# Canada Youth Unemployment Analysis – Exploratory Findings

### 1. Participation Rate vs. Unemployment Rate by Age Group

Our analysis of participation and unemployment rates highlights distinct differences between youth (ages 15–24) and adults (25+).

- For youth, the participation rate explains only about 26% of the variation in unemployment. The scatter of data points is wide, suggesting that other important structural and cyclical factors drive youth unemployment beyond participation alone. Nevertheless, when participation rises, it tends to be associated with slightly lower unemployment. This could reflect periods of favorable job market conditions that both draw young people into the labor force and create opportunities for them to find work.
- For **adults**, unemployment appears more stable and less tied to participation shifts. Adults who want to work are generally able to find employment, and adult unemployment movements are instead shaped by larger macroeconomic factors such as recessions.

Overall, the youth labor market is more sensitive to participation and external shocks, while adult employment is buffered by greater stability.

# 2. Youth Employment Trends (1976–2025)

A long-run view of employment composition reveals a structural shift in the Canadian labor market.

- Full-time employment among youth has declined over the past several decades.
- **Part-time employment** has steadily increased, gradually narrowing the gap with full-time roles.

By 2025, the number of part-time positions nearly equals that of full-time roles. This shift likely reflects several forces: greater demand for labor market flexibility, the rise of the gig economy, expansion of service-sector work, and evolving employer preferences that favor part-time or contract arrangements.

#### 3. Youth Unemployment Rate Trends (1976–2025)

Youth unemployment has consistently been higher and more volatile than that of older workers, with downturns magnifying the gap.

- Youth (15–24): average unemployment rate of 13.79% (mean absolute error: 1.79).
- Adults (25+): average unemployment rate of 6.73% (mean absolute error: 1.11).

Major recessions, including the early 1980s, the early 1990s, the 2008 financial crisis, and COVID-19, produced severe spikes in youth unemployment. For example, participation collapsed in spring 2020, illustrating how quickly young workers exit the labor force when opportunities vanish.

In contrast, adults experienced smoother adjustments, reflecting greater attachment to the labor market and accumulated work experience that shields them during downturns.

# 4. Unemployed Youth by Duration of Unemployment

Analysis of unemployment spells provides further insights:

- 1. **Short-term unemployment dominates.** Most of the unemployed youth fall into the "1 to 4 weeks" category. This indicates that youth unemployment is often transitional.
- 2. **Downturns increase both incidence and duration.** During recessions, not only does overall unemployment rise, but the share of longer-duration categories also expands. This means more young people are unemployed, and they remain unemployed for longer stretches.
- 3. Long-term unemployment (27+ weeks) leaves scars. Though always the smallest share, long-term unemployment becomes more visible during economic crises. These youths face prolonged difficulty re-entering the labor force, highlighting how downturns can leave lasting damage at the start of careers.

# 5. Summary

- Youths are more vulnerable. Unemployment among young workers is not only higher on average but also more volatile, amplifying the risks they face during downturns.
- **Shifting job structures.** The growth of part-time and precarious work has reshaped opportunities for youth, limiting access to stable full-time roles.
- **Policy considerations.** Addressing youth unemployment requires targeted measures such as job training, incentives for youth hiring, and stronger pathways from education to work.