

# The implications of AI for governments and civil servants

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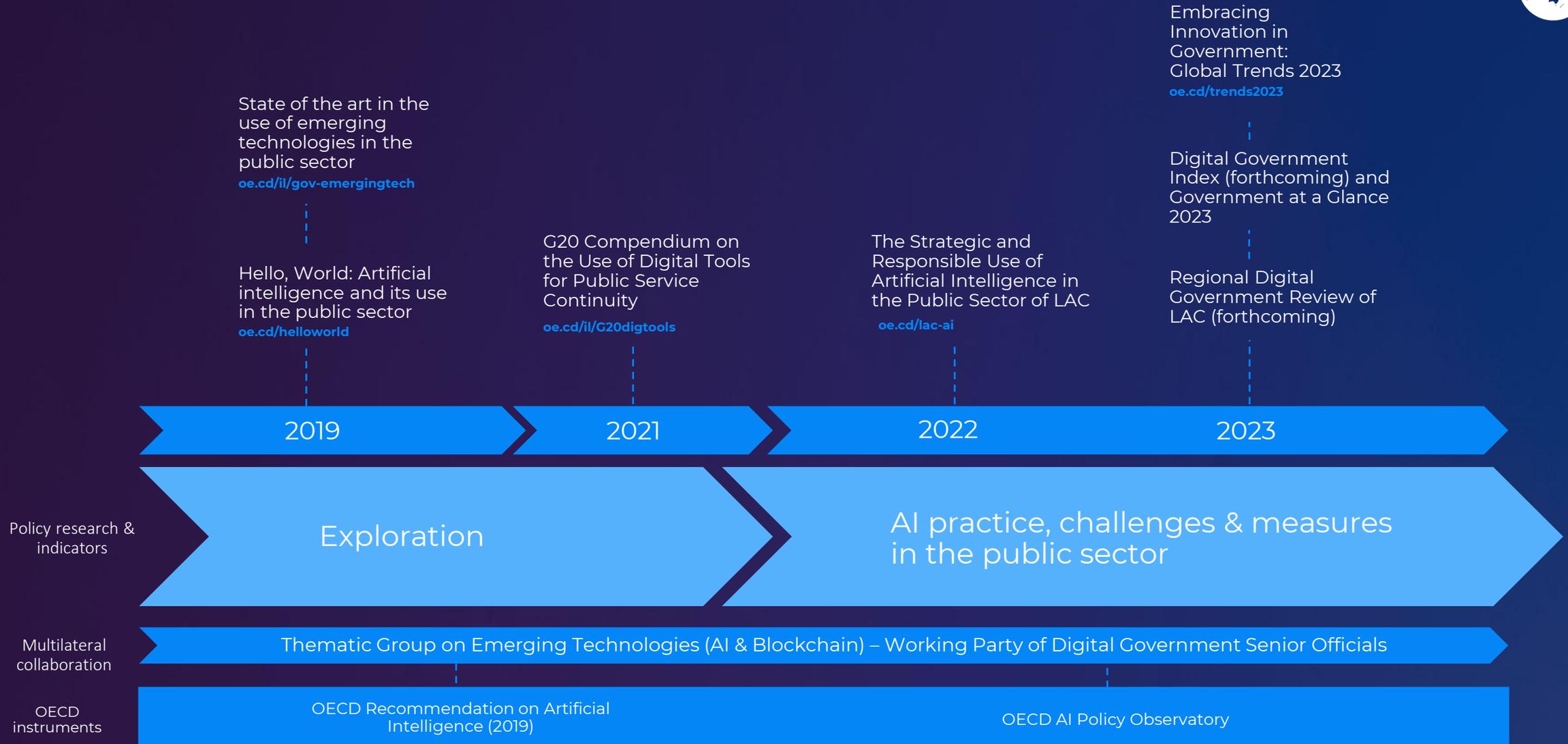
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- ◆ Why and how governments should adopt AI solutions in the delivery of public services
- ◆ What AI adoption means for the tasks and skills of civil servants

# Why and how governments should adopt AI solutions

# 1 Where we have been





# AI for responsive, reliable, and accountable government

Governments as:

- ◆ Developers
- ◆ Regulators
- ◆ Financers
- ◆ **Users**



**Enhanced engagement with citizens**



**Efficient capturing and responding to user needs**



**Improved speed and quality of services**



Improved decision-making



Targeted public spending



**Free up public servants' time & lead to higher-value work**



# AI case studies

## Record of employment comments



The Record of Employment Comments (ROEC) uses natural language processing (NLP) to review the free-text comments received on records of employment and assess and predict simple actions (e.g. save or ignore comments). This allows to reduce the manual workload of Service Canada officers and deliver timely payments of Employment Insurance (EI) benefits to users.

## Long-term unemployment prediction



The Portuguese Public Employment Service builds on unemployment data held by the agency to predict the risk of an individual to become unemployed for long-term. With the results, the agency tailors actions to support users.

## CLOVA Care Call



The City of Daegu in the Republic of Korea developed an AI call service for seniors. Users receive a call once or twice per week to get check-ups on their health, eating, sleeping and medication patterns. The system can understand unstructured conversations and interact naturally with users. 95% of the users are satisfied with the service and would like to continue.



# Establishing an enabling environment

for trustworthy and human-centred AI development within the public sector

- ◆ Governing AI coherently across the public sector (AI strategies, data governance, institutional structures) ----- Australia's AI in Government Taskforce
- ◆ Designing effective policy levers through guidelines, frameworks, tools, and legislation to steer the ethical and responsible development and use of AI ----- Colombia's Ethical Framework for AI
- ◆ Supporting implementation through knowledge sharing, competences and capacities development, and partnerships. ----- Finland's Elements of AI free and open course
- ◆ Monitoring AI in the public sector and measuring the impact for fostering trust and long-term viability. ----- Canada's Algorithmic Impact Assessment tool



A preliminary framework for trustworthy use of **AI** in the public sector



# What **AI** adoption means for the **work and skills** of civil servants



Little evidence of significant **employment** effects so far



AI has improved **performance** and **working conditions**



But there are **risks to employment** in the longer term



AI applications have improved and can now perform cognitive skills, such as expression, scheduling, and advising...



...but they are still limited in socio-emotional skills, such as high-level management negotiation, persuasion and active listening





AI applications can free up public sector staff to support more **vulnerable users**



Adopting **AI solutions** in the public sector will require **more than specialised AI skills**



Governments will need to **invest in skill development** to support the AI transformation

# Thank YOU

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# Annex



# Use cases for AI in the public sector



Responding to  
the COVID-19  
crisis



Public safety  
and security



Improving  
government  
efficiency and  
decision  
making



Relationships  
with and  
services for  
citizens and  
businesses



Regulatory  
functions



Healthcare



Transportation



SDGs



Public  
integrity and  
anticorruption



Education



# AI

## case studies

### Improving internal efficiency



To move beyond manual mapping processes of the state's large land mass, the Queensland Government Department of Environment & Science adopted ML to automatically [map and classify land use](#) (e.g., agriculture, housing) in satellite imagery. This provides for more efficient emergency response, disease outbreak readiness, and biodiversity conservation.

[oe.cd/aus-ml-map](#)

### Strengthening engagement with citizens



To enhance understanding and responsiveness to citizen perspectives, 400+ local governments leverage AI-driven solutions from Belgian civic tech company CitizenLab. This [technology enables civil servants to effectively group and categorize citizen input](#), thereby streamlining the processing of thousands of contributions and improving the ability to address community needs more effectively.

[oe.cd/citizenlab](#)

### Enhancing public integrity



Medellin's Treasury Department is [tracking tax evaders on Instagram](#) using an AI system that [cross-checks accounts selling products](#) with Treasury records to identify unregistered businesses.

[oe.cd/IG-tax-evasion](#)

### Designing better policies and services



The Information Society Foundation for the Americas (FSIA) is working with local governments in Argentina to fight gender-based violence with AI. The "SIAVIGia" system achieves this by 1) [identifying women at risk of femicide](#), and 2) [generating statistics and information](#) to support designing better policies.

[oe.cd/gender-care-ai](#)



# AI

## case studies

in OECD central/federal governments

### Public Sector Internal Processes



Betto by the Colombian Family Welfare Institute (ICBF). An AI solution to strengthen transparency, objectivity, and excellence in **bidder selection process** of early childhood service providers. It evaluates and selects the best operators for providing comprehensive services aimed at early childhood in the 1,103 municipalities of the country.

### Service Design & Delivery



Mona by the Digitalisation and e-government Directorate of the Federal Ministry of Finance. A conversational chatbot conceived to **increase the service quality** and relieve service staff in three areas: providing information to entrepreneurs about business-related services, supporting electronic delivery for companies and citizens, and helping users to navigate Austria's digital office website.

### Service Design & Delivery



To overcome disjointed and cumbersome public services, the Finland Ministry of Finance's AuroraAI programme uses AI to **simulate potential service paths and proactively offer citizens services** based on life events (e.g., marriage, beginning university, retirement).

### Policymaking



The Disease Control and Prevention Agency developed an AI convergence system to address emerging infectious diseases. The system uses AI to analyse medical data, quarantine data, spatial data, among others, to **develop policy responses to infectious diseases**.



# 1010 Key enablers 1010 for AI in the public sector

## Inside national govts and public sectors

- Securing **political support**.
- Creating **synergies** with innovation centres and labs.
- Nurturing and providing incentives for **creativity** of public servants.
- Building up **digital competencies** in public administration.
- Including a "**Human in the loop**" to foster the human-machine collaboration.
- Leveraging **institutional innovations** for governing AI.
- Investing in **data infrastructure**.
- Establishing sound **data governance**.
- Adopting **dedicated strategies** for AI in the public sector.

## Broader ecosystem

- Securing **private sector commitment**.
- Promoting **public awareness**.
- Fostering a **dynamic academic environment**.
- Supporting **start-ups and private sector** initiatives to bring value to the public sector.
- Promoting **Public-Private partnerships** to foster AI-based innovative solutions
- Developing **frameworks for accessibility and sharing of public data** with academia and private stakeholders to improve experimentation and solutions development.
- Developing a **regulatory environment** to encourage AI innovation.

## Cross-border value

- Participating in the **international debate**.
- Adopting **common standards** across borders.



# 1010 Addressing constraints

## 1010 for AI in the public sector

### Governance

- Lack of **common standards**.
- Unsuitable **legal framework**.
- Absence of a **flexible governance model** to ensure a whole-of-government approach and the right level of control over the adoption of these potentially transformative technologies in the public sector.
- Lack of **cross-functional teams** for the development of AI initiatives.
- Absence of **risk management** frameworks.

### Capabilities

- Lack of **specific competences** in the public sector.
- General **low understanding** of ET and low digital literacy across the population.
- Creation and fostering of **synergies** with the academia and the private sector.
- **Algorithm aversion** and misunderstanding of human-machine collaboration approach.

### Collaborations and partnerships

- Limited understanding of the **role of the ecosystem** including actors outside the government.
- **Misalignment of goals** on the purpose of AI solutions.
- Issues on **intellectual property** of data, algorithms and predictions made by AI.



# IOIO Guardrails

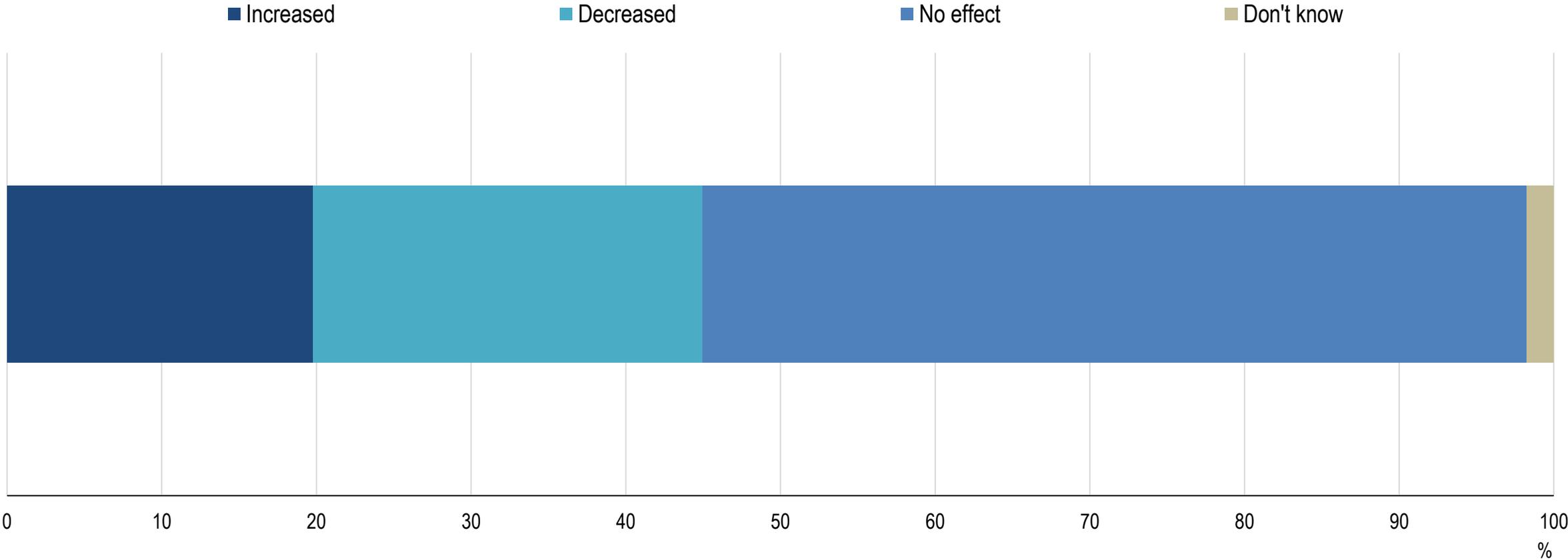
## IOIO for AI in the public sector

- ◆ Adoption of common standards to secure ethical use
- ◆ Development of common policies
- ◆ Establishment of enforcement mechanisms
- ◆ Set up of oversight monitoring bodies

# There is little evidence of significant employment effects of AI so far

## AI impact on overall employment in company

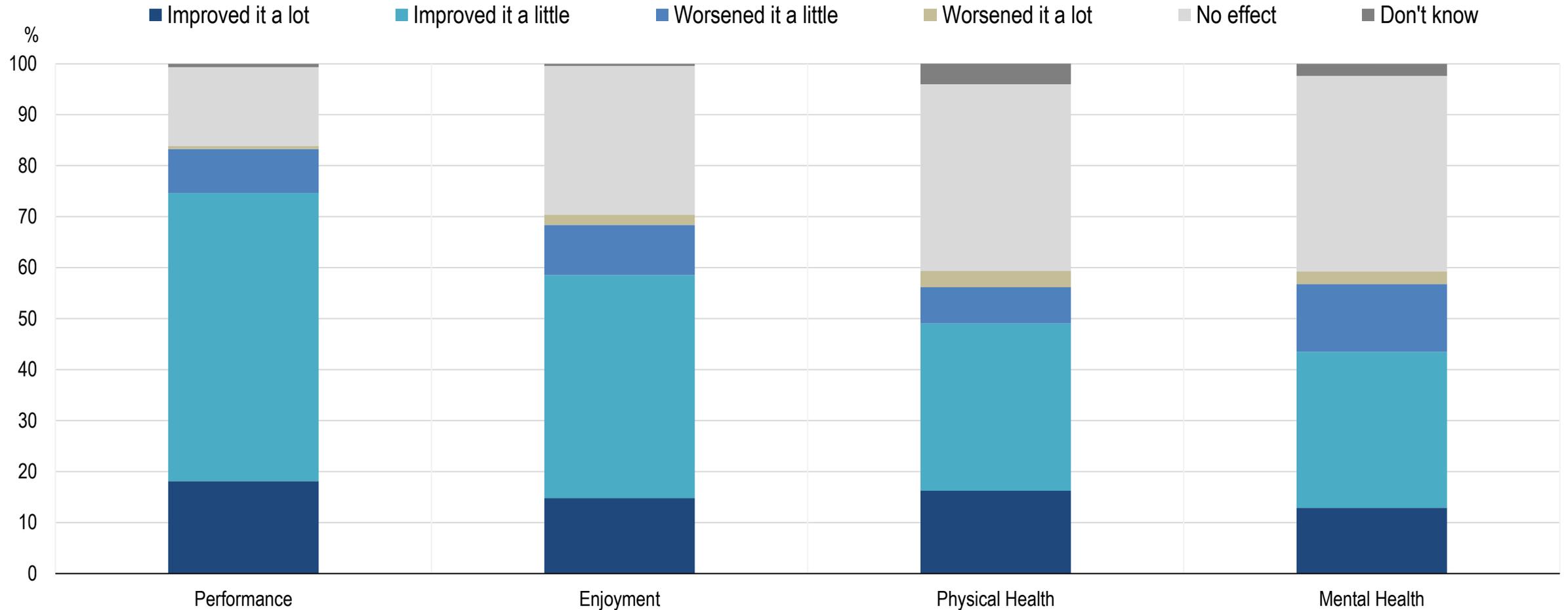
% of employers in manufacturing and finance sectors who say that employment has increased/decreased/stayed the same



# AI can have a positive effect on job quality

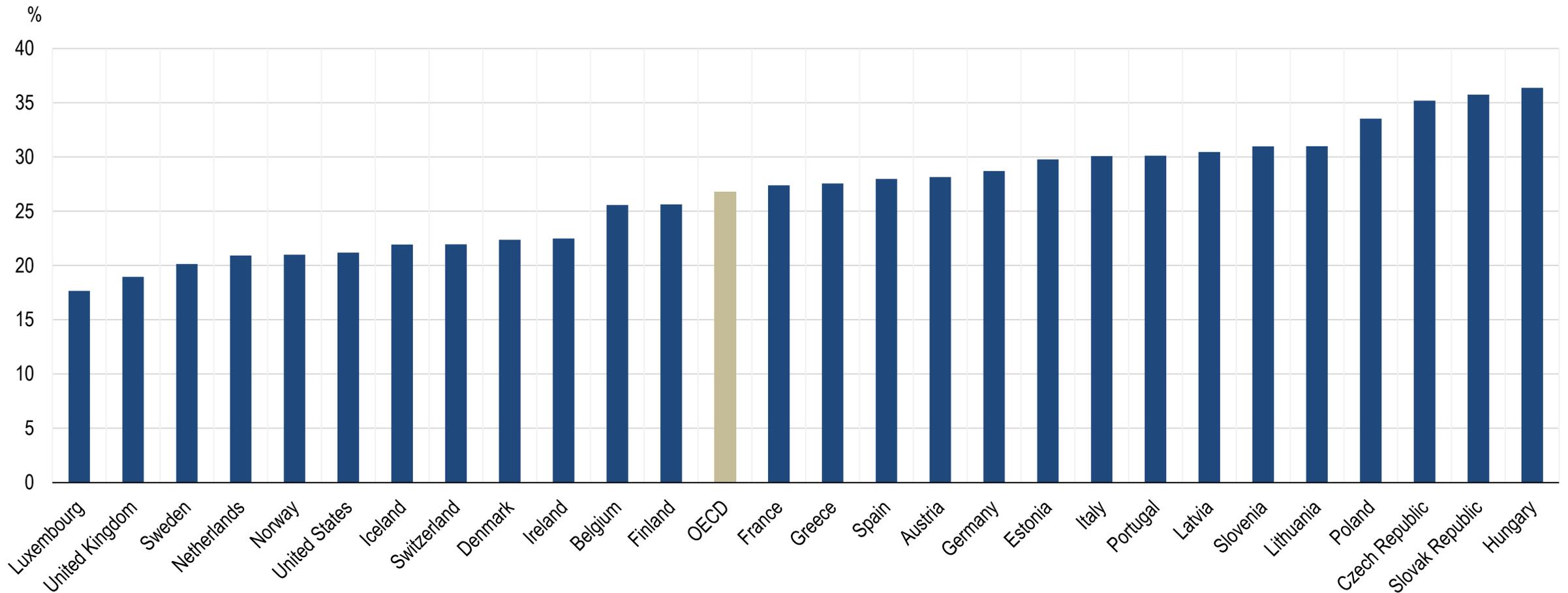
## The impact of AI on performance and working conditions

% of workers who work with AI



# But there are risks to employment

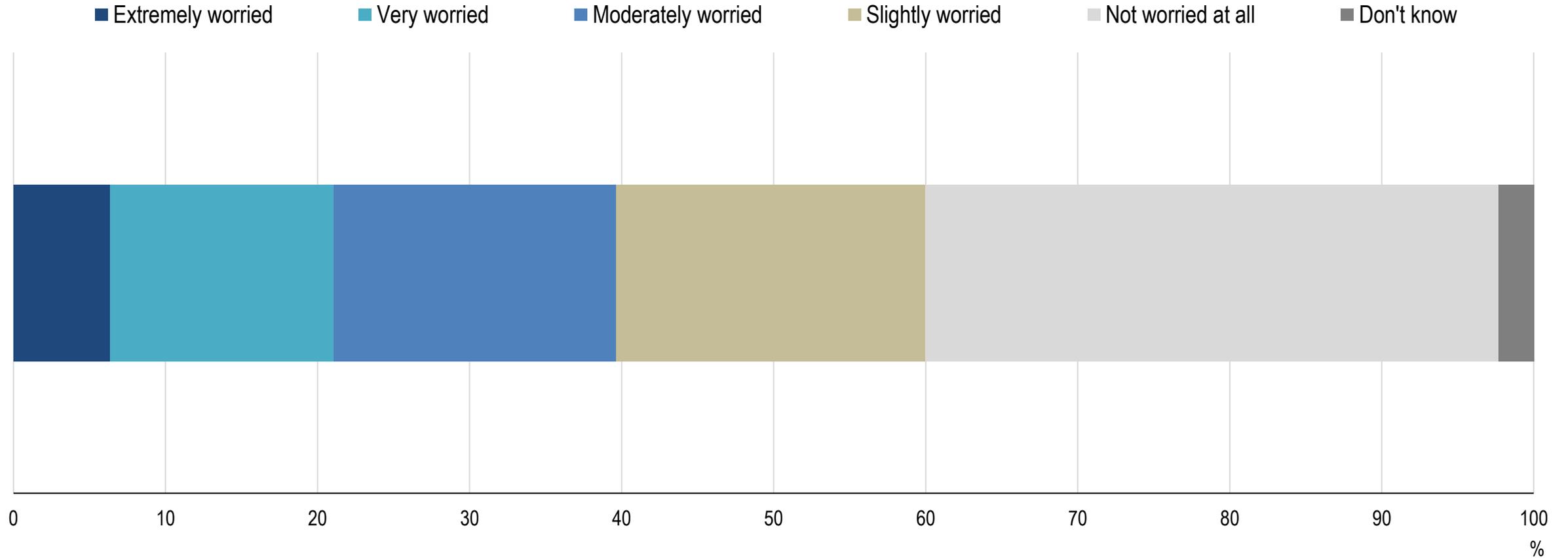
Share of employment in occupations at the highest risk of automation by country, 2019



# Many workers are worried about job loss to AI

Share of workers worried about losing their job to AI in the next 10 years

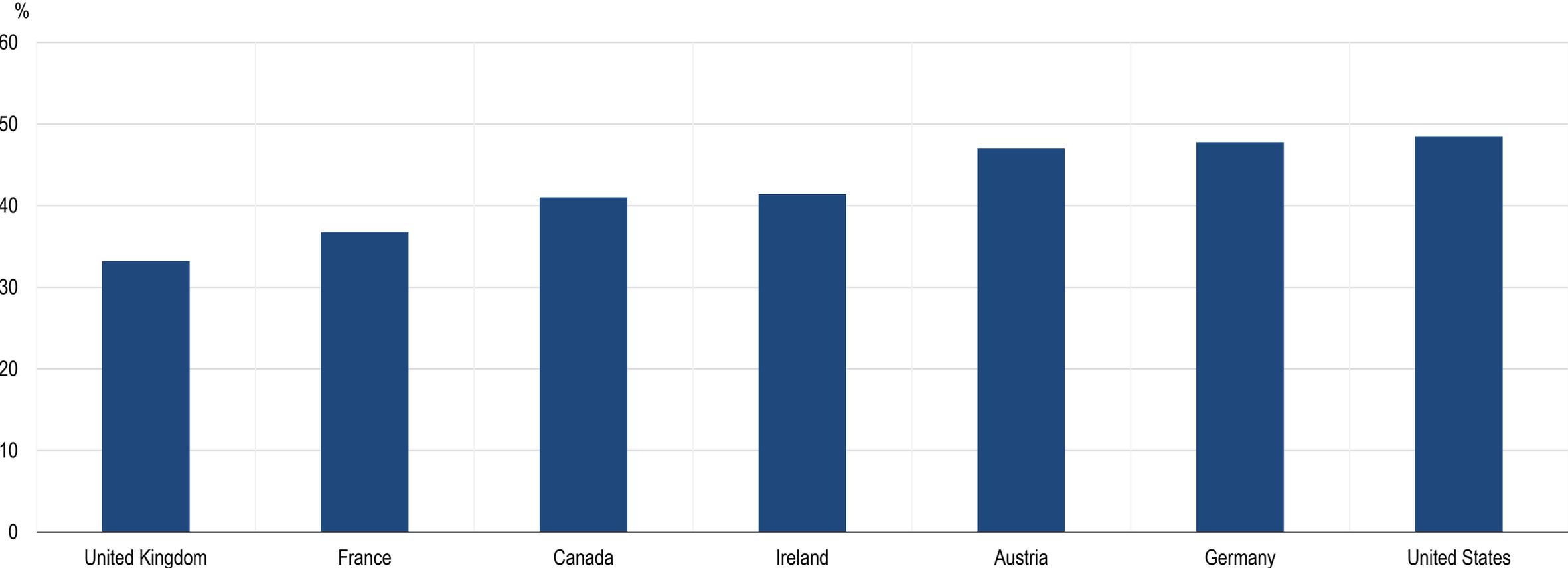
% of workers



# Investing in skills will be important

## Share of employers saying lack of skills is a barrier to adopting AI

% of employers



# Recent advances in AI have broadened the set of skills that can be replicated by automation

## More susceptible to automation



## Bottlenecks to automation

