

An Economy All In on Automation

A System-Wide Scenario With High Stakes

This research examines a hypothetical rapid, economy-wide adoption of automation technologies, including artificial intelligence (AI), robotics, and connected systems, across Canada. The findings point to a clear conclusion: Automation could materially raise long-term economic performance, but it would also produce a prolonged and disruptive labour market adjustment that would require active management.

In our full-adoption, or “all-in,” scenario, labour productivity rises by roughly 40 per cent between 2025 and 2045. That increase lifts GDP by 11.7 per cent, an expansion equivalent to adding an economy the size of British Columbia. Over time, higher productivity supports stronger real wages and a larger economic and fiscal base.

These benefits do not emerge smoothly. The transition exposes a structural gap between the pace of technological change and the capacity of labour markets and institutions to adapt.

A prolonged labour market adjustment

The most consequential near-term challenge lies in the depth and duration of labour market disruption. Employment growth stalls for seven years, from 2025 to 2032, the longest stagnation period since the Second World War. During this phase, total employment declines outright, potentially falling as much as 1.2 million below baseline projections for 2032.

Unemployment rises above 10 per cent, a level typically associated with recessionary or crisis conditions. At the same time, productivity and profitability increase early in the transition. This sequencing creates a period in which economic output improves while labour market conditions deteriorate, placing pressure on income supports, public services, and social cohesion.

Recovery occurs gradually and depends on sustained policy support. By 2045, employment broadly returns to baseline levels, but the structure of the labour market changes permanently.

A structural reallocation of labour and demand

Automation accelerates a shift already underway: a reallocation away from goods production toward service-based, knowledge-intensive activity.

Goods-producing sectors, particularly manufacturing, agriculture, and resource extraction, experience the largest employment declines. By 2045, these industries could employ roughly 346,000 fewer workers than the baseline forecast, even as output rises. Automation allows firms to expand production while relying on smaller workforces.

Service industries absorb the majority of job growth during the recovery. The economy adds approximately 3.9 million service-sector jobs, driven by a combination of public spending, private demand, and changing consumption patterns.

Growth concentrates most strongly in:

- healthcare and education, supported by sustained public investment
- professional, financial, and technical services, where human judgment, interaction, and problem-solving remain central

As productivity and incomes rise, households devote a larger share of spending to services, reinforcing the expansion of higher-skill sectors and increasing pressure on service delivery systems.

Distributional effects and adjustment risk

Although average wages rise over the long term, the transition produces uneven outcomes. In the early stages of adoption, profits grow faster than wages, which reduces labour's share of income.

Job creation also concentrates in higher-skill roles. Workers displaced from goods-producing sectors can face barriers to re-employment, including skill mismatches, credential requirements, and geographic immobility. Without intervention, these frictions slow adjustment, widen inequality, and prolong labour market slack.

These dynamics raise demand for income supports, retraining, regional adjustment assistance, and public services at the same time fiscal pressures intensify.

Policy and investment as stabilizing forces

Markets alone can't deliver a timely or orderly adjustment. Public investment and structural policy choices will be needed to shape both the depth of disruption and the pace of recovery.

In our scenario, targeted investment in healthcare, education, infrastructure, and defence provides near-term employment support while expanding long-run productive capacity. These investments would help absorb displaced workers and sustain demand during periods of weak private hiring.

Structural reforms could further improve adaptability. Reducing interprovincial mobility barriers, scaling reskilling and adult education systems, strengthening income supports during transition periods, and aligning immigration with labour market demand all improve adjustment outcomes in our modelling.

Automation-driven productivity gains also depend on sustained private investment. Capital formation responds to the investment environment shaped by regulation, tax policy, procurement, and infrastructure.

Automation does not pose a single challenge. It tests the capacity of institutions to manage a system-wide economic transition while maintaining stability, fairness, and long-term growth.

For the full research, see our impact paper [*Going All In on Automation: Economic Growth, Labour Markets, and the Path Toward a Robust Transition*](#).

