Long-term goals for the Auckland economy

Rachael Logie and Dr Tim Maloney

Rachael is Senior Economist, Auckland Council and Tim is Professor and Head of the Department of Economics at Auckland University of Technology.

Auckland's Economic Development Strategy outlines long-term targets for growth in labour productivity of 2 per cent, and growth in exports and GDP volumes of 6 per cent and 5 per cent, respectively.

These aspirational economic targets are linked to one of the key goals of the Auckland Plan: to lift Auckland's OECD ranking for GDP per capita by 20 places over the next 20 years.

Labour productivity is driven by 'capital deepening' — more capital per worker — and by 'multi-factor productivity', which refers to the efficiency with which labour, capital and natural resources are organised in producing output.

The economy's long-term growth potential is a function of both labour productivity and the size of the labour force. Alternatively put, under full-employment conditions, the economy's effectual speed limit — the rate of growth it can achieve without risking an acceleration in inflationary pressures — is approximated by the combined growth in labour supply and labour productivity.

Between 1996 and 2012, Auckland's population grew at an annual rate of 1.9 per cent, while its labour force grew at an annual rate of 2.2 per cent. In comparison, population growth and labour force growth in the rest of New Zealand grew at an annual average rate of 0.8 per cent and 1.5 per cent, respectively.

Labour force growth is expected to slow substantially over the next 20 years, reflecting the region's changing demographic profile. Auckland's younger population and sizeable net inflows of migrants (migrants are disproportionately represented from within working-age cohorts) will cushion the impact on its labour force growth, but its labour force growth is projected to slow markedly. There is however, potential for further increases in participation rates from a variety of population groups (e.g. women, migrants and the older population).

There has been a substantial increase in participation in the labour force within the 55+ age cohort in Auckland over the past decade, rising from a year-average of 36.6 per cent in 2002 to 46.2 per cent in 2012.This reflects a combination of factors, including more opportunities for older workers to retrain and stay in the workforce; longer average life expectancies necessitating workers to delay retirement in order to build sufficient retirement savings, and the impact of the Global Financial Crisis on household wealth. Participation rates among individuals at the other end of the age spectrum (15- to 19-year-olds) trended down from a year-average of 47.8 per cent in 2002 to 36.8 per cent in 2012.

Average growth in the working-age population of around 1 per cent – even with a positive differential for rising participation, delayed retirement and, potentially, a higher fertility rate – together with a 2 per cent productivity growth rate would allow the Auckland economy to grow at around 3 per cent.

A combination of higher productivity and higher labour supply growth would be required for Auckland to reach a target approaching 5 per cent real growth in GDP. Under the medium population projections, net migration in the Auckland region is estimated to average 6000 a year out to 2016, rising to an average of 9000 a year out to 2031.

If, instead, net migration into Auckland averaged 20,000 (Statistics New Zealand's high scenario uses an assumption of 25,000 per annum, nationally), then growth in the working-age population out to 2031 would average between 1.5 per cent and 2 per cent. Even under these assumptions, productivity growth would still need to exceed 2 per cent per annum to meet the 5 per cent GDP growth target.

Raising productivity growth is critical if Auckland is to sustain high levels of economic growth. Increasing the supply of labour and the capital-output ratio are two measures that can support this target, but it is the role of knowledge and skills that has the most potential to achieve higher productivity targets.

Auckland as New Zealand's productivity powerhouse

There is a lot of pressure on Auckland to drive national productivity growth and lift average living standards. This is hardly surprising: international evidence shows that densely populated urban areas tend to substantially outperform other regions in output per worker through what are known as 'agglomeration effects'. These effects refer to a variety of potential benefits to firms and workers when they locate close to one another. Exactly why productivity might arise due to agglomeration is unclear. Possible reasons include a greater division and specialisation in the use of labour, improved matching between firm needs and worker skills, better use of public goods and existing natural resources, and greater technological innovation from spatial concentration. Although the precise reasons for the productivity advantages of cities are unclear, there is overwhelming evidence that they exist in urban areas around the world.

The best evidence that we have suggests that Auckland is no different in this regard. Maré (2008), using firm-level data, found evidence of a substantial and persistent productivity premium in Auckland. Value added per worker was at least 30 per cent higher in Auckland than elsewhere in New Zealand (annual labour productivity growth in New Zealand averaged 1.4 per cent between 1996 and 2012). Lewis and Stillman (2005) took a different approach. Using worker-level data, they found that hourly earnings in Auckland were higher than other regions in New Zealand with the possible exception of Wellington. Because workers should be paid their marginal products under competition, Lewis and Stillman interpret these wage advantages as reflecting the higher productivity of workers in our cities. Thus, we have both direct and indirect evidence of the relatively higher productivity of workers in Auckland.

It's always tempting to interpret such empirical findings in a 'causal manner' (i.e. greater population concentrations lead to better economic performance). We need to be cautious in this regard. Some of this positive association between urban density and productivity performance may be reversed. Urban pockets of high performance may simply attract the most innovative firms, the latest large-scale plants and the highest-performing workers. Although cities may be engines of economic growth, they may also be magnets for existing productive activities in an economy.

Education could be a key channel through which urbanisation leads to improved productivity. Economic growth now may be more closely tied to the accumulation of human rather than physical capital. Agglomeration might increase the value of education through increased specialisation, better firm matching, and as an integral part in technological innovation. According to the 2006 Census figures, the percentage of adults with a tertiary qualification was higher in Auckland (19.9 per cent) than in the rest of New Zealand (13.8 per cent). The gap may be widening: between 1996 and 2006, the percentage of adults with a tertiary qualification grew faster in Auckland (68.6 per cent) than in the rest of the country (62.0 per cent). Berry and Glaeser (2005) found evidence of relatively higher returns on education in other metropolitan areas. Even more intriguing is their finding that cities with initially high levels of education tend to experience the fastest growth rates in education over time. Creating a skilled city today could lead inevitably to an even more skilled city in the future.

References

Berry, C. R., & Glaeser, E.L. (2005). *The Divergence of Human Capital Levels across Cities* (Faculty Research Working Papers Series). Cambridge, MA: John F. Kennedy School of Government, Harvard University.

Lewis, G., & Stillman, S. (2005). *Regional Economic Performance in New Zealand: How Does Auckland Compare?* (New Zealand Treasury Working Paper 05/08). Wellington: The Treasury.

Maré, D. C. (2008). *Labour Productivity in Auckland Firms* (Motu Working Paper 08-12). Wellington: Motu Economic and Public Policy Research.