UNIONS21
Building tomorrow's unions

Changing World of Work

Introduction

Economies, and the wider societies within which they are embedded, are always changing.

For unions to continue to find a place in society and to represent the workers of today and tomorrow, it is crucial to know and understand those changes.

Over the last 25 years, western economies have seen relative declines in jobs in industry and agriculture alongside relative gains in service jobs, with notable gains in broad areas such as healthcare, education, professional services and ICT. These declines and rises have changed the wider environment from which unions need to encourage membership and obtain collective agreements.

This paper will explain those megatrends, and identifies potential risks and opportunities for trade unions to hopefully inform strategic efforts in an uncertain future within the UK, Ireland and the EU27.

To help us further understand the coming labour market changes, we have outlined four megatrends which are all out of the control of unions and therefore will have a profound effect on their power and influence. These are:

- Demography: the process of population ageing observed across much of the developed world;
- Decarbonisation: climate transition to net zero greenhouse gas emission;
- Digitalisation: a potentially novel shift in the form of a new general-purpose technology (GPT) Artificial Intelligence (AI);
- De-globalisation: a reshaping of globalisation which include tariffs, industrial subsidies, and the re-ordering of supply chains.

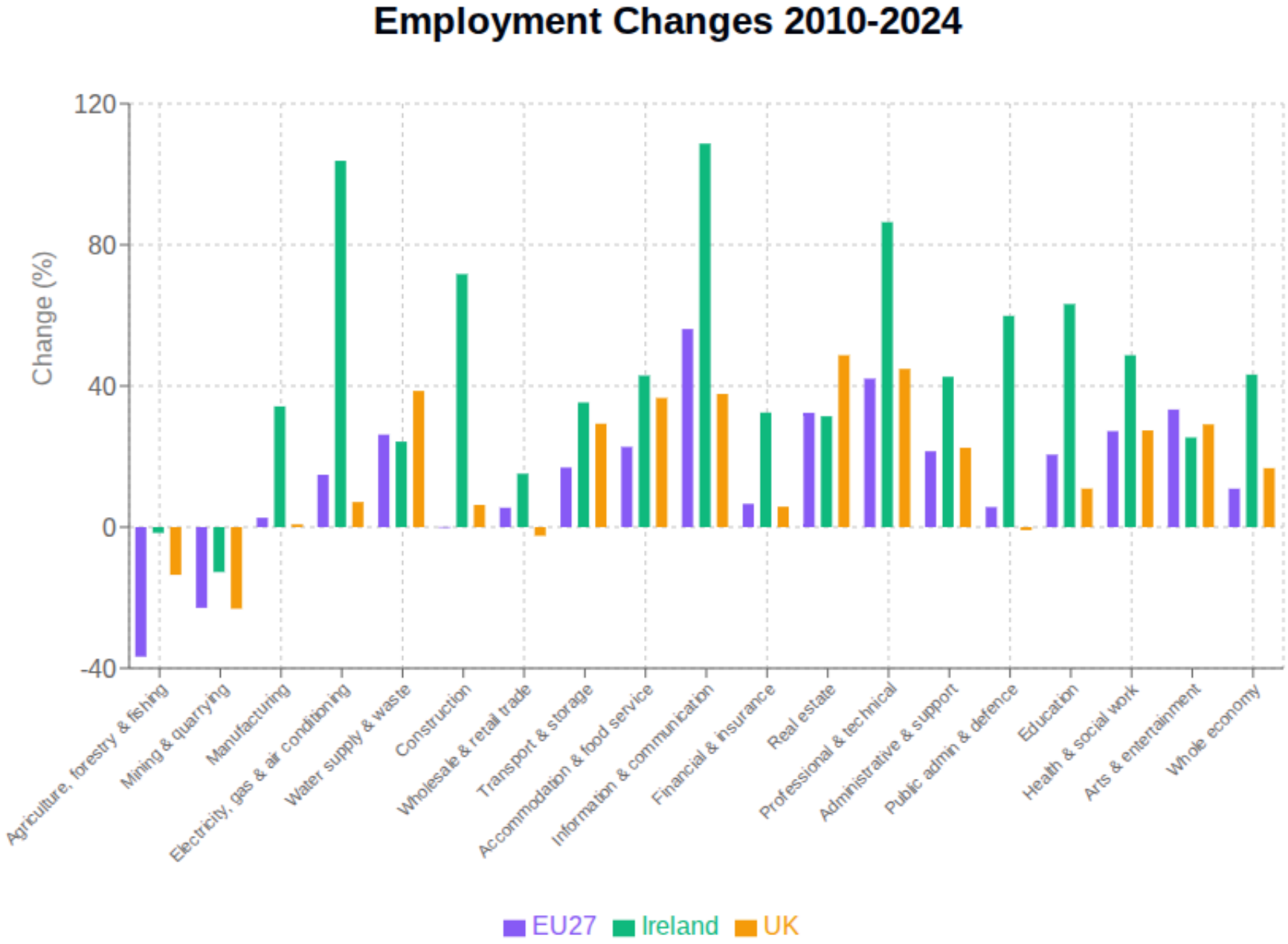
The dynamics of employment growth

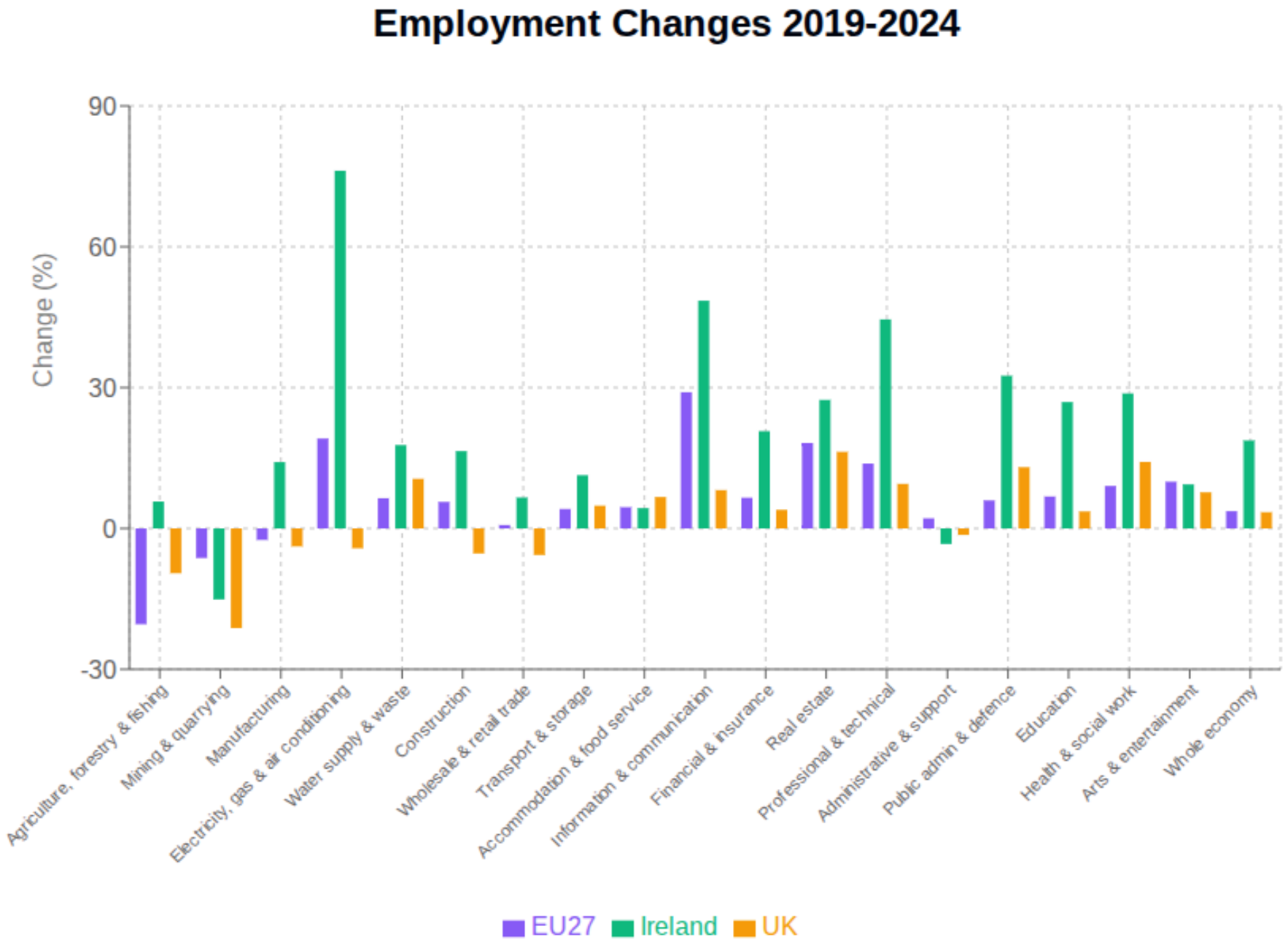
Where is the work?

To understand where employment growth will go in the future, we first need to understand its current trajectory. Labour markets in Ireland, the UK and the EU27 are already undergoing changes tied to a variety of forces, especially megatrends. These structural shifts have already had differential effects in labour markets and by extension, unions.

Looking at trends gives us the best picture of how employment is likely to shift in the short term based on the dynamics that are already in play. These dynamics will interact with ongoing structural forces to determine how employment growth will be affected in the medium and longer term.

The charts below shows employment growth in each sector of the economy in Ireland, the United Kingdom and the current members of the EU.


Employment Changes 2010-2024
Change (%)
120
80
40
0
-40
Agriculture, forestry & fishing
Mining & quarrying
Manufacturing
Electricity, gas & air conditioning
Water supply & waste
Construction
Wholesale & retail trade
Transport & storage
Accommodation & food service
Information & communication
Financial & insurance
Real estate
Professional & technical
Administrative & support
Public admin & defence
Education
Health & social work
Arts & entertainment
Whole economy
EU27
Ireland
UK


Employment Changes 2019-2024
Change (%)
90
60
30
0
-30
Agriculture, forestry & fishing
Mining & quarrying
Manufacturing
Electricity, gas & air conditioning
Water supply & waste
Construction
Wholesale & retail trade
Transport & storage
Accommodation & food service
Information & communication
Financial & insurance
Real estate
Professional & technical
Administrative & support
Public admin & defence
Education
Health & social work
Arts & entertainment
Whole economy
EU27
Ireland
UK

In all three cases across the EU, UK and Ireland, the sectors declining in the current labour market, both across the 2010-2024 span, and the more recent 2019-2024 period are **agriculture, forestry and fishing** and **mining and quarrying**.

Manufacturing also generally appeared in the bottom third in growth terms, showing modest aggregate growth or declines. Even where employment growth was middling (Ireland between 2010 and 2024), this growth was not sufficient to maintain the sector's relative position.

In all cases, **wholesale and retail** trade was in the low growth group, showing job declines in the UK.

Professional, scientific and technical activities represent a significant growth sector in all three comparators, exceeding aggregate job increases in all cases, often significantly. **Information and communication**, while not in the top third in terms of job expansion, also represents a relative growth sector in all cases, exceeding overall changes. **Accommodation and food service activities** also tended to show expansion, though in the Irish case between 2010 and 2024, the sector was modestly behind relative to overall jobs growth.

Union membership

Examining data across the three comparators, we see that union membership is relatively high in:

- Electricity, gas, steam and air conditioning supply
- Water supply; sewerage, waste management and remediation
- Transportation and storage
- Public administration and defence
- Compulsory social security
- Human health and social work activities.

Consistently low union membership rates are observed among employees in:

- Agriculture, forestry and fishing, manufacturing
- Construction
- Wholesale and retail trade
- Repair of motor vehicles and motorcycles
- Accommodation and food service activities
- Information and communication
- Financial and insurance activities
- Professional, scientific and technical activities.

Megatrends

To understand where the economy will go over the longer term, we need to look beyond current dynamics and engage in a process of strategic foresight to identify some of the risks associated with the main approaching global megatrends. Where risk is relatively low, we could see sectors relatively advantaged from transitions. Where high, workers and their unions could face challenges.

Demographic change

Demographic change in the form of increased life expectancy, declining births and a growing share of those who have left versus entering the labour market has already affected the world of work. While demographic change in the form of population ageing will present challenges globally, some countries and specific sectors already face challenges. These effects can occur on both the labour supply – referring to the availability of appropriate workers – and labour demand side, as a shift in consumption shifts the balance of spending between sectors.

Across the European Union, 35% of workers are aged 50 or over. Ireland faces relatively favourable demographics with just over 30% of workers aged over 50, while that figure stands at 29.6% in the UK.

Particular areas of the economy will go through significant decreases in their labour force and face sustainability challenges over the next several decades. This is most stark in agriculture, where about 45% of the UK and EU27 workforce is over 50, rising to nearly two thirds of the workforce in Ireland (63.4%). Other consistent outliers in these cases include:

- Water supply; sewerage, waste management and remediation activities
- Transport and storage
- Real estate
- Professional, scientific and technical activity
- Human health and social work activities
- Education
- Arts, entertainment and recreation
- Other service activities.

However, these issues of labour supply may be balanced by increased labour demand in areas like human health and social activities as the population ages. Conversely, sectors like education, which tend to see higher demand from younger cohorts, may contract in relative terms. This long-term trend may interact with other structural forces like AI if labour supply is more constrained.

For unions, while agriculture will be affected, it is relatively unorganised and so the impact will be lesser than in areas like the public sector, suggesting these challenges may disproportionately affect members.

Decarbonisation

The necessary transition to societies where gross emissions are balanced out by removals from the atmosphere – net zero or carbon neutrality – will have profound implications across economies.

The shift towards low carbon production will be a major component of these changes, with implications for workers across economies. These shifts will be more dramatic where transition efforts are sufficient to limit damage associated with climate change by restricting warming to under 2 degrees C, or ideally, 1.5 degrees.

Generally, "green jobs" are expected to benefit from increasing policy support aimed at reducing carbon emissions and advancing environmental goals. As such, demand for labour is projected to grow (Zaachman et al., 2024).

In contrast, those in high-emission sectors or "brown" jobs face pressure to change or disappear and are significantly more likely to be current members of a trade union.

Across the EU27, some 17.7% of brown sector employees were members, versus 15.9% for other workers. This gradient is more pronounced for the UK and Ireland. Just under a quarter of brown sector workers in the UK were unionised, compared to 20.3% of other workers. In Ireland, just under 30% of brown sector workers were currently union members, whereas 24% of other workers were.

This presents some risk for the movement as a whole, since the elimination of these roles without membership increasing elsewhere will present a secular drag on membership. There is a real risk if new jobs are significantly less likely to be organised, whether or not employment is continued within a given sector.

However, relatively high union membership in key brown sectors could prove a strategic advantage for the labour movement in the green transition.

Membership provides an opportunity to more actively bargain for adequate resources for transition or job guarantees elsewhere with firms and state bodies. Properly managed, the green transition could be an opportunity for the labour movement, encouraging membership and helping the movement reshape the economy in a more worker friendly direction, ensuring a Just Transition.

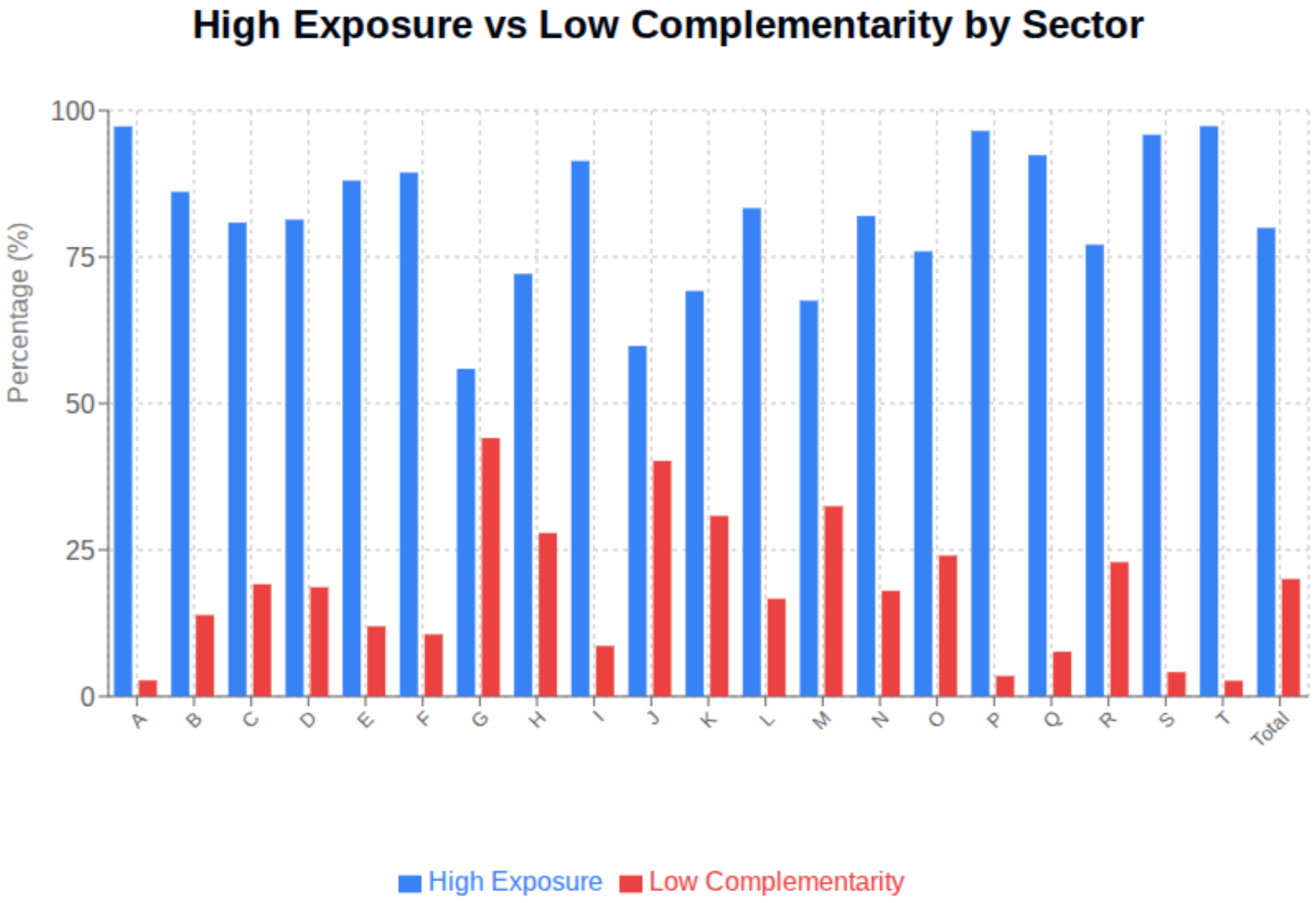
Digitalisation (AI)

Automation represents perhaps the most consistent structural force shaping labour markets over the course of modern capitalist history. Artificial Intelligence, or AI, represents the latest, potentially dramatic iteration of these changes. Between 2023 and 2024, usage among all firms with 10 or more employees grew significantly across the EU27, UK and Ireland. This is most stark in the UK case, with 2024 planned adoption rates amounting to more than double 2023 levels, rising from 9% of these companies to 22%. This effect is even more pronounced where larger firms are concerned, with a majority of large firms (250 or more employees) in Ireland using AI tools in 2024.

However, all jobs are not equally likely to be affected by automation. Risk depends on both the likelihood AI can perform on the job tasks (exposure) and whether this means AI can complement or substitute for workers (complementarity). Occupations which are both highly exposed and substitutable are particularly vulnerable to displacement and labelled high risk. We observe elevated – relative to the EU27 employment generally – risk within the following sectors:

- Wholesale and retail trade;
- Repair of motor vehicles and motorcycles
- Transport and storage
- Information and communication
- Finance and insurance activities
- Professional scientific and technical activities
- Public administration and defence; compulsory social security
- Arts, entertainment and recreation.

Chart: Proportion of jobs in high risk occupations by NACE sector EU27


High Exposure vs Low Complementarity by Sector
Percentage (%)
100
75
50
25
0
A
B
C
D
E
F
G
H
I
J
K
L
M
N
O
P
Q
R
S
T
Total
High Exposure
Low Complementarity

Source: European Social Survey Round 11 (2025), author calculations, Wiliamson et al. (2024)

Note: See Tables earlier in this report for the sector corresponding to each letter code. "Other" refers to both High complementarity, highly AI exposure occupations, as well as all low AI exposure occupations.

In all cases, union members are less likely to be employed in high risk occupational categories. This differential is most prominent in the UK, with only 7.5% of union members identified as high risk, versus 21% for non-members.

Ireland also shows a significant gap in proportions, with 25.5% of non-members at high risk compared to 18.1% for trade unionists. This compares to values of 15.4% among members for the EU27 aggregate vs 20.9% for non-members.

Deglobalisation

After decades of expanding economic links between countries through trade, technology, investment and migration, these processes of "globalisation" have slowed. The slowdown in cross-border commercial ties is in many ways complex and varies by place and activity. Some types of commercial ties – such as trade in services – have increased while others appear to have peaked. For some, "deglobalisation" implies too much of a broad brush picture of decline in these linkages, preferring "slowbalisation".

This slowbalisation has been associated with decreased political support for these flows in many states. The infusion of domestic politics and new strategic concerns by states, alongside the varied picture across industries, makes this process uncertain in many ways.

In any case, economic models built on the assumption of continued rapid growth in globalisation may be at risk. The OECD produces a dataset which incorporates direct and indirect employment supported by the export of goods and services.

In the Irish case, the latest available data suggest that more than half of employment is supported by exports in 2020. This compares to 20.6% of employment in the UK and 28.7% of employment in the EU27. Manufacturing was particularly significant in all cases with between 3.5% (UK) and 12.3% of aggregate employment reliant on exports in this sector.

Exports from the aggregate category wholesale and retail trade; repair of motor vehicles and motorcycles; transportation and storage; accommodation and food service activities, which incorporate sectors G-I, was also a major contributor to employment in all cases. Information and communication also represent outliers relative to their employment contribution across the three comparators, while financial and insurance activities and the aggregate real estate, and professional and business support services, are notable in Ireland and the UK. Ireland is also uniquely reliant on agriculture, forestry and fishing exports, with 3.7% of employment directly or indirectly supported by this trade.

Conclusion

In this research, we have identified the main trends in employment by sector, and identified the distribution of trade union membership across the labour market. We have also identified potential risk factors for workers and their trade unions arising from measurable indicators tied to four known structural forces with significant implications for the world of work – demographic ageing, decarbonisation, digitalisation in the form of AI and deglobalisation.

These forces present varied challenges and opportunities for various sectors, and the trade union membership tied to them in the UK, Ireland and the wider EU.

The analysis points to a changing picture for workers and their unions and the economy of the future presents both challenges and opportunities. However, while these forces are likely beyond the purview of trade unions to stop, continued involvement within changing sectors and the wider policy space could help shape these trends for the better.

In risk terms, sectors such as **education** and **health** face ageing demographic challenges, though health may see growth as older people require more health and social care. These sectors face a relatively low threat from automation and AI, with several studies indicating that AI may improve conditions of work. As low emitters and not faced by the challenges of international trade, the indication is that, despite certain challenges, employment conditions may be favourable to continued high membership.

Public Administration shows a more ambiguous picture. While there appears to be prospects for growth in the EU and UK, employment growth projections moving forward in Ireland are slow. The sector may face significant shifts due to AI, with a high proportion of jobs considered found to be substitutable. Workers in this sector also skew older, raising the potential for attrition as older workers are not replaced, with direct implications for trade unions given the propensity of these workers to be unionised.

Manufacturing employment may face challenges, given the continued reduction in its role in labour markets in all three comparators. While this may be given a significant new boost by AI technologies and other forms of automation, the sector faces challenges from decarbonisation and reductions in international trade. These effects likely vary significantly within the sector, as some sectors contribute disproportionately on both fronts. On the other hand, areas such as the green transition may present new opportunities for industrial growth in valuable technologies, though this will likely interact with other structural forces.

Transportation and storage tends to have good projected growth prospects despite ambiguous recent labour market performance in Ireland. Concerningly, workers in the sector may face more significant challenges given identified risk across all four megatrends domains. Workers in these sectors are older, and face pressure from decarbonisation given their emissions intensity. Employment in similar green jobs may be feasible in many cases, given appropriate infrastructural investment and collaboration to ensure that workers have the skills to meet these jobs. Deglobalisation and reductions in international trade may also have significant effects for these workers and other workers.

Despite relatively low unionisation rates in the UK (and relatively modest rates slightly below the economy wise average in Ireland, the **construction** sector may be an opportunity for the labour movement in both jurisdictions. The sector has significant growth potential, and faces fewer risks from the main structural forces identified within this paper. Similarly, **accommodation** and **food**, under the terms of the present analysis, have both employment growth prospects and a lower risk profile than other sectors, despite low unionisation rates and other factors militating against membership growth. In contrast, **wholesale and retail** trade faces a combination of low employment growth, significant risk from AI and deglobalisation coupled with low unionisation rates.

In Ireland, the UK and the EU, **professional, scientific** and **technical**, **administrative and support service**, **financial** and **insurance** and **information** and **communication** show encouraging employment growth, implying that the economy may skew towards these sectors. Despite this, megatrends may be a challenge e.g. automation will affect a high proportion of work where there are potentially substitutable technologies.

About the author

Paul Goldrick-Kelly is an Economist at the Nevin Economic Research Institute, based in Dublin. A graduate of University College Dublin with a HDIP and MA in Economic Science, Paul's work has examined issues related to healthcare, housing, tax and revenue sufficiency as well as productivity performance in the Republic of Ireland.

Paul's current research interests relate to ecological sustainability and political economy, incorporating issues related to Just Transition. Paul is currently engaged in a collaborative doctoral research project with NUI Maynooth concerning carbon lock-in and its manifestation and propagation through institutions. This work is funded in partnership with the Irish Research Council.

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