

Aug 5 - 9, 2024

The AI future, judging by the past

by Avery Shenfeld avery.shenfeld@cibc.com

One question that even ChatGPT can't answer is about the future of artificial intelligence. Technological futurism is littered with widely off-the-mark predictions. In 1977, the CEO of DEC, then a leading computer company, opined that "nobody would ever want a computer in their home." Other calls were much too optimistic, or still unfulfilled; where's my flying car, our fusion power? Still, while AI forecasts are similarly challenging, if history does repeat itself, it offers some lessons for both investors and economists.

First, in most cases, there have been long lags for the full economic consequences of a new technology to show up. The Nobel economist Robert Solow famously noted in 1987 that "you can see the computer age everywhere except in the productivity statistics." Often, the first innovation — the computer — requires subsequent investment spending and further innovations before it truly flourishes. When Solow spoke, firms were just buying their first desktop computers, software was unfriendly to the non-specialist, and business computers weren't hooked up to the internet until the middle of the next decade. There was another long wait between the adoption of the internet and today's widespread use of virtual meetings.

That lag has us skeptical about some of the widely circulated forecasts for the GDP lift from Al. A PWC study, for example, cited a 15% boost to North American real GDP by 2030. That would entail a roughly 2% annualized acceleration, essentially a doubling in trend growth, that would require a much quicker full flowering of the technology than we saw in the dawn of computers or the internet.

Second, we'd caution equity investors that first-mover advantages aren't what they're often cracked up to be. That's been true in spreadsheets (anyone remember Visicalc, Lotus 1-2-3?), search engines (Lycos, Altavista), browsers (Netscape) desktop computers (Xerox, Altair) and cell phones (Blackberry, Nokia). Suarez and Lanzolla (Harvard Bus Rev, 2005) found that first movers typically fail to gain a lasting edge when the market and/or the technology develop rapidly. That might well

characterize the path for Al-related goods and services, so choose your high-flying Al stocks with due care.

Part of that risk is tied to the chance that something even better comes along that supplants the types of Al applications being considered these days. In the tech world, there's a graveyard of once-dominant products, and related companies, that fell victim to a better mousetrap. We still have cell phones, browsers and desktop computers, but there's not much of a market for fax machines, word processors, or CD players these days.

Other AI forecasts drill into the implications for workers and careers. An IMF study estimated that 60% of advanced economy jobs will be impacted by AI, equally divided between those that AI will help by improving worker productivity, and those where workers will fully be replaced by AI tools.

But history shows that when it comes to technology, it's always been thus, and we shouldn't worry about ending up with a 30% jobless rate. Technology change shifted massive numbers of workers off of farms and into industry, and then in turn shrank the labour needs of the manufacturing sector. But these changes freed up the labour needed to expand the service sector into the major employer it is today. Banks have far fewer tellers, but more complex products that couldn't exist without IT investments have meant offsetting job creation in higher value-added and better-paid positions.

In the 1970s, the typical office building was filled with secretarial typing pools and filing clerks whose jobs vanished as people used desktop computers to type their own reports, and filing cabinets were supplanted by electronic documents. But consider all the white collar jobs that were created in the internet era: social media managers, web designers, TikTok influencers, data analysts and so on. Canada's unemployment rate was at multi-decade lows in early 2023, even without all the jobs that various technologies replaced over time.

And we'll still need economists, even if an AI system could summarize today's payroll report. This commentary wasn't written by ChatGPT; some of us still like to think for ourselves.

Week Ahead Calendar And Forecast—Canada

H, M, L = High, Medium or Low Priority

SAAR = Seasonally Adjusted Annual Rate

Consensus Source: Bloomberg

Date	Time	Economic Releases, Auctions and Speakers	Month	Priority	CIBC	Consensus	Prior
Monday, August 5	-	Markets Closed (Civic Holiday)	-	-	-	-	-
Tuesday, August 6	8:30 AM	MERCHANDISE TRADE BALANCE	(Jun)	(H)	-\$1.7B	-	-\$1.9B
Wednesday, August 7	-	AUCTION: 5-YR CANADAS \$5B	-	-	-	-	-
Wednesday, August 7	8:30 AM	IVEY PMI	(Jul)	(L)	-	-	62.5
Wednesday, August 7	1:30 PM	Publication: BoC Summary of Deliberations	-	-	-	-	-
Thursday, August 8	-	-	-	-	-	-	-
Friday, August 9	8:30 AM	EMPLOYMENT CHANGE	(Jul)	(H)	25.0K	-	-1.4K
Friday, August 9	8:30 AM	UNEMPLOYMENT RATE	(Jul)	(H)	6.5%	-	6.4%

Week Ahead Calendar And Forecast—United States

H, M, L = High, Medium or Low Priority

SAAR = Seasonally Adjusted Annual Rate

Consensus Source: Bloomberg

Date	Time	Economic Releases, Auctions and Speakers	Month	Priority	CIBC	Consensus	Prior
Monday, August 5	9:45 AM	S&P GLOBAL US SERVICES PMI	(Jul)	(L)	-	56.0	56.0
Monday, August 5	9:45 AM	S&P GLOBAL US COMPOSITE PMI	(Jul)	(L)	-	-	55.0
Monday, August 5	10:00 AM	ISM - SERVICES	(Jul)	(M)	51.0	51.3	48.8
Monday, August 5	8:30 AM	Speaker: Austan D. Goolsbee, Chicago (Non-Voter)	-	-	-	-	-
Monday, August 5	2:00 PM	Release: Senior Loan Officer Opinion Survey	-	-	-	-	-
Monday, August 5	5:00 PM	Speaker: Mary C. Daly (San Francisco) (Voter)	-	-	-	-	-
Tuesday, August 6	-	AUCTION: 1-YR TREASURIES \$46B	-	-	-	-	-
Tuesday, August 6	-	AUCTION: 3-YR TREASURIES \$58B	-	-	-	-	-
Tuesday, August 6	8:30 AM	GOODS & SERVICES TRADE BALANCE	(Jun)	(H)	-\$71.3B	-\$72.6B	-\$75.1B
Wednesday, August 7	-	AUCTION: 10-YR TREASURIES \$42B	-	-	-	-	-
Wednesday, August 7	7:00 AM	MBA-APPLICATIONS	(Aug 2)	(L)	-	-	-
Wednesday, August 7	3:00 AM	CONSUMER CREDIT	(Jun)	(L)	-	\$10.3B	\$11.4B
Thursday, August 8	-	AUCTION: 30-YR TREASURIES \$25B	-	-	-	-	-
Thursday, August 8	8:30 AM	INITIAL CLAIMS	(Aug 3)	(M)	-	-	249K
Thursday, August 8	8:30 AM	CONTINUING CLAIMS	(Jul 27)	(L)	-	-	1877K
Thursday, August 8	10:00 AM	WHOLESALE INVENTORIES M/M	(Jun)	(L)	-	0.2%	0.2%
Thursday, August 8	3:00 PM	Speaker: Thomas I. Barkin (Richmond) (Voter)	-	-	-	-	-
Friday, August 9	-	-	-	-	-	-	-

Week Ahead's market call

by Avery Shenfeld

In the **US**, after a year of mostly upside surprises, we're coming off a "hebdomas horribilis" for economic data, and that will have Fed speakers on the defensive in trying to explain why they didn't cut rates in July. Having just unanimously voted to hold off until September, we don't expect a change of heart in the coming week, but we should see more confirmation that a September cut is now the Fed's base case. It's a light week for economic news, and we wouldn't expect the ISM services to show the same sort of weakness that we saw from the factory survey. Keep an eye on weekly jobless claims, which bounced notably higher last week. Another move in that direction could raise eyebrows, by adding to the picture painted by the July payrolls report.

In **Canada**, Friday's employment report will top the agenda in a holiday shortened trading week. The population count, and therefore the growth in the workforce, has been a wildcard for forecasters, but odds are that we see yet another month in which job creation trails the labour force growth, pushing the jobless rate up another tick. A weak summer market for student jobseekers could again be part of that story. We're not expecting a large move in the trade balance, and the "summary of deliberations" from the Bank of Canada can't really add much to what was already in the Bank's MPR, and to the description of that meeting conveyed by Governor in his press conference.

Week Ahead's key Canadian number: Labour force survey—July

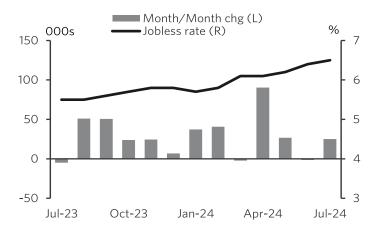
(Friday, 8:30 am)

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Variable	CIBC	Mkt	Prior
Employment change	25.0K	-	-1.4K
Unemployment rate	6.5%	-	6.4%

Following a drop in headcounts in June on weak summer student hiring, employment could have rebounded by 25K in July, but that would still leave the unemployment rate a tick higher given strong population gains. Labour demand growth has continued on a downward trajectory, leaving the job vacancy rate sitting below pre-pandemic levels, and our forecast would represent a step down from the recent three-month trend pace in hiring. That's in line with survey evidence that has shown deteriorating hiring plans from firms as demand remains sluggish, while households have also become more pessimistic about the labour market. Wage growth for

Chart: Canadian employment



Source: Statistics Canada, Haver Analytics, CIBC

permanent employees will likely decelerate, helped by base effects.

Forecast implications — The loosening in the labour market is coinciding with a wave of mortgage renewals at higher interest rates, which should see the Bank of Canada trim interest rates again in September in order to lean against a further deterioration in demand.

Other Canadian releases: Merchandise trade balance—June

(Tuesday, 8:30 am)

Canada's goods trade deficit likely narrowed in June on higher crude export volumes, owing to the operation of the TMX pipeline. Two-way trade in the auto sector could have also increased following retooling at some plants, while imports of consumer goods could have waned on bloated domestic inventory levels. All told, the goods trade deficit likely narrowed to \$1.7bn in June.

There are no major US data releases next week.

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