

# Future Employment Distribution

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**Abstract:** *The objective of the paper is to outline a job distribution in EU in a long run. There is an attempt to point out the main drivers in EU labour market and their possible outcomes. There is a structural and geographical point of point of view. An attempt to depict the labour market in 10 years is made.*

**Keywords:** *EMPLOYMENT DISTRIBUTION, EU LABOUR MARKET*

## 1. Introduction

The current high level of interest in the future of work reflects recent perceptions and future expectations of radical change in work. Structural change in the economy is primarily driven by intersectoral productivity differentials and the structure of demand, and continually influences the distribution of employment throughout the economy. It has been argued that, due to innovations in the application of information and communication technology, the pace of productivity-enhancing technological change has increased and is expected to accelerate further in the forthcoming decades. [1] The purpose of this paper is to attempt to outline job disparities.

## 2. A longer-term perspective on European employment (to 2030)

### Covid 19 Pandemic

The COVID-19 crisis has strongly affected Europe's labor markets, and it may take years for employment to return to its pre-crisis levels. The COVID-19 crisis ended years of strong employment growth marked by greater mobility. The crisis put up to 59 million European jobs, or 26 percent of the total, at risk in the short term, through reductions in hours or pay, and permanent layoffs. This marks a sharp reversal in employment rates, which prior to the crisis had risen in 85 percent of the regions. [2].

There are evidence that local labor markets have been on diverging trajectories in employment outcomes. 48 energetic cities, home to only 20 percent of the continent's population, have generated more than one-third of the EU's job and population growth since 2007. These cities - including Amsterdam, Copenhagen, London, Madrid, Munich, and Paris - have become Europe's leading hubs of innovation and talent. Despite their high costs of living, they have been magnets that attract people from other regions that are experiencing low or no job growth. The rapid move to working from home during the crisis may affect this urbanization pattern.

How automation and artificial intellect (AI) may reshape the mix of occupations, the skills required to work?

Second key element that will affect Europe's labor markets in the future, as automation is increasingly adopted in the workplace: shrinking labor supply. The working-age population has decreased by 1.4 percent across the EU since 2011. Some regions feel this more deeply because of aging and emigration, and these trends are accelerating. In addition, though there is some variation across the continent, the average European workweek has shortened by more than an hour since 2000. [2] New jobs are likely to be distributed unequally across occupations and geographies, potentially exacerbating existing strains in the social contract linking individuals and institutions. Workers will need to add new skills and find their way to these opportunities.

Work activities equivalent to about 53 million jobs could potentially be displaced by automation. There is some overlap between these jobs at risk from automation and those at risk in the short term from the impact of the COVID-19 crisis.

Many of the largest occupational categories in Europe today have the highest potential for displacement. About 21 million workers, most of whom lack tertiary education, may need to change occupations by 2030 [2]. Countries such as Bulgaria and Romania, with their predominance of individual farmers, are likely to lag behind in automation [3].

At the same time, we see a continuing rise in demand for workers in technology, science, and engineering fields as well as business and legal professionals. Human workers will also increasingly concentrate in roles that require personal interaction, caregiving, teaching and training, and managing others - activities for which machines are not good substitutes.

Regarding AI and its influence on labor market, the current evidence and forecasts on the impact of AI on jobs present a mixed picture of job losses and gains. The impact of AI on the future of jobs foresees the displacement of tasks by AI-based technologies, rather than the replacement of jobs. Despite the limits of forecasts in anticipating largescale disruptions, AI is expected to disproportionately displace low-skill and low-wage jobs. EU Member States with existing high levels of technology adoption may experience minimal or positive net employment effects, depending on the role that sectors affected by AI play in the labor market. Member States with low levels of technology adoption and a high proportion of jobs with well-defined task routines are expected to experience negative net employment effects. [3] However, AI is envisioned as an opportunity. The extent to which AI can create decent jobs is as yet underexplored and is likely to depend on the institutional and societal factors, which are prevalent in individual EU Member States. Job displacement effects due to AI may contribute to a rise in platform work, adding multiple risks to job quality. EU Member States with low levels of labor market segregation and strong collective bargaining frameworks will more likely benefit from AI in terms of decent jobs. The way AI will be incorporated into the legal frameworks regulating labor markets will play a large part in determining the ultimate impact of AI on decent jobs.

Another question is inevitable, i.e. to what extent does AI (a) offer opportunities to improve working conditions and (b) pose risks associated with the use of AI in a working environment? AI has the potential to bring both risks and opportunities to working conditions. On the one hand, it can reduce the risk of dangerous or unhealthy working conditions, encourage the development of specialist or soft skills, and improve accessibility to certain jobs. However, the application of automated technologies to the job market brings physical and psychosocial risks. The use of AI software to monitor and manage employees may reduce bias in decision-making and identify skills needs, but also reinforce existing biases, increase psychological risks and result in unprecedented amounts of personal data being held by employers. Future policy-making and technological development will be important in determining the extent of the realisation of the potential benefits and risks of AI [3].

A challenge posed by AI usage are legislative issues. A range of EU legislation addressing health and safety, data protection and workers' rights plays a role in regulating the impact of AI on working conditions. Recent EU strategies and white papers examining AI are considered an important step towards a cohesive

policy. Although Member States are increasingly developing national AI policies, these usually tend to focus more on the economic benefits that automation and software could bring to the country. Few have policies in place that explicitly address how AI can be used to improve working conditions, or consider how to mitigate risks brought by AI to working conditions [3].

How might Europe's geography of job growth evolve by 2030?

Automation could intensify regional concentration in the years to come. The 48 dynamic cities that outperformed in the past decade could capture more than 50 percent of Europe's potential job growth in the next. Meanwhile, stable economies should continue to add jobs at a modest pace, just as they did in the past decade. Within the shrinking regions category, the outcomes could range from small increases to negative growth. Around 40 percent of Europe's population lives in regions that could have fewer jobs in 2030 than they do today in absolute terms. However, even places facing job losses will need to boost employment to compensate as aging and outmigration shrink the working-age population [2].

What are the priorities for employers?

Employers will need to make adept decisions about strategy, skills, and social responsibility. Companies may need to respond as consumer purchasing power shifts. To address the need for new types of skills, they may need to change recruiting processes, establish learning programs, and redesign organizational structures. Their choices have to reflect the skills, occupational mix, and geographic footprint of their workforces today. A retail chain with a distributed customer-facing workforce, for example, faces different questions than a geographically concentrated tech firm. Employers will also need to consider how their workforce decisions affect the communities in which they operate [2].

What are the priorities for local communities?

Each community has its own current and future priorities to overcome labor market mismatches. However, four broad imperatives stand out: creating viable training and career pathways to address skills shortages, improving access to jobs in dynamic growth hubs, revitalizing and supporting shrinking labor markets, and increasing labor participation rates.

### 3. Main drivers

It has generally been assumed that new technology replaces low-skilled labor, but is a complement to high-skilled labor, so that it would lead to an upgrading of the skills structure. [4].

Another main driver of recent and projected structural change is globalization. Recent decades have seen significant changes in the global distribution of labor, and global competition and market opportunities are likely to continue to impact upon the structure of employment in Europe. In this context, relative wages and productivity are the key determinant of which jobs will remain and grow in Europe and which will be lost to foreign competition. As manufacturing still dominates global trade, it is the main sector impacted by globalization.

When examining the reasons for the resilience of jobs at the bottom end of the wage distribution. Many of these jobs, not least those providing personal services in both the private (e.g. hotels and restaurants) and the public sector (various caring services), are not significantly vulnerable to trade, as the provision and the use of these services is geographically fixed to a single location. This requirement of face-to-face interaction of the provider and the user is also one reason why these jobs are less routine and, so far, less susceptible to technological change.

### 4. Possible scenarios

Humanity, experience a fundamental transformation in the way of work. Thus, there are made attempts to outline different visionary scenarios for the future of workplace. PwC's Global People and

Organization leaders have depicted four worlds of work in 2030. [5]. They called them: the Red world, the Blue world, the Green world, and the Yellow one.

#### Red world

The Red World is an incubator for innovation with organisations and individuals racing to give consumers what they want. Digital platforms and technology enable those with winning ideas and allow for specialist and niche profit-makers to flourish. Businesses innovate to create personalisation and find new ways to serve these niches. But in a world where ideas rule and innovation outpaces regulation, the risks are high. Today's winning business could be tomorrow's court case. However, there's a lack of loyalty from the company towards the employees. Workers with skills in demand will prosper; those with outdated skills will be abandoned. (Fig.1)

#### Red World: The road to 2030

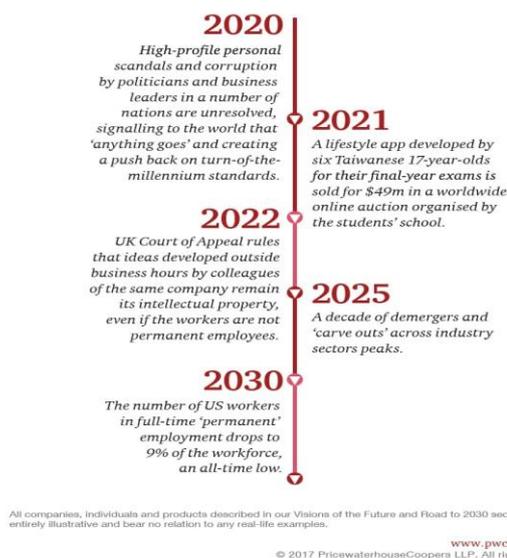


Fig. 1 The road to the Red World, Source: [5].

#### Blue world

In the blue world, capitalism reigns supreme, it's where bigger is better. Organisations see their size and influence as the best way to protect their profit margins against intense competition from their peers and aggressive new market entrants. Corporations grow to such a scale, and exert such influence, that some become more powerful and larger than national economies. It's a world where individual preferences take precedent over social responsibility. However, there is a risk of huge employment disparity. [5] There will be a gap between the rich and the poor. Either people will have a high paying job or no job at all. (Fig. 2)

#### The Green world

This is a world where corporate responsibility isn't just a nice-to-have but it's a business imperative. It's characterised by a strong social conscience, a sense of environmental responsibility, a focus on diversity, human rights and a recognition that business has an impact that goes well beyond the financial. Workers and consumers demand that organisations do right by their employees and the wider world. Trust is the basic currency underpinning business and employment. Companies have to place their societal purpose at the heart of their commercial strategy. It is possible to rehearse the idea of job for life. [5]. (Fig. 3)

#### The Yellow world

This is a world where workers and companies seek out greater meaning and relevance in what they do. Social-first and community businesses find the greatest success and prosper. Crowdfunded capital flows towards ethical and blameless brands. It's a world

where workers and consumers search for meaning and relevance from organisations, ones with a social heart. Artisans, makers and 'new Worker Guilds' thrive. [5]. It's a world where humanness is highly valued. (Fig. 4)

### Blue World: The road to 2030

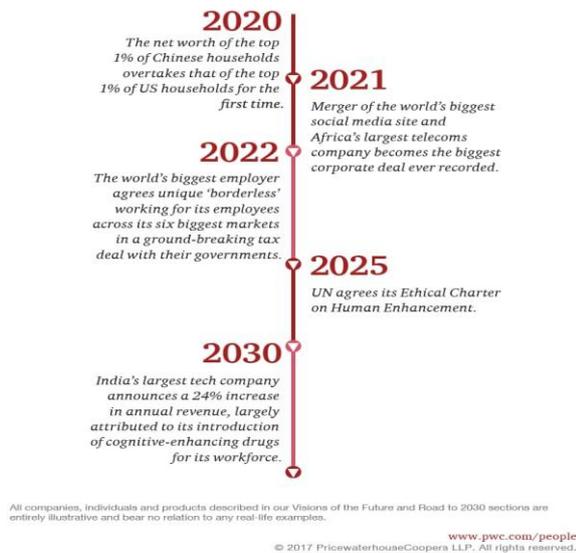


Fig. 2 The road to the Blue World, Source: [5].

### Green World: The road to 2030

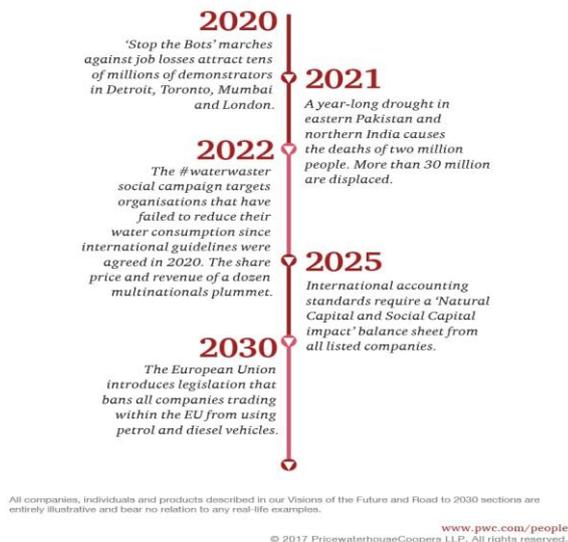


Fig. 3 The road to the Green World, Source: [5].

May be these scenarios could take place simultaneously. Alternatively, may be they will be developed with connection to cross-cultural differences appealing to them. We will see what the future will bring.

## 5. Conclusion

There are grounds for optimism and pessimism in this paper. Some argue [6] far from being doomed by technology and other trends, that many occupations have bright or open-ended employment prospects. There are a negative thought as well, which is inevitable with such an ambiguity. In both cases, it requires individuals, educators, businesses and policymakers to respond appropriately. History is a reminder that investments in skills must be at the center of any long-term strategy for adjusting to structural change.

### Yellow World: The road to 2030

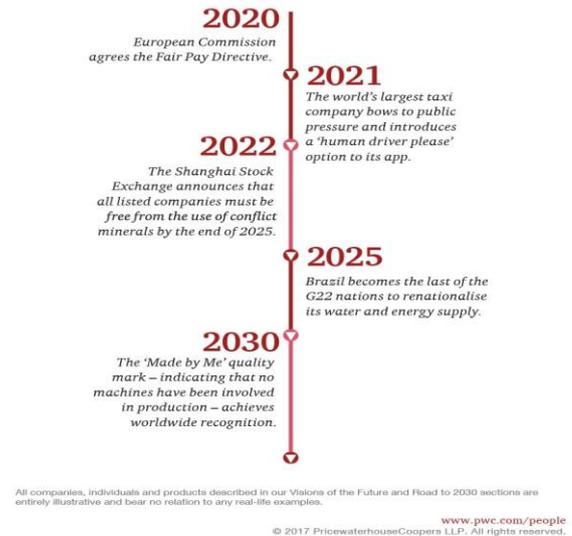


Fig. 4 The road to the Yellow World, Source: [5].

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