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RODNEY'S RAVING

Questioning the threat technology poses to employment

EXECUTIVE SUMMARY

Many jobs that exist today will be displaced by technology. But there is nothing new in this. Manufacturing is an industry where technology has already decimated many jobs. Despite this, unemployment rates in the likes of NZ and Australia haven't experienced trend increases. There is too much focus on the jobs at threat from robotics and artificial intelligence. Such threats are easier to identify than are the new jobs technology and the evolution of industries will generate. I suspect new jobs will be created by technology and the evolution of industries faster than current jobs are destroyed, as has been the case in the past.



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Robotics and artificial intelligence pose a threat to many jobs

Many jobs will be displaced by technology but I am sceptical of the pace this will occur while the reporting is biased towards the jobs at risk because of the unknown of what new jobs will be created in the future.

"Almost half the jobs in New Zealand may be done by computers and robots in the future, researchers say."

"A leading futurist is urging Kiwi companies to prepare for a tech-transformed future where machines have replaced many of today's jobs."

"Digital disruption is turning finance on its head and destroying traditional banking jobs along the way."

"Up to 4.6 million jobs may be at risk if Australia does not prepare its workforce for the digital future, a discussion paper has warned."



The links below relate to the headlines above, respectively.

http://www.nzherald.co.nz/business/news/article.cfm?c_id=3&objectid=11610112

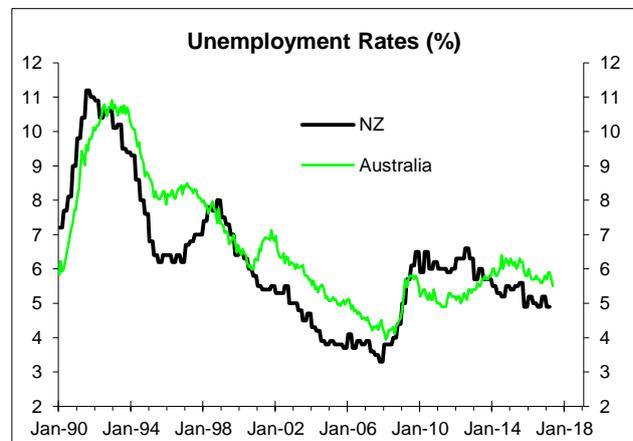
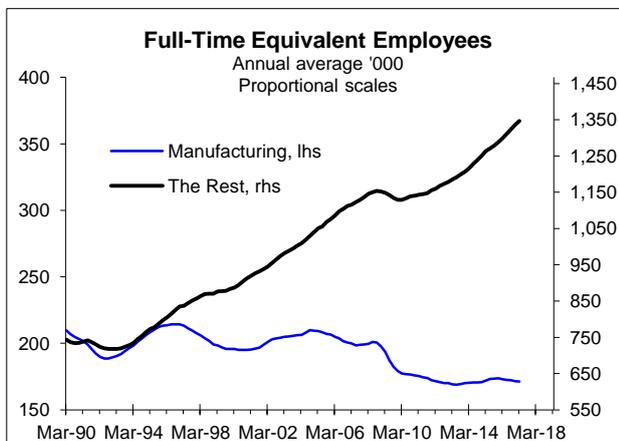
http://www.nzherald.co.nz/business/news/article.cfm?c_id=3&objectid=11851276

<http://money.cnn.com/2016/04/04/investing/bank-jobs-dying-automation-citigroup/index.html>

<http://www.smh.com.au/business/workplace-relations/australian-workers-must-be-ready-to-ride-the-technology-wave-says-startupaus-20160728-gqfm4j.html>

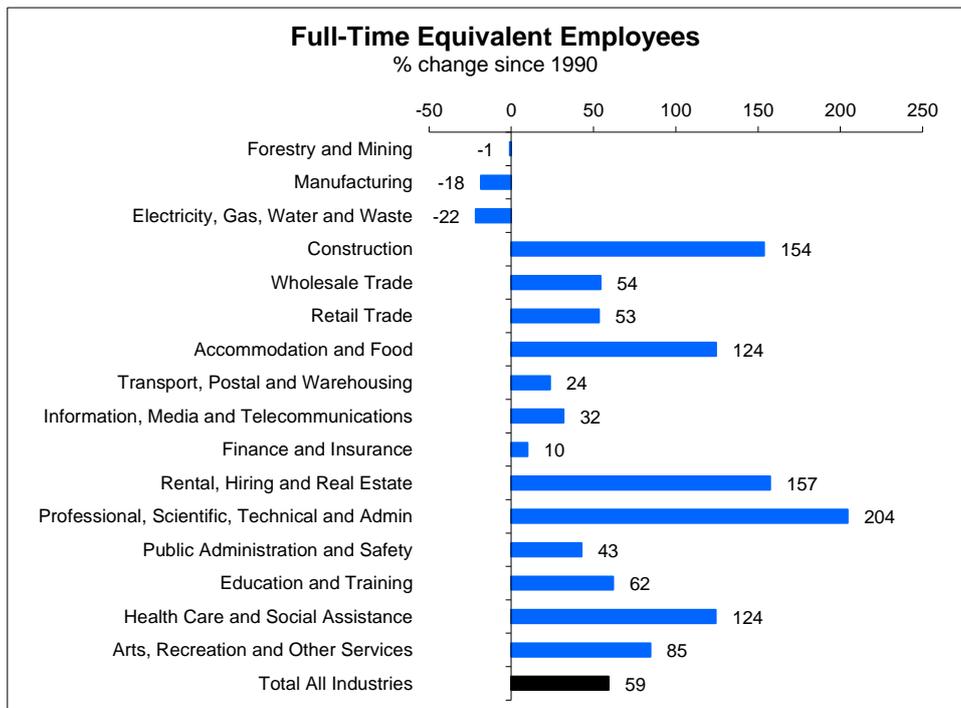
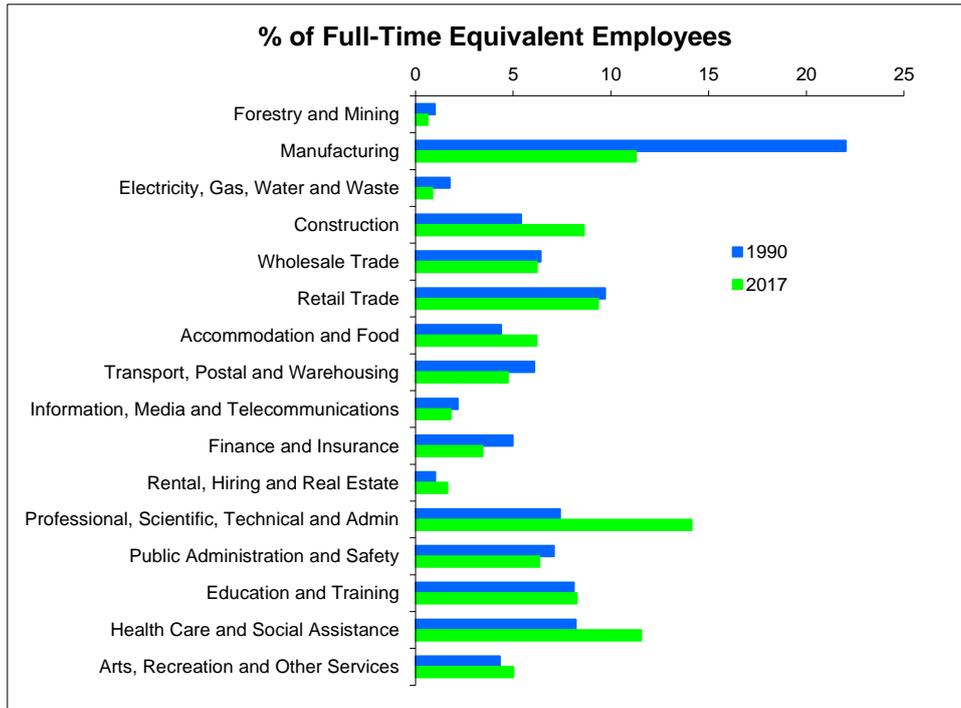
The manufacturing experience may provide a useful perspective

There is nothing new in technology threatening jobs. In 1990 22% of NZ full-time equivalent employment was in manufacturing. Automation and globalisation contributed to manufacturing employment falling 18% since 1990 versus 81% growth in jobs in all other industries (left chart). If manufacturing had behaved in line with all other industries it would have 383,000 full-time equivalent employees now rather than 171,000. Just as technology in part contributed to the fall in manufacturing employment, it will impact on numerous industries in the future. But despite the march of technology since 1990, unemployment rates in the likes of NZ and Australia haven't experienced trend increases (right chart below).





For many manufacturing companies and manufacturing workers technology and globalisation have meant a rocky road. Manufacturing went from by far the largest employer in 1990 to now being only the third largest (chart below). Maybe the future threat is greater than the experience since 1990. But I suspect the negative impact of technology on jobs will be slower to arrive than suggested by some commentators. Equally, new technologies and the evolution of industries will create many new jobs. Over periods of 20-30 years it is normal for employment growth to differ dramatically by industry (see the second chart below). It is easy to focus on the threats to jobs from technology and harder to identify which industries will create jobs. But this doesn't mean new jobs won't be created by technology and the evolution of industries faster than current jobs are destroyed, as has been the case in the past.



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