

THE AUSTRALIAN

There's so much robots can't do — like take our jobs

By **ADAM CREIGHTON**, ECONOMICS EDITOR

12:00AM NOVEMBER 13, 2018 •  51 COMMENTS

Since James Hargreaves's spinning jenny threatened cotton weavers' jobs in the late 18th century, experts periodically have feared that improving technology would prompt mass-unemployment.

In 1930 it was John Maynard Keynes's turn. He famously wrote that within 100 years mass unemployment would emerge "due to our discovery of means of economising the use of labour outrunning the pace at which we can find new uses for labour". "Technical improvements in manufacture and transport have been proceeding at a greater rate in the last 10 years than ever before in history," he said.

Replace manufacture with communication, and transport with artificial intelligence, and that could have been written last week. In 2013 Oxford economists Carl Frey and Michael Osborne predicted that 47 per cent of jobs in the US would disappear during the next 20 years.

The thing is, it's not happening. Since 2013 the US has added more than 10.1 million new jobs. The sum of the unemployment rates of the four biggest Western economies — the US, Britain, Japan and Germany — has fallen to the lowest level in generations. New Zealand's unemployment rate dropped to 3.9 per cent last month.

Jobs growth in Australia last year was the fastest since the early 2000s. About 330,000 workers lost their jobs involuntarily through redundancies or business closures, according to research by Alphabeta, an economic consultancy. That was about 2.4 per cent of the workforce, yet it was half the rate recorded two decades ago. "And the rate has remained relatively steady in the last five years, despite growing levels of automation in workplaces across the country," Alphabeta chief executive Andrew Charlton says.

In an insightful speech last month, Productivity Commission deputy chairwoman Karen Chester pointed out that average hours worked per person were 14 per cent higher now

than they were in the early 1980s.

And the popular idea that workers increasingly are flitting between occupations isn't true either: the share of workers in their job for more than 10 years has increased from less than 20 per cent in 1982 to about 27 per cent.

The bottom line is that robots are still pretty hopeless. Three years ago crack teams of robot engineers pitted their machines against each other at a competition in California sponsored by the Pentagon. "They had to do simple tasks — walk up steps, turn a valve, operate a power drill. This would take a human 10 minutes at most. The winning robot took 45 minutes," one observer said. I doubt I'll see the day when a robot asks a question at a press conference.

Robert Gordon, an eminent US economist who argues that the pace of innovation has stalled, plays "find the robot" when he's out and about. "There are no robots to be seen so far in retail stores, restaurants, construction sites, hotels, commercial aircraft, hospitals or the offices I visit of doctors, dentists and veterinarians, not to mention fellow professors," he says. "Part of the problem with robots is that they are not yet adept at many of the routine tasks performed by humans, including hopping off trucks and delivering packages."

Driverless cars and trucks may go the way of the flying car, a popular prediction as long ago as the 1940s. The range of situations a driverless car would need to handle — pets, weather, road hazards, accidents — seems well beyond today's technology, let alone what risk-averse politicians and regulators would approve.

Jobs are changing from inside, though. Charlton analysed about 2000 tasks performed in 1000 jobs, finding new technology had replaced almost a 10th of tasks in the average Australian job during the past five years.

For instance, registered nurses now spend 11 per cent less time recording patient medical history and more time looking after patients.

Interestingly, the jobs whose tasks had changed the most were the least likely to become obsolete.

While the average worker may be safe, low-skilled male workers are the most vulnerable group. According to Charlton, they have a one in four chance of being made redundant during the next five years. Indeed, the job market has been far kinder to women than men

in recent decades, generating plentiful part-time work and jobs that suit many women better.

The dramatic shift away from repetitive, simple jobs to those entailing more human - interaction had sapped men's satisfaction with their lives, according to a US study earlier this year that compared how men and women feel about their work.

While there are plenty of jobs, the incomes that go with them haven't been growing so fast of late. "Jobs are a source of income but also a source of self-esteem, social interaction, a feeling of purpose and even community," Chester says.

In recent weeks economists have become excited about a modest rise in annual US wage growth, which picked up from 2.8 per cent to 3.1 per cent between September and October. That's barely more than inflation. Closer to home, the Australian Bureau of Statistics will release wage growth figures for September tomorrow. An increase of 2.3 per cent is tipped — a bit better than June's 2.1 per cent. Even that would be only slightly higher than inflation.

The Luddites who wanted to destroy machinery in the 18th century have re-emerged today as proponents of a universal basic income. UBI, they say, and the penal taxation that would have to go with it, will be necessary as robots and artificial intelligence render millions of jobs obsolete. There's a major problem with this argument: the premise is wrong.

"In quite a few years — in our own lifetimes — we may be able to perform all the operations of agriculture, mining and manufacture with a quarter of the human effort to which we have been accustomed," Keynes wrote in his 1930 essay, *Economic Possibilities for Our Grandchildren*.

Keynes was broadly right about this. The employment share of manufacturing has shrivelled from almost 30 per cent in the 60s to less than 10 per cent.

Agriculture has dropped from 22 per cent in the 30s to barely 2 per cent. But the service sector has more than made up these losses.

Just 12 years out from 2030 — a century since Keynes's essay — history is going to have to pack a great deal of change into a small period for anything remotely like mass joblessness to come true.

ADAM CREIGHTON, ECONOMICS EDITOR

Adam Creighton is an award-winning economics journalist with a special interest in tax and financial policy. He spent most of 2016 at the Wall Street Journal in Washington DC. He won the Citi Journalism Award f... [Read more](#)