While these developments are more prominent in developed countries, they are also impacting developing nations in unique ways. Ms. Bardak concluded by noting sectoral shifts, including diminishing agricultural employment, stagnant manufacturing, and expanding service sectors, as well as the growing prominence of platform work.



The next speaker, **Mr. Ekkehard Ernst**, provided his perspective as Chief Macro-economist at the International Labor Organization on the risks posed by the current global digitalization wave, particularly for Europe and Mediterranean African countries. He stressed that, while artificial intelligence (AI) development is largely dominated by the U.S. and China, Europe and African nations primarily serve as data providers without getting any benefits or tailoring tools to their unique needs. It is paramount to localize AI solutions to foster development, especially in sectors like agriculture. Without this, both regions risk missing the opportunities provided by digital transformation. Mr. Ernst pointed out that an effective digital ecosystem is essential to harness digital skills, but current educational and workforce systems lack the foundational elements to create this ecosystem. A concerning trend is the decline in basic skills, as evidenced by recent OECD studies, which further undermines digital readiness.







The role of digitalization in addressing Europe's labor shortages was also discussed by Mr. Ernst, who proposed a framework for leveraging surplus labor in African countries through expanded skill partnerships. He argued that digital tools and AI could play a key role in identifying skill gaps and promoting efficient labor mobility between the two regions, if the necessary regulatory frameworks are in place. In reference to the global slowdown in structural transformation, particularly in agriculture and manufacturing, and the rise of informality and working poverty in low-income countries, Mr. Ernst underscored the responsibility of Europe to integrate African nations into global value chains, harnessing their potential in a mutually beneficial partnership. Such an approach, he suggested, could address labor shortages in Europe while promoting economic growth across the Mediterranean.

Following this intervention, **Mr. Jorge Miguel Bravo**, from Universidade Nova de Lisboa & Université Paris-Dauphine, highlighted the shift from low-skill to high-skill jobs in Europe, powered by advancements in AI, green energy, and digital technologies. This trend, paired with an aging population, creates challenges as older workers struggle to adapt to rapid technological change, which requires reforms in education and lifelong learning. In the Mediterranean and Africa, uneven access to digital infrastructure exacerbates disparities within and between countries. While sectors like tourism and agriculture are adopting digital technologies, high youth unemployment and limited digital skills remain significant barriers. Mr. Bravo emphasized that in Africa the informal economy dominates, but addressing infrastructure gaps would lead to entrepreneurship opportunities offered by digital platforms. Thus, substantial investments in inclusive digital infrastructure are key to enable these regions to benefit from global megatrends.

Mr. Bravo also addressed the need for modernizing social protection systems to accommodate flexible and mobile working arrangements, which are becoming increasingly common. He advocated for portable social protection rights, mobile-based solutions to expand coverage, and digitized systems to reduce inefficiencies and corruption. Public-private partnerships and collaboration between governments, private entities, and NGOs were highlighted as essential for accelerating digitalization and workforce adaptation. Additionally, he stressed the importance of international cooperation, such as the EU-Africa Digital Economy Task Force, to promote knowledge sharing and infrastructure development. Mr. Bravo concluded by calling for labor law reforms to address platform work and ensure fair labor practices, emphasizing that inclusive and collaborative approaches are necessary to harness the benefits of digital transformation while mitigating its challenges.

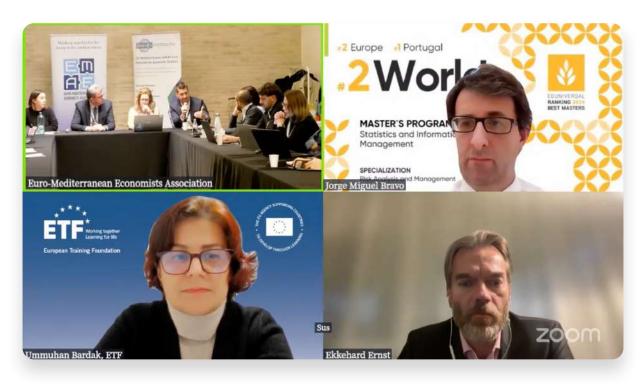






The discussion continued with an intervention by **Mr. Charles Crevier** from the International Training Center of the ILO, who elaborated on bridging the gap between knowledge and practical know-how in his work. Highlighting evidence from African participants, he emphasized the challenges posed by low social protection coverage rates, particularly for the informal economy. He noted that government programs often fail to extend income protection to workers outside formal employment, such as domestic and platform workers. While non-contributory social assistance programs have emerged to reduce poverty, the "missing middle" remains unaddressed, with most informal economy workers lacking adequate protection. Mr. Crevier advocated for expanding legal coverage, adapting frameworks to include informal workers, and using technology to simplify processes like registration and payments. He also stressed the importance of human presence in explaining rights and benefits to promote understanding and participation.

The role of technology in addressing these challenges and enhancing learning was further explored by Mr. Crevier. At the ITCILO, he emphasized the use of digital tools such as Al-driven applications and learning analytics to improve engagement and training outcomes. He highlighted the growing demand for workforce retraining, driven by evolving employment patterns and technological advancements, and noted the shift from technical cooperation projects to capacity-building initiatives within the UN. He finally underscored the importance of adaptive learning journeys and integrating technology to strengthen social protection systems.









Ms. Inès Duarte, from the Union for the Mediterranean (UfM), focused her remarks on digitalization of skills in energy and climate action within the Mediterranean region, emphasizing the region's vulnerability as a climate hotspot warming 20% faster than the global average. Initiatives of the UfM include political dialogue, regional platforms, and project collaborations, with a focus on reinforcing the science-policy network. Digital technologies, Ms. Duarte explained, are key in addressing regional challenges such as droughts, floods, and sea-level rise, particularly in renewable energy and climate-smart agriculture. The UfM collaborates with the EU's Copernicus-ECMWF satellite system to improve decision-making, producing accessible apps that provide insights into sea-level rise effects on cultural heritage and climate change impacts on vector-borne diseases. These tools democratize complex data for both policymakers and the public.

Ms. Duarte highlighted the UfM's efforts to bridge the digital divide between the Mediterranean's northern and southern shores. The South faces fragmented markets, limited internet access, and skill gaps, despite its youthful population with potential to drive change. One example of the UfM's practical interventions is its forthcoming app for forecasting optimal locations for installations of renewable energy. However, she noted that challenges such as infrastructure disparities, regulatory inconsistencies, and political instability remain. Addressing these issues requires integration, investment in green curricula, and reskilling initiatives to adapt to a digital economy, all of which can only be achieved through enhanced dialogue and cooperation in the Mediterranean region.

The final speech was delivered by **Hon. Nikolla Camaj**, Member of the Montenegrin Delegation to the Parliamentary Assembly of the Mediterranean (PAM). Representing PAM, he highlighted the transformative potential of AI and emerging technologies, advancements that are likely to demand a workforce with advanced digital skills rather than replacing entire roles. Hon. Camaj emphasized PAM's advocacy for digital entrepreneurship and the integration of digital literacy into education to address skills gaps and promote inclusivity. Despite Europe's advancements in integrating information technology into workforce programs, challenges such as skills shortages in AI, cybersecurity, environmental technologies, and data analytics persist.







Looking ahead, Hon. Camaj pointed out that coordinated strategies must target marginalized groups, including women and youth, to bridge skill gaps and promote inclusivity. Policy initiatives, such as digital skills acceleration programs, scholarships, apprenticeships, and digital nomad visas, can enhance labor mobility. Added to that, promoting digital entrepreneurship through start-up incubators and innovation ecosystems can unlock regional potential. Other measures that are key to facilitating cross-border mobility and cooperation include harmonizing qualifications and certifications across regions and addressing systemic barriers like visa restrictions. Hon. Camaj concluded stressing that by bridging digital gaps, investing in underserved areas, and fostering collaboration, Europe, the Mediterranean, and Africa can emerge as global leaders in the digital economy while also driving socio-economic development.

Moderator **Dr. Alcidi** then opened the discussion with two pivotal questions. The first focused on ecosystems, emphasizing the need to align upskilling and reskilling efforts with local realities rather than abstract approaches. The second question addressed credentials, particularly the growing importance of micro-credentials in a labor market increasingly valuing specific skills over formal educational qualifications.

Mr. Ernst responded by highlighting a key challenge in Europe, namely the rigidity of its labor market, which has been exacerbated by pandemic-era policies like labor hoarding. While these measures provide short-term stability, they have hindered workforce mobility and adaptability. He noted that a significant part of the problem lies in the issue of credentials. Despite talent shortages, employers often insist on narrowly defined qualifications, struggling to recognize broader skills and undocumented competencies. Drawing on a McKinsey study, he emphasized how the value of initial certifications diminishes over time, while the practical skills gained through experience are critical but frequently overlooked.

To address these challenges, Mr. Ernst advocated for tools that can standardize and compare competencies across industries, sectors, and regions. Such systems would promote a more dynamic and flexible labor market, which is especially important as Europe faces an aging workforce. Enabling cross-border and cross-sector transitions, he stressed, is vital for improving productivity and making better use of the region's human capital.







Ms. Bardak then emphasised the ongoing gap between developments in the labor market and the ability of education systems to adapt, which remains a challenge. She suggested two key steps to address this matter. First, there is a need for clear guidance to help individuals, especially lowand medium-skilled workers, navigate the wide array of education and training opportunities. Second, she stressed the importance of micro-credentials, which can validate learning across formal, non-formal, and informal settings. For micro-credentials to be effective, however, Ms. Bardak noted that they must be widely recognized and respected by employers, a goal that has not yet been achieved. While the EU is taking significant steps in this direction, developing a flexible lifelong learning system where individuals can engage in training and receive recognition for their skills will require more time and effort.

The audience then raised one question regarding the growing divide between countries in terms of preparedness for AI and digital transformation. It pointed out that many African and South Mediterranean countries face challenges such as lack of infrastructure and digital literacy, particularly in emerging fields like AI. The question speculated about the potential for a divide in global talent, with some countries leading and others lagging, as well as the implications of "virtual migration" driven by digital advances.

In response, **Mr. Bravo** acknowledged that even in developed countries, educational systems are struggling to keep up with the rapid pace of technological advancements. However, he highlighted that the rise of tools like large language models such as ChatGPT could help bridge some of the gaps. These technologies can enable people without formal programming backgrounds to acquire basic algorithmic literacy and engage in programming tasks. He emphasised that while the divide may increase, these tools could provide opportunities to teach people how to leverage AI in their daily activities, as long as these tools are effectively incorporated into education.

Two aspects of AI-related jobs were then highlighted by **Ms. AI Cidi**, which drew a distinction between those jobs for highly skilled individuals developing AI technologies, which make up a small portion of the job market (1.5%), and the broader adoption of AI tools across various industries. While AI-related jobs have high productivity potential, they are unlikely to create large-scale employment globally. Added to that, measuring the extent of AI adoption in the workforce is a complicated task, due to the lack of research on the use of AI on various jobs and how it enhances productivity. Ms. AI Cidi stressed the importance of ensuring that workers are equipped with the skills to use AI tools effectively, as well as recognizing the importance of supporting high-skilled individuals in promoting substantial growth. She also expressed concerns that Europe is falling behind the U.S. and China in adopting advanced technologies, particularly AI, which has significant economic implications, and noted that the speed of change in this field is accelerating globally.







Mr. Crevier added to the discussion by highlighting the potential to bridge the digital divide by leveraging online resources and knowledge, noting that regions once isolated from global developments now have access to tools and communities that empower them While acknowledging challenges such as specialized knowledge and regional talent density, he expressed optimism that micro-credentials are increasingly providing recognition for skills, helping individuals access the labor market. He also suggested a collaborative approach to education, combining MOOCs, national education systems, universities, and the private sector, to improve educational quality and reduce the digital divide.

Upon conclusion, the policy session raised thought-provoking questions about the profound impacts of global megatrends such as digitalization, artificial intelligence, and climate change on labor markets and education systems. Speakers emphasized the need to address digital and skills gaps, particularly between developed and developing regions, to promote inclusive economic growth and innovation. Collaboration was highlighted as a key driver of progress, with calls for increased investment in digital infrastructure, adaptable education systems, and international partnerships. The conversation underscored the potential of technology to empower individuals and communities while addressing systemic barriers. Ultimately, the event stressed the importance of fostering dialogue and cooperation to build resilient and inclusive labor markets across Europe, the Mediterranean, and Africa.







Speakers' Biographies



Cinzia Alcidi, Senior Research Fellow at the Centre for European Policy Studies

Dr. Cinzia Alcidi is Senior Research Fellow at the Centre for European Policy Studies (CEPS) in Brussels, where she is also head of the Economic Policy Unit and the Jobs and Skills Unit. From 2020 to 2023 she was Director of Research. A macroeconomist by training, over the last 15 years, Cinzia provided evidence-based policy analysis to EU institutions and national governments by completing research projects in the field of economic policy analysis and policy evaluation, related to labor markets, macroeconomics and financial services. She is currently guest lecturer at the University

of Ghent (BE) and Member of the Joint Board of Studies of the "Economics of Globalisation and European Integration (EGEI)" Erasmus Mundus Master Degree. She is member of the editorial Board of Intereconomics, and Editor of Applied Economics Quarterly.

Dr. Alcidi holds a Ph.D. degree in International Economics from the Graduate Institute of International and Development Studies, Geneva (Switzerland). She also holds a Doctorate in Statistical and Mathematical Methods applied to Economics and Social Sciences from the University of Perugia (Italy).



Charles Crevier, Manager of the Social Protection, Governance and Tripartism Programme at the International Training Centre of the ILO

Charles is the manager of the Social Protection, Governance and Tripartism Programme at the International Training Centre of the ILO. He ensures the overall coordination of the human resources, financial resources and technical activities of the Programme as well as the development of training and learning policies, plans and curricula. From 2010 to 2017, he was responsible for the social protection training portfolio of the International Training Centre of the ILO. He implemented more than 100 international training activities in partnership with United Nations partners, research institutes and national stakeholders.







He was the technical manager of Quatrain Africa, a project designed to enhance financial governance capabilities of social security institutions in Africa, and he has worked as an actuary in the Social Security Department of the ILO in Geneva on more than 20 technical cooperation projects concerning actuarial matters and financial governance (Europe, Africa, the Middle East and the Caribbean). He holds a BA in Actuarial Science from Laval University, a Master in Management of International Organizations from SDA Bocconi, and completed Postgraduate Studies in Development Economics at Harvard University and Strategy & Innovation at MIT.



Ekkehard Ernst, Chief Macro-economist at the International Labor Organization

Ekkehard Ernst is Chief Macro-economist at the International Labour Organization where he is responsible for flagship reports on global labour market developments such as ILO's World Employment and Social Outlook Trends report. He publishes regularly on the implications of artificial intelligence, demographic change, and globalization for the future of work, including in developing countries, as well as on the transition to a sustainable society. His latest publications focus on developing solutions for a Just Transition in a world of labor shortages where he focuses on innova-

tions that help mobilize resources to accelerate the UN Sustainable Development Goals agenda. Ekkehard has international experience at the OECD and the European Central Bank. He is member of various advisory boards, including the European Parliament's International Advisory Board of the Science and Technology Committee, the UK's Productivity Insight Network, Pillars, CEPS, The Conference Board, and the Economists Network of the German Ministry of Collaboration and Development. He holds a PhD from the Ecole des Hautes Etudes en Sciences Sociales (Paris).









Jorge Miguel Bravo, Universidade Nova de Lisboa & Université Paris-Dauphine PSL and BRU-ISCTE

Jorge Miguel Bravo is Associate Professor of Economics & Finance at NOVA IMS and Invited Full Professor at Universidade Nova de Lisboa FCT; Invited Professor at Université Paris-Dauphine PSL in Paris, France. He holds a PhD and BSc in Economics from the University of Évora and a MSc in Monetary in Financial Economics from ISEG Technical University of Lisbon. He is Director of the Postgraduate Programs in Financial Markets and Risks and in Data

Science for Finance and of the MSc Program in Statistics and Information Management. He is an Integrated Member of research centers MagIC (NOVA IMS research and development center), BRU-ISCTE-IUL and CEFAGE-UE, and an integrated member of Banco Bilbao Vizcaya Argentaria (BBVA) Pensions Institute Scientific Experts Forum in Madrid, Spain. He was considered a member of the World's Top 2% Scientists List in 2021 – University of Stanford, USA. His work is published in prestigious academic journals such as the Journal of Banking and Finance, Journal of Pension Economics and Finance, MIT Press and World Bank books. He works as scientific consultant for national & international public (SOCIEUX+ European Union, Statistics Portugal, Ministry of Finance; Ministry of Labour & Social Security) and private institutions on research topics such as longevity risk management, ageing & social protection systems, and reform and sustainability, among others.



Ummuhan Bardak, Senior Human capital development expert, ETF

Ummuhan Bardak is a senior specialist on labor market and migration at the ETF. She has been involved in different projects related to the labor market, migration, employment and human capital development in the European Neighborhood Region. Her work encompasses research and analysis, policy dialogue, capacity-building and project management. Her thematic areas have been labor market reviews, skills anticipation and matching, the skills dimension of migration, youth transition and the future of work studies.









Hon. Nikolla Camaj, Member of the Montenegrin Delegation to the Parliamentary Assembly of the Mediterranean (PAM)

Hon. Nikolla Camaj is a distinguished political leader and academic, member of the Montenegrin Delegation to the Parliamentary Assembly of the Mediterranean (PAM). He is the Vice-President of the Parliament of Montenegro and serves on several key parliamentary committees, including the Committee on European Integration and the Committee for Monitoring the Population and Housing Census. He has a strong educational background, having

completed a degree in Albanian Literature and Language in Prishtina, postgraduate studies at the Faculty of Philosophy at the University of Zagreb, and is currently pursuing a Ph.D. in Anthropology. Camaj has a history of active political engagement, having founded and led the Democratic Alliance of Tuzi (DSuCG), advocating for minority rights and decentralization. His career includes roles in education, the NGO sector, and local governance, including serving as the Head of the Tuzi Local Assembly and Director of Utility Services in Tuzi. Notably, he has been an advocate for Montenegro's independence, participating in the anti-war movement in 1991 and supporting the independence referendum.



Inès Duarte, Project Manager at the Energy and Climate Action Division of the Secretariat of the Union of the Mediterranean

She is specialized in climate finance, mobilizing and managing financial instruments and grant funds for projects outside the EU (both technical assistance, investment grants, concessional loans or guarantees) from the European Commission (EC), the Climate Investment Funds (CIF) and the Green Climate Fund (GCF). She has a strong knowledge of lending, blending and advising for

projects in key sectors of sustainable development such as energy (renewable energy, energy efficiency, storage), climate action (mitigation and adaptation). Ms. Duarte has previously worked for the European Bank for Reconstruction and Development (EBRD), the European Investment Bank (EIB), and in the private sector with PricewaterhouseCoopers (PwC). Ines holds a Master in European Economic Studies from the College of Europe (Bruges, Belgium) and a Bachelor in Economics from the Catholic University of Portugal.





