



# OECD REVIEW ON LOCAL JOB CREATION: PREPARING FOR THE FUTURE OF WORK IN CANADA

Launch webinar  
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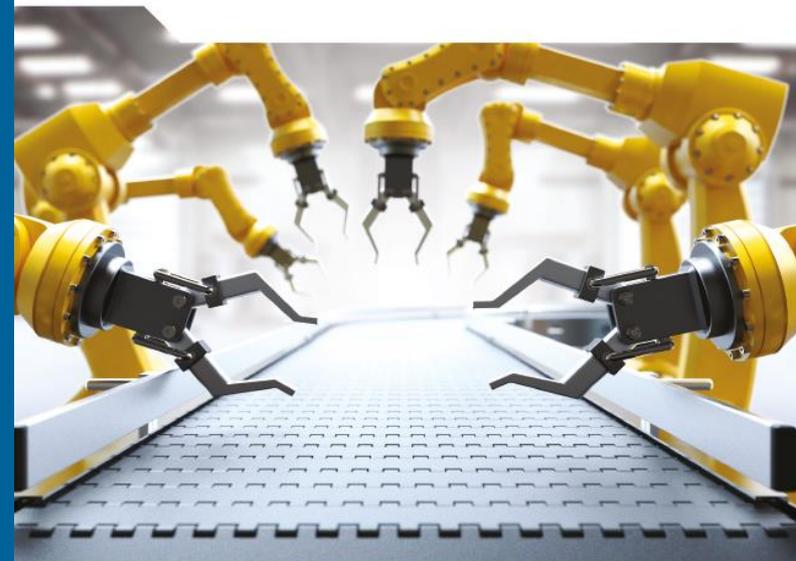
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OECD Reviews on Local Job Creation

Preparing for the Future  
of Work in Canada

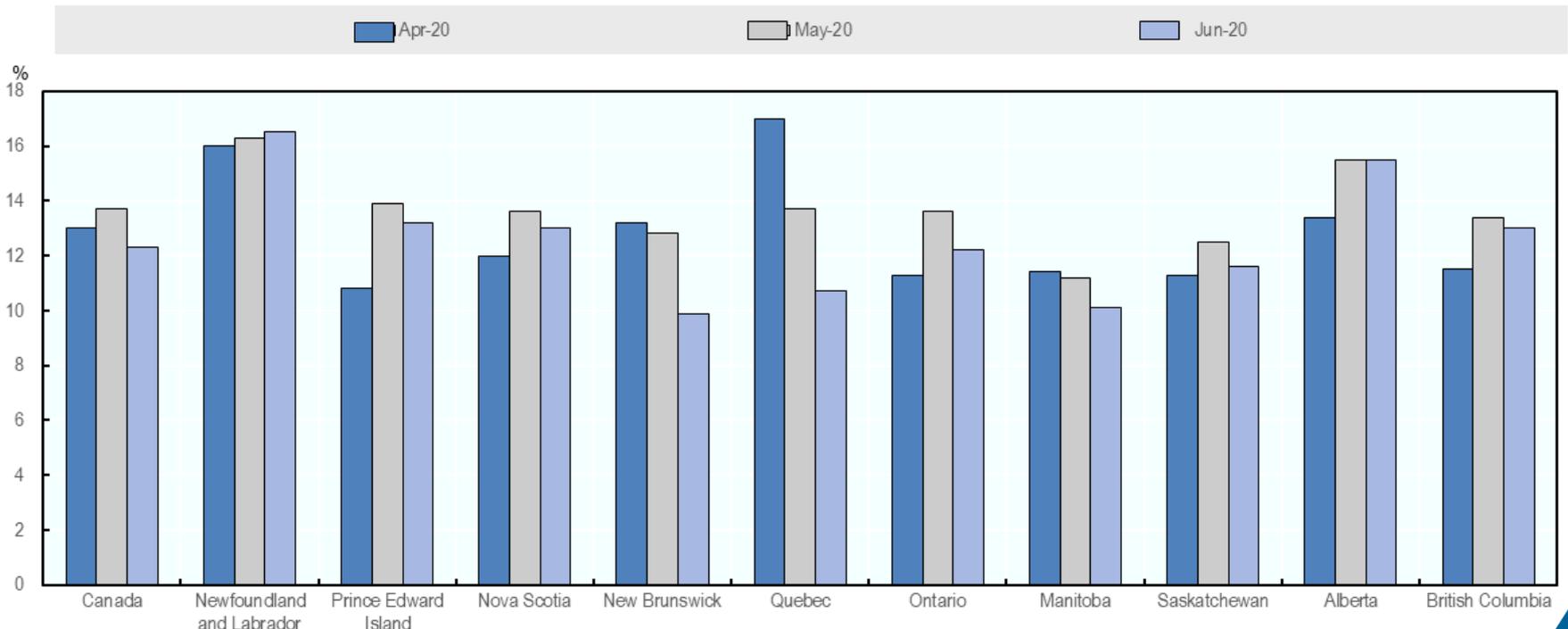




# COVID-19 has led to a labour market shock and the path to recovery remains unclear

- **Employment fell by 3 million** between February and April 2020, with gradual recovery starting in May and continuing in June
- **The unemployment rate sat at 12.3%** in June, a drop of 1.4 percentage points from a record-high of 13.7% in May

Unemployment rates, Canada provinces, April, May and June 2020

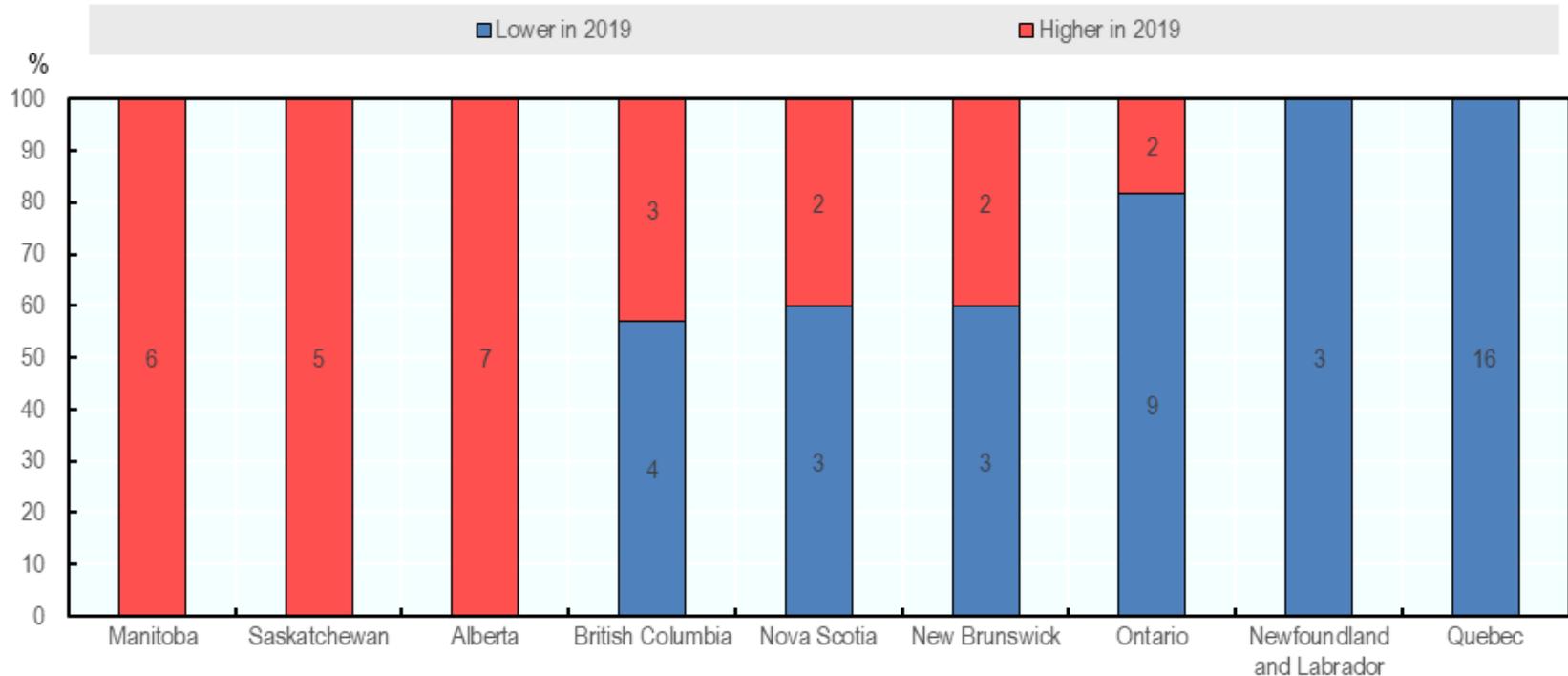




## Several places were still struggling with the consequence of the previous 2008 crisis

- Almost half of Canada economic regions had experienced **higher unemployment rates in 2019 than in 2008**

### Share of economic regions within Canada provinces facing lower/higher unemployment in 2019 than 2008



Note: the number in each column denotes the number of economic regions facing lower/higher unemployment rates in 2019 compared to 2008 within each province.

Source: OECD calculations on Statistics Canada.



## COVID-19 is likely to accelerate the adoption of automation in the workplace

- **Automation accelerates in economic crises**, as firms replace workers performing routine tasks with a mix of technology and better skilled workers.
- **More firms could decide to invest in technology to automate the production of goods and services** to reduce their exposure to any future social distancing and lockdown measures
- **Firms worldwide are starting to use robots to perform roles workers cannot do at home.** From 2020 to 2022 almost 2 million new units of industrial robots are expected to be installed in factories around the world

FINANCIAL TIMES

Covid-19 will only increase automation anxiety

Forbes

Coronavirus Is Forcing Companies To Speed Up Automation, For Better And For Worse

BBC  
NEWS

Coronavirus: Will Covid-19 speed up the use of robots to replace human workers?



## Two potential scenarios of impact on a job from automation

### High Risk

70% or above of tasks could be replaced (e.g. the job likely to be destroyed)

### Significant Change

between 50% and 70% of tasks could be replaced (e.g. meaning skills training is likely required for those individuals to stay in the job).

*Classical example of the bank teller*



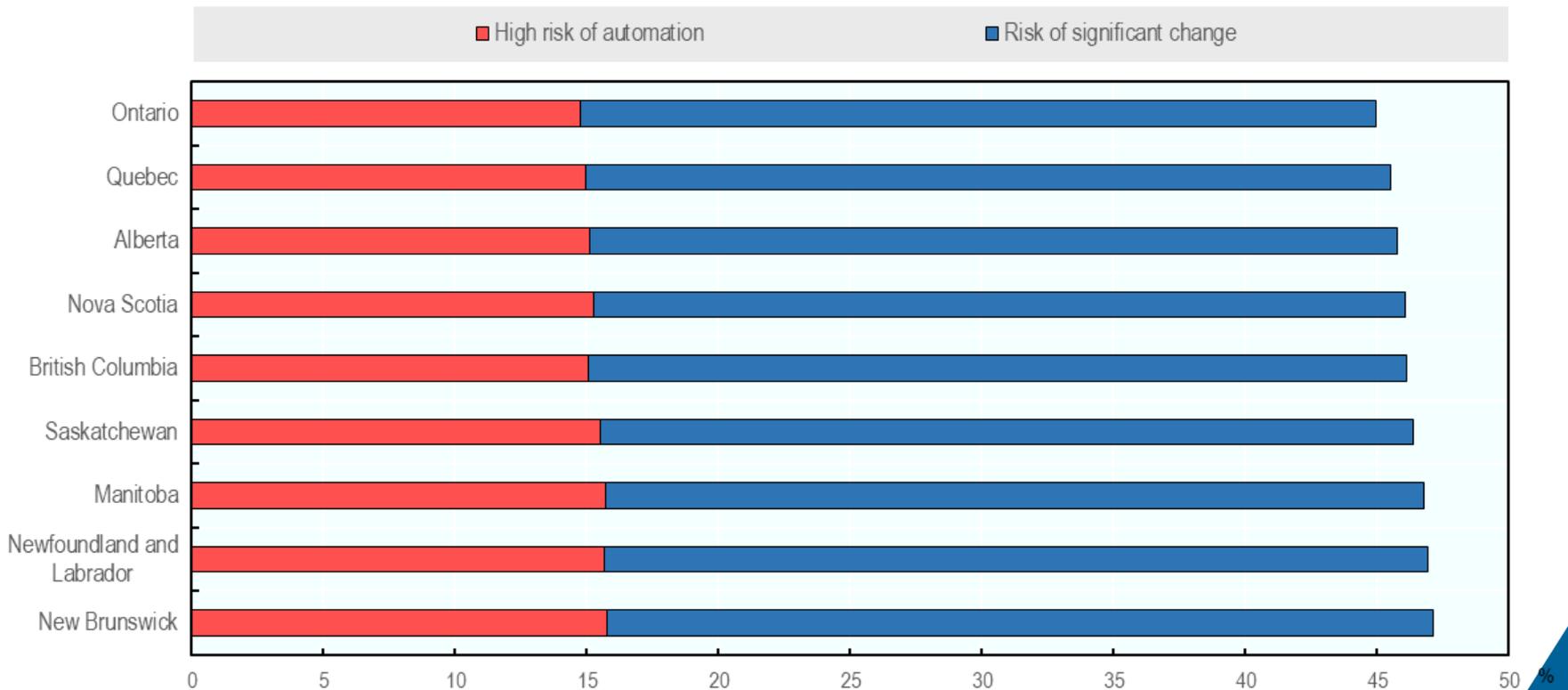
*Did ATMs replace this job or change the types of tasks bank tellers perform?*



# The risk of automation varies across Canadian provinces

- The share of jobs at risk is highest in **New Brunswick (47.1% or 160 000 jobs)** and lowest in **Ontario (44.9% or 3.2 million jobs)**

Jobs at risk of automation by province in Canada, 2018



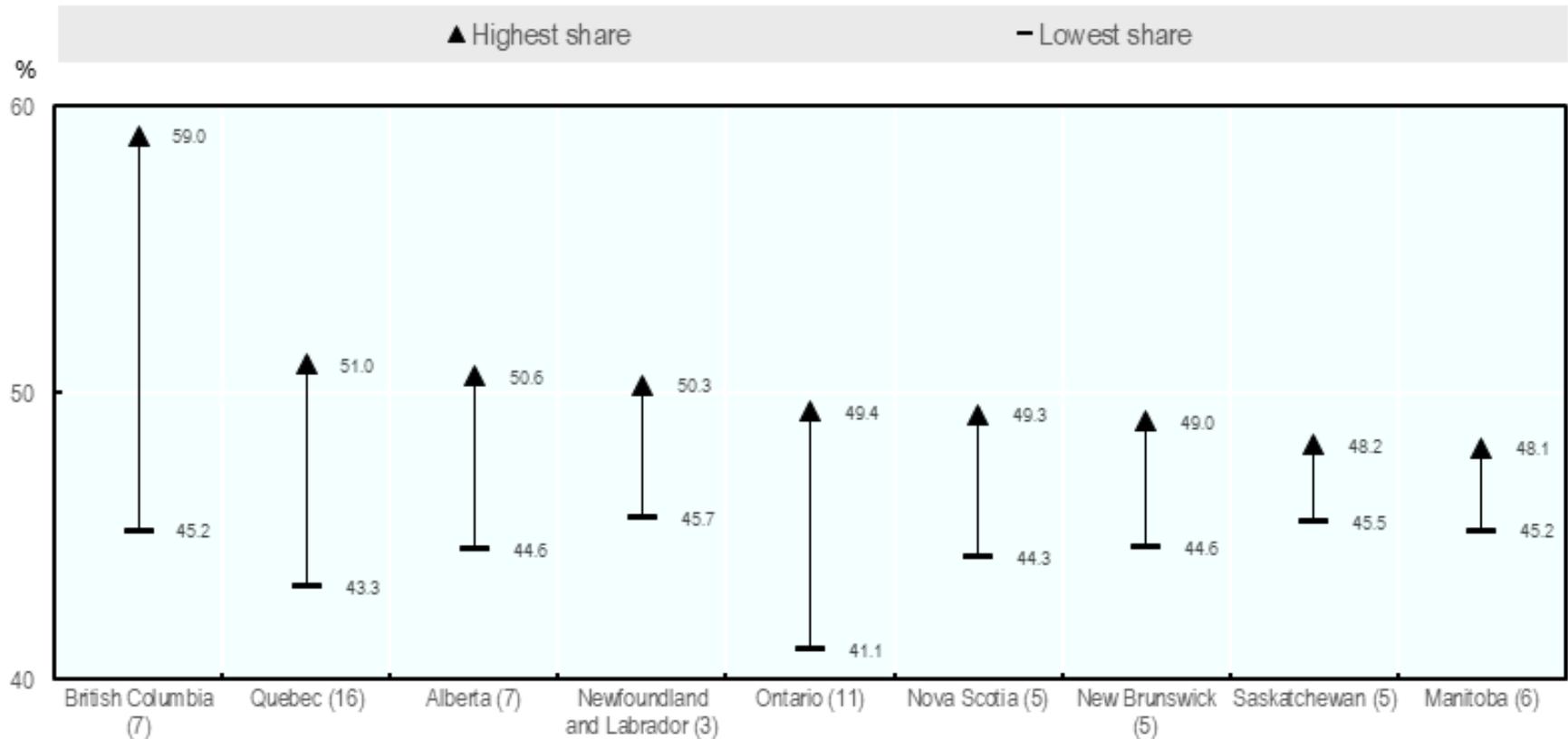
Source: OECD calculations on Labour Force Survey



# Differences are even more pronounced within provinces

- For example, in **British Columbia** there are almost **15 percentage points of difference** between the region facing highest and lowest risk

## Regions facing the highest and lowest risk of automation within province in Canada, 2018





# Some Ontario cities are more vulnerable than others

**Jobs at risk of automation by Census Metropolitan Area (CMA) in Ontario, 2018**

Census Metropolitan Area	Total employment (2018)	Jobs at high risk of automation	Jobs vulnerable to significant change	Total percentage of jobs that could be impacted	Total number of jobs that could be impacted
Barrie	106 750	16.1%	31.3%	47.4%	51 000
Brantford	55 500	18.7%	33.4%	52.2%	29 000
Greater Sudbury	68 289	15.3%	31.4%	46.7%	32 000
Guelph	75 695	15.3%	30.5%	45.8%	35 000
Hamilton	409 971	14.7%	30.1%	44.8%	184 000
Kingston	77 470	13.6%	29.3%	42.9%	33 000
Kitchener-Cambridge-Waterloo	287 332	15.6%	30.5%	46.1%	132 000
London	245 879	15.9%	31.1%	47.0%	116 000
Oshawa	215 875	15.0%	30.6%	45.6%	98 000
Ottawa-Gatineau, Ontario part	551 893	11.7%	27.8%	39.5%	218 000
Peterborough	50 871	16.3%	32.6%	48.8%	25 000
St. Catharines-Niagara	196 620	16.4%	32.0%	48.4%	95 000
Thunder Bay	49 280	15.3%	31.7%	47.0%	23 000
Toronto	3 336 159	14.0%	29.8%	43.8%	1 461 000
Windsor	159 836	16.8%	31.3%	48.0%	77 000



## Places facing a lower risk of automation have some characteristics in common across the OECD



are more  
urbanised



have a larger  
service sector



have more  
educated workers



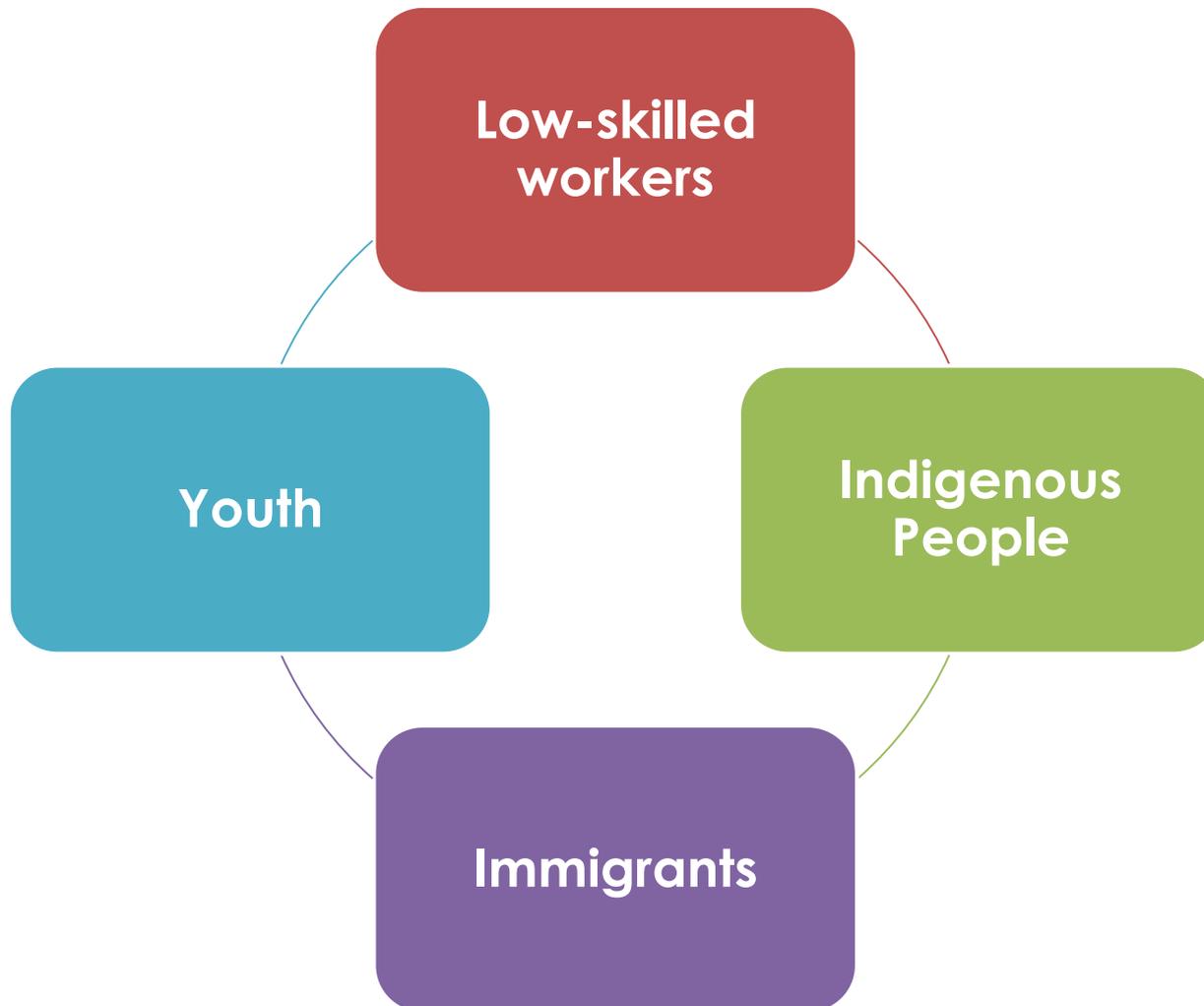
## Which occupations tend to have the highest risk?

- Some occupations face a higher risk than others, given that they entail routine and repetitive tasks likely to be automated

Occupation	Average risk of automation	Total employment in Ontario (2018)
Food Preparation Assistants	63.9%	39 109
Labourers in Mining, Construction, Manufacturing and Transport	61.8%	188 975
Cleaners and Helpers	61.5%	132 448
Refuse Workers and Other Elementary Workers	59.5%	174 173
Assemblers	59.4%	40 418
Food Processing, Woodworking, Garment and Other Craft and Related Trades Workers	59.0%	228 167
Drivers and Mobile Plant Operators	57.2%	241 388
Other Clerical Support Workers	56.9%	114 966
Personal Services Workers	55.2%	309 507
Market-oriented Skilled Forestry, Fishery and Hunting Workers	55.1%	27 015



## Automation will impact some segments of the population more than others

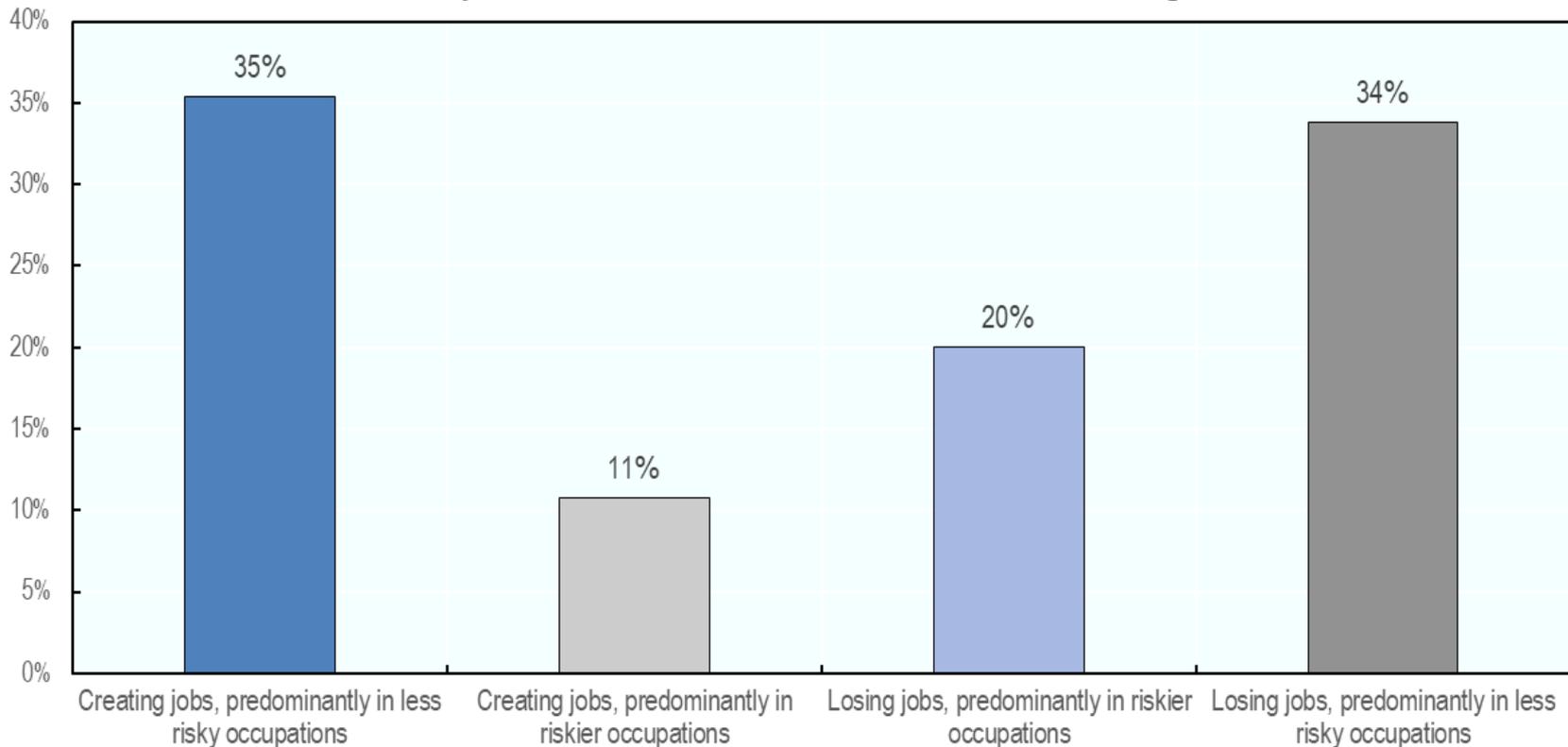




## The good news is that the future of work is also generating opportunities across Canada

- In the large majority of regions across Canada, the risk of automation has decreased over the past decade.** Between 2011 and 2018, 35% of regions have created jobs predominantly in less risky occupations

Job creation by risk of automation, Canada economic regions, 2011 to 2018

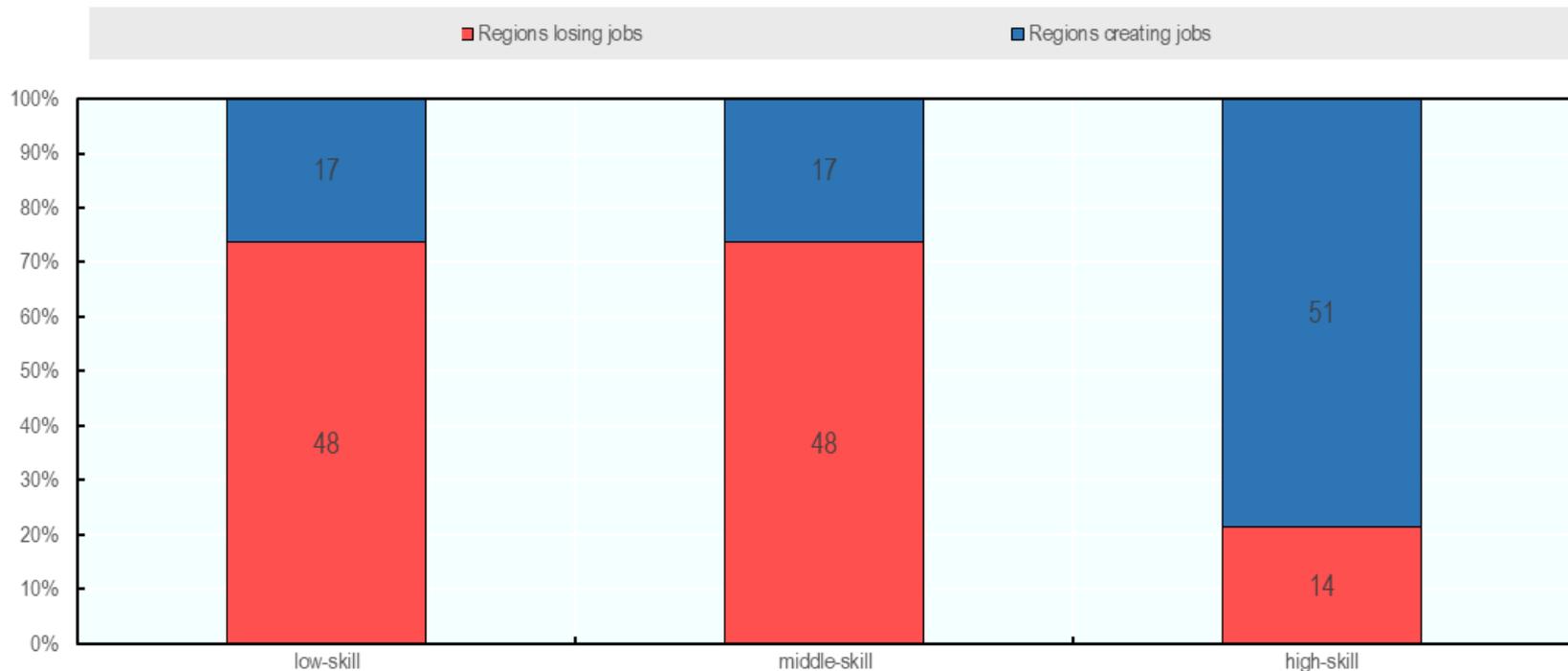




# The process of job polarisation shows that most Canadian regions are shifting from middle to high-skill jobs

- **The large majority of regions have also shifted towards high-skill jobs.** Between 2011 and 2018, in 51 economic regions, the employment share of high-skill jobs has increased

Regions creating and losing jobs by skill level, 2011 to 2018

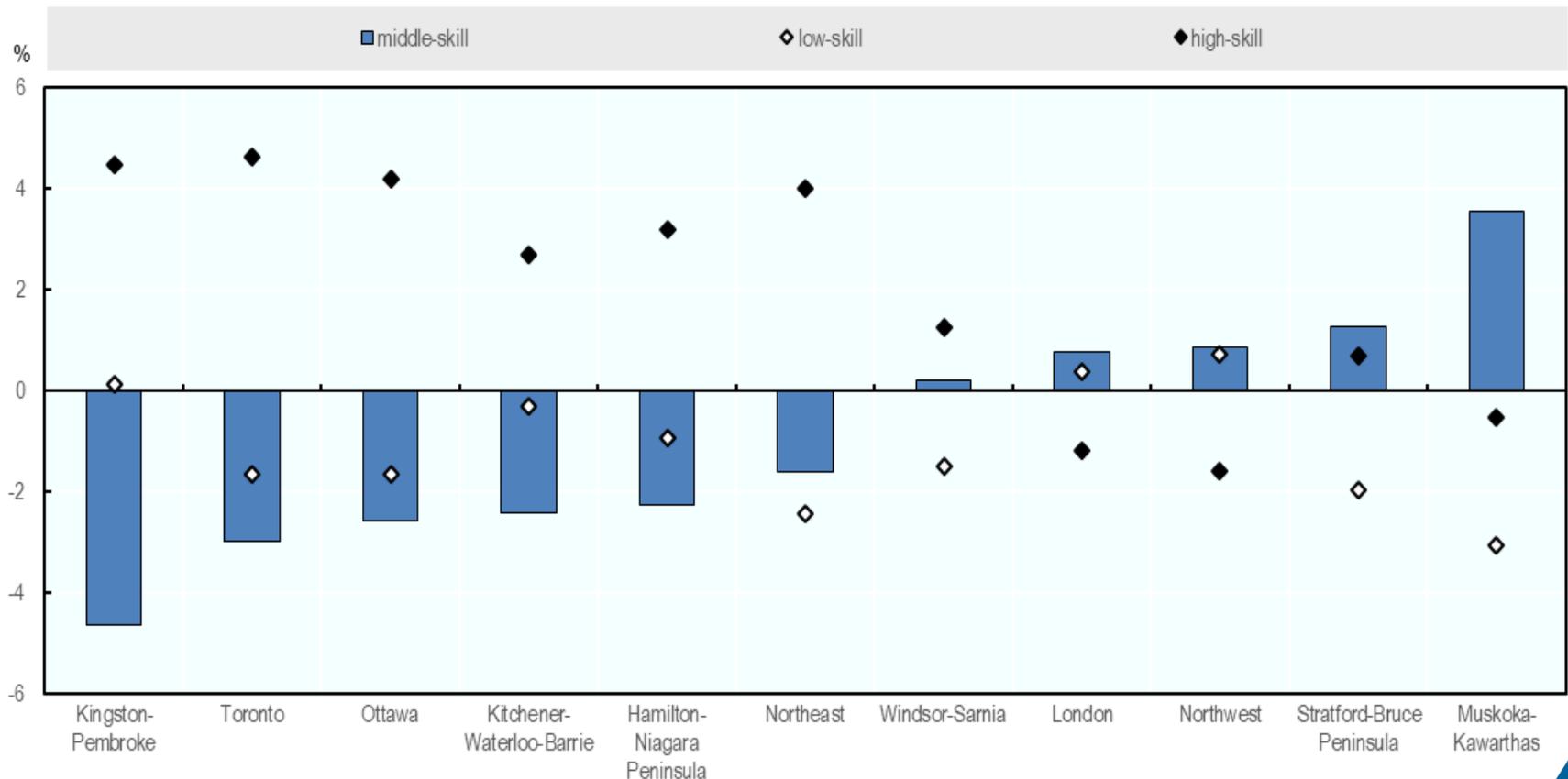




# Many Ontario regions are shifting towards high skilled employment, requiring higher levels of skills

- 6 out of 11 Ontario regions have shifted from middle to high skilled jobs

Job polarisation across economic regions in Ontario, 2011-2018

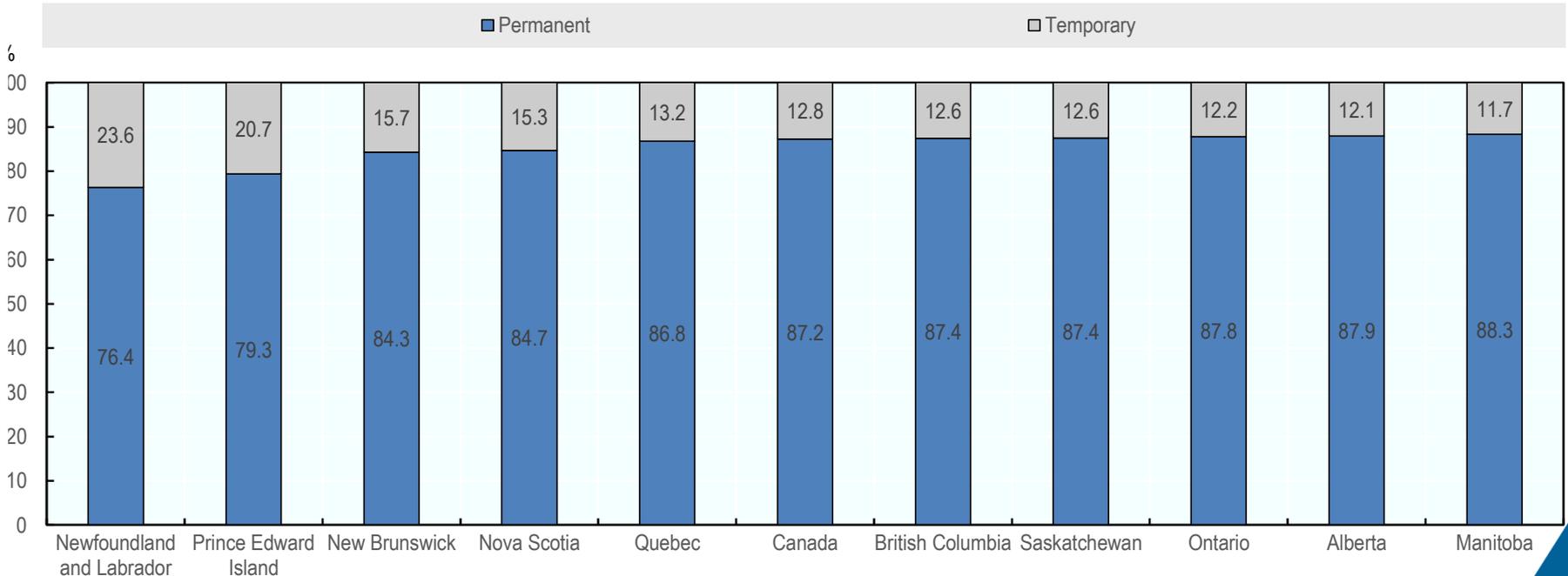




# Non-standard work presents both opportunities and challenges for local labour markets in Canada

- The prevalence of non-standard forms of work varies across provinces in Canada
- Non-standard work can provide flexibility to some workers. However, it can also be associated with deteriorating working conditions.
- COVID-19 has often exacerbated challenges for non-standard workers.

Percentage of permanent and temporary employees over total employees, Canada and Canadian Provinces, 2019





# What are the OECD's key takeaways?

- Place matters when examining the potential impacts of automation
- Skills development is more than important that ever and a necessary step for recovery.
  - More flexible opportunities for training are needed to make skilling accessible to both people and firms
  - Programmes need to embed job-specific technical skills but also core competencies such as adaptability, communication, collaboration, and creativity.
- Community-based responses can lead to innovation in policy design and implementation
- Monitoring job quality will be critical going forward
  - Need to find opportunities for technology to enhance worker well-being, NOT diminish it



## Going forward further action to future-proof communities could be helpful

- Both federal and provincial governments in Canada could look for opportunities to **build in-demand skills while also promoting adult learning, especially for those workers most at risk**
- Other opportunities include:
  - The **establishment of an employer skills survey**, which would gather labour market information and insights on emerging needs, job vacancies, the prevalence of skills shortages, as well as firm investments in training
  - **Strengthening sector-focused training programmes**, especially in those industries most vulnerable to technological change
  - **Encouraging SMEs to be aware of their training needs**, while raising awareness on existing financial incentives for training and promoting the emergence of employer-led networks around skills



# What can Canada learn from other OECD countries?

## United Kingdom



**Employer skills survey:** This annual survey interviews approximately 82,000 employers across all sectors and sizes in England, Wales and Northern Ireland. The survey collects information on apprenticeships, vacancies, recruitment, training, skill shortages, and future skill needs. The findings from the survey are used by policy-makers and industry to decide how to invest in national and local skills systems.

## Ireland



**Skillnet** is a business support agency of the Government of Ireland. Its mandate is to advance the competitiveness, productivity and innovation of Irish businesses (especially SMEs) through enterprise-led workforce development. It currently supports over 18,000 businesses and provide a wide range of valuable learning experiences to over 70,000 individuals. Its mission is to facilitate increased participation in enterprise training and workforce learning in Ireland.

## Australia



**The Regional Employment Trials (RET)** program provides grants of between AUD \$7,500 and \$200,000 to local stakeholders for employment-related projects. The trial takes into account regional variations to help ensure that local economic opportunities are better promoted to Australians looking for work and employment services providers. In trial regions, Employment Facilitators work with Regional Development Australia (RDA) committees to enable local stakeholders to address employment issues.

## Netherlands



**Sectoral training funds in the Netherlands:** Facilitates investment in continuous skills development,. Many of these funds play a role in the development of training, knowledge and productivity, including attracting new talent into a sector; developing new training programmes, either sponsored directly by the fund or in co-operation with other training providers; or sharing knowledge between firms in a sector.



# Thank you

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