

AUCKLAND ECONOMIC INSIGHTS SERIES

AUCKLAND: AN EMERGING KNOWLEDGE CAPITAL OF THE ASIA- PACIFIC

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AUCKLAND ECONOMIC INSIGHTS SERIES

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June 2017

Presented by

**Auckland
Tourism, Events and
Economic Development**
An Auckland Council Organisation



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Foreword

Knowledge capitals are the world's leading knowledge creation centres. They compete in the highest value-added segments of the economy, relying on their human capital, innovative universities and entrepreneurs, and solid infrastructure connectivity¹. Knowledge capitals have well-educated populations, productive industries, and are international transit hubs. They have high proportions of employment in the knowledge intensive services sectors and while having a strong financial and business services sector, often aren't considered a global financial centre.

As New Zealand's commercial capital, Auckland displays many of the traits identified above. It has a small but significant advanced industries segment, fuelled by a vibrant knowledge intensive services sector; a growing knowledge-enabled and well-qualified labour force; a strong tertiary education sector; and a growing, diverse and internationally orientated population. It is also a regional financial and business services centre, has a blossoming entrepreneurial ecosystem, and is emerging as a key international connectivity hub of the Asia-Pacific region.

Since 2000, Auckland's economy has become knowledge focused. Buoyed by strong population growth and infrastructure investment, the knowledge intensive services sector has seen increased domestic demand and since 2003, this sector represents the largest proportion of overseas businesses setting up in Auckland. With an ever-evolving innovation ecosystem and growing start-up community, it is clear that Auckland is emerging as a knowledge capital and is on a journey to achieve its goal of becoming an innovation hub of the Asia-Pacific.

This Auckland Tourism, Events and Economic Development (ATEED) paper leads on from the first paper in our Economic Insights Series, providing a short overview of how Auckland has begun to emerge as a knowledge capital, how its economy and labour force have become more knowledge intensive, and how foreign direct investment into Auckland has been dominated by knowledge intensive firms. It also examines the opportunities presented by these shifts, including how technology and global business behaviours may be beneficial to Auckland in an eastward shifting global economy and at a time of international geopolitical change.

Patrick McVeigh

General Manager
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¹ Brookings Institution "Redefining Global: Cities: The Seven Types of Global Metro Economies"

Auckland’s expanding knowledge base

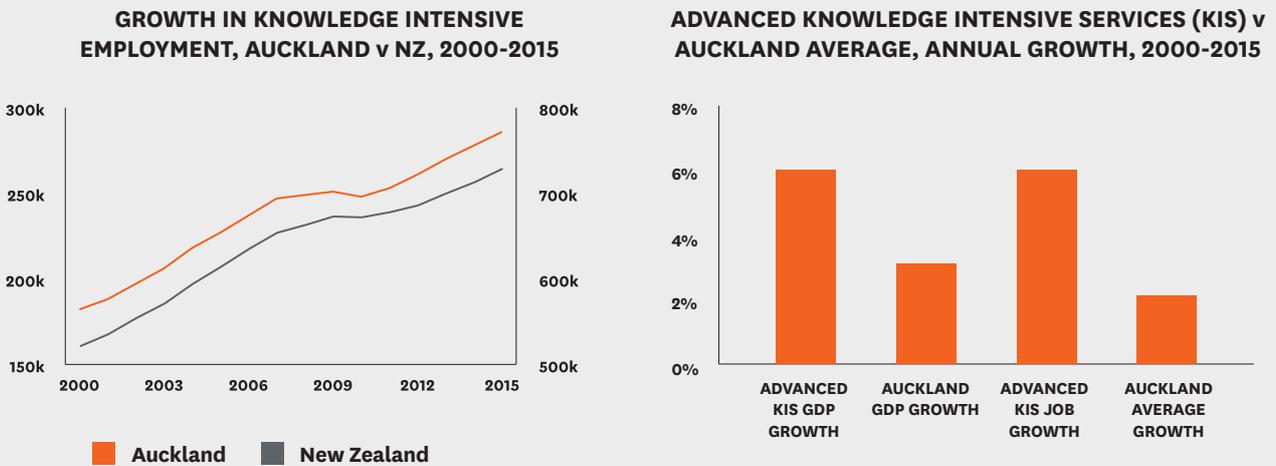
A supply side shift – increasing knowledge intensity

Between 2000 and 2015, Auckland has seen a significant shift in its economic demography, with a reducing manufacturing base and a growing services sector. This sector growth has been fuelled by knowledge intensive services², which have grown at an average annual rate of 3.9 per cent since 2000, and its proportion of the Auckland economy from 13 per cent to 15 per cent.

This growth has been supported by a highly skilled and knowledge-enabled labour force. While the knowledge intensive services sector itself has added 25,000 employees since 2000, the entire labour force has added more than 100,000 workers identified as knowledge intensive.

Those knowledge intensive services, part of Auckland’s advanced industries³, have been increasing output and creating jobs at a faster rate than the broader knowledge intensive services sector, with both output and employment averaging six per cent growth since 2000. With 40 per cent of New Zealand’s total knowledge intensive services employment (against 34 per cent of total employment), Auckland is without doubt the knowledge intensive services capital of New Zealand.

Figure 1: The move towards a knowledge-orientated services economy



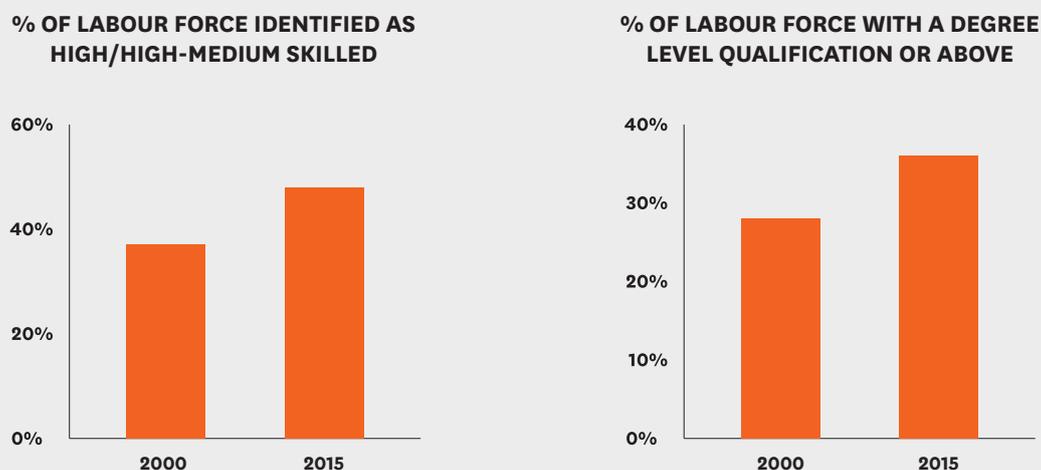
Source: ATEED/Infometrics/NZIER

Auckland’s knowledge assets

Since 2000, there has been a dramatic shift in the skill and qualification levels of the Auckland labour force. In that period, more than 212,000 additional people have joined the Auckland labour force, with more than 160,000 (75 per cent) of these categorised as having a high or high-medium skill level. In the same period, the proportion of the Auckland labour force holding a degree-level qualification or higher increased from 28 per cent to 36 per cent, with an additional 126,000 people with a degree-level qualification or above joining the Auckland labour force.

² Sector which covers a broad and diverse range of services with varying degrees of knowledge intensity. It includes firms providing post, finance, insurance, professional, scientific and technical services – OECD (2006)

³ Research and Development (R&D) and Science, Technology, Engineering and Math (STEM) Intensive Industries

Figure 2: A knowledge-enabled labour force

Source: Infometrics

In addition to a growing knowledge-enabled labour force, Auckland is home to three universities – The University of Auckland, Auckland University of Technology (AUT) and Massey University – and five institutes of technology and polytechnics, which provide a pipeline of talent into the Auckland economy.

The University of Auckland ranks 81st globally⁴ and its Law Accounting and Finance, Civil and Structural Engineering, Architecture, and Business and Management Studies undergraduate courses are ranked within the top 50 worldwide. Both Massey University and AUT also rank within the top 500 world universities.

Auckland is also home to some world-leading knowledge intensive services companies, including Beca, an Auckland headquartered international consulting engineering firm, Datacom, a leading payroll and back office services provider, and a range of international consulting and advisory firms, including the Big Four⁵, Mott McDonald and Aecom.

A demand side shift – an attractive FDI location for knowledge intensive firms

New Zealand has a long history of attracting Foreign Direct Investment (FDI)⁶ projects⁷.

Knowledge intensive services make up the second largest sector for FDI at a global, Asia-Pacific and New Zealand level. Between 2003 and 2015, there were 84 knowledge intensive services project investments into New Zealand, making it the 13th most popular destination for FDI in the Asia-Pacific region. Of these 84 projects, 74 were into Auckland, 88 per cent of all projects.

Auckland has witnessed a dramatic increase in the number of knowledge intensive services FDI projects, particularly between 2005 and 2011 increasing from one to 12 per annum. Knowledge intensive services makes up almost 40 per cent of all FDI projects into Auckland since 2003, the largest single sector.

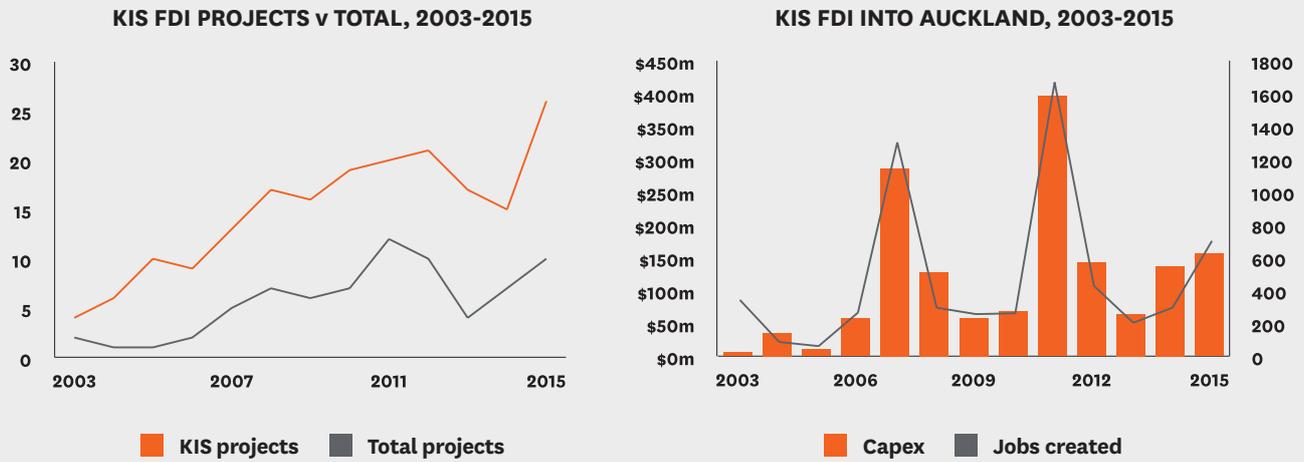
⁴ QS World University rankings

⁵ Pricewaterhouse Coopers (PwC), KPMG, Ernst & Young and Deloitte

⁶ Foreign direct investment (FDI) is an investment made by a company or individual in one country in business interests in another country, in the form of either establishing business operations or acquiring business assets in the other country, such as ownership or controlling interest in a foreign company.

⁷ FDI project is classified as a foreign company setting up or expanding in a particular market.

Figure 3: Auckland's FDI in knowledge intensive services (KIS)



Source: fDi Markets

These investments have brought significant financial investment and employment into Auckland – a total of \$1.5 billion of investment, creating more than 5800 jobs since 2003. This peaked in 2011, with \$400 million of investment and 1500 jobs created, and has slowed as the global economy has recovered. However, there are signs of resurgence with increasing activity in 2014 and 2015.

International perceptions shifts

Increasing visibility worldwide and in Asia-Pacific

While Auckland's economy has grown and become more globally engaged, internationally Auckland is still largely perceived as a high quality-of-life location and a visitor destination. However, over the last number of years the international perception of Auckland has shifted. Auckland is described by Jones Lange LaSalle in its publication 'Globalisation and Competition: The New World of Cities' as a new world city⁸ and they rank Auckland 20th overall in their City Momentum Index. Auckland is also ranked 89th out of 500 in the 2thinknow Innovation Cities Index 2017, up from a 2014 ranking of 106. In 2016, New Zealand was also recognised by The World Bank as the number 1 country globally for ease of doing business. When benchmarked against Asia-Pacific peer cities, it is clear Auckland now has enhanced visibility as a knowledge capital, evident by improving rankings in relevant criteria against the nine peer cities presented in Figure 4.

Figure 4: Rankings v Asia-Pacific peers (Tokyo, Seoul, Sydney, Brisbane, Seattle, Portland, San Diego, Lima, Santiago)



Source: FDI Benchmark

⁸ An emerging city is characterised by a high quality of life, strong education sector and being safe and secure for living and doing business.

Global trends – Auckland’s opportunity

Trade and investment – building on our strengths

Asia-Pacific’s increasing prominence

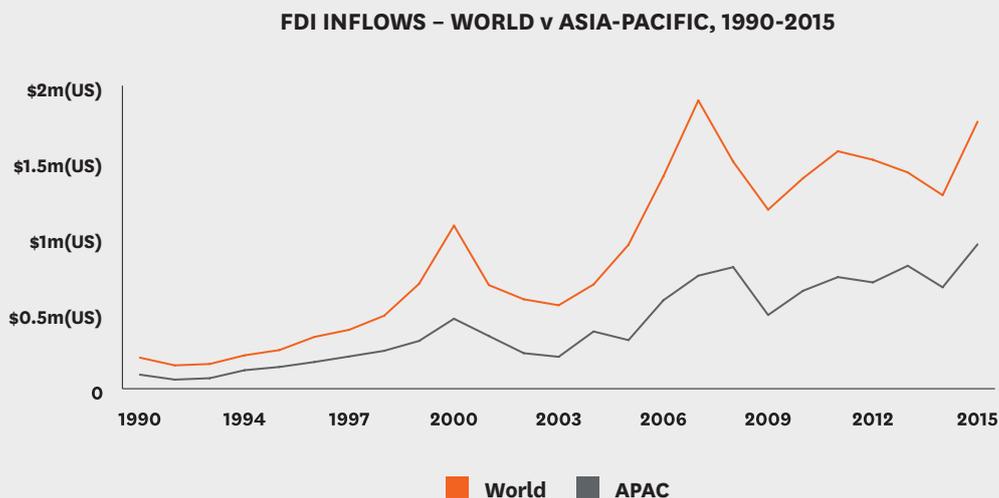
The Asia-Pacific region is described by the International Monetary Fund (IMF) as the “most dynamic region of the global economy”. GDP growth in this region is forecast to continue at over five per cent per annum versus a global average of three per cent in 2017 and 2018⁹. This growth, and the increasingly western approach in a number of emerging Asian nations, presents business opportunities for knowledge intensive firms.

As highlighted in Figure 5, the level of annual FDI at a global and Asia-Pacific level grew consistently from 1990 to 2000, then significantly increased to a global peak in 2007, peaking in the Asia-Pacific region in 2008.

The global financial crisis resulted in global FDI flows declining significantly between 2007 and 2009, and while deals have not recovered to pre-crisis levels, the Asia-Pacific region has weathered the crisis better, seeing only a small decline in 2008 and 2009. Since then, the Asia-Pacific region has witnessed a 95 per cent increase in flows between 2009 and 2015, accounting for 54 per cent of global FDI flows, increased from 41 per cent in 2009.

While Auckland has benefited from this increasing focus on the Asia-Pacific region, it only attracted a small proportion of total FDI in Asia-Pacific in recent years, which presents both a challenge and an opportunity.

Figure 5: Growth of FDI into Asia-Pacific (APAC)



Source: OCO Global/UNCTAD

⁹ imf.org/external/Pubs/FT/REO/2016/apd/eng/pdf/areo1016.pdf

Capitalising on niche opportunities

With a track record in attracting FDI, including outsourced businesses and a strong business support and consulting sector, Auckland can capitalise on existing strengths in these areas to grow its share of FDI in Asia-Pacific. Niche opportunities include:

- **Knowledge outsourcing** – Global outsourcing was a US\$100 billion industry in 2014, with many global firms seeking to increase their presence in key customer markets and use outsourcing to improve performance and realise efficiencies. With increased air and digital connectivity, firms now have more choice on where to locate and, dependent on their needs, they can look at a range of options across many regions. With global firms increasingly serving an Asian client base, cities such as Auckland are now an attractive location for outsourcing. With a diverse and multilingual population, similar time zone(s), a knowledge intensive labour force and recent record of attracting knowledge intensive overseas companies, there is a continuing and growing opportunity for Auckland to compete in this space.
- **Emerging Asia's consulting needs** – Consulting, one of the knowledge intensive services sub industries, can be thought of as one of the original outsourced industries. The industry has traditionally been viewed as a western practice, with all of today's major global players originating in Europe or North America; it is only recently that Asia has become a sizeable market for these firms. As many Asian nations emerge as powerful economies, consulting companies are taking an increasing interest in these new markets, either through FDI and/or increased new business development in market. With countries such as India, Indonesia, Thailand and Malaysia opening up to foreign markets and international competition, companies are understanding the costs of poor strategy and there is now a demand for high-end strategy consulting. Increasing infrastructure investment and construction growth also present opportunities for consulting firms in this sector. Auckland firms have niche specialisms in consulting spaces such as engineering, architectural consulting services and advisory, and with a growing Asian market for these services, there is scope for Auckland firms to move into and/or expand their footprint in these markets.

Technology in knowledge intensive industries

The World Economic Forum has described the wave of technical disruption since 2000 as the Fourth Industrial Revolution¹⁰. This revolution has seen a shift from simple digitisation to innovation based on combinations of technologies and is forcing companies to re-examine the way they do business.

This is having a particular impact on the knowledge intensive services sector, with technologies such as advanced computing, the cloud, and mobile internet disrupting the business models of the financial and business services sector and business outsourcing. With the emergence of digital payments and cloud accounting, traditional banking and accounting business models are increasingly unfit for purpose and the rapid emergence of big data analytics and artificial intelligence is reducing traditional players' competitive advantage.

Capitalising on existing comparative advantages across the knowledge intensive services sector, specifically in big data and financial payments, and achieving early mover status in adapting other tech platforms, will play a key role in Auckland's emergence as an international knowledge capital.

¹⁰ weforum.org/focus/the-fourth-industrial-revolution

How does Auckland capitalise on this opportunity?

With a strong knowledge intensive services industry, a knowledge-enabled labour force, a growing international reputation, and a track record of attracting knowledge intensive services investment, Auckland is emerging as an Asia-Pacific knowledge capital. With the global economy shifting eastwards towards Asia and opportunities presented by technology and globalisation, Auckland can play a much more significant role than it does today and further increase its prominence in the region. To do this, the city must take the actions below.

- Through strong promotion, build on established trading relationships and leverage our diversity and supportive business environment, and seek to increase share of knowledge intensive services FDI projects in Asia-Pacific.
- Be at the forefront of technology adaption and development, ensuring we are seen as a world leader where we have comparative advantage, and as a first mover where we have implemented early. ATEED's next paper in this series explores the impact of disruptive technology platforms and identifies where Auckland has specific areas of comparative advantage that can be leveraged to support growth.
- Build on international perceptions shifts, position Auckland internationally as a knowledge capital, and highlight its key strengths and assets, particularly in niche areas of competitiveness.
- Support internationally focused knowledge intensive services firms based in Auckland to access new markets.



GET IN TOUCH

ATEED welcomes comment and feedback on the Economic Insights Series.

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ABOUT ATEED

Auckland Tourism, Events and Economic Development (ATEED) is Auckland's economic growth agency, and an Auckland Council-controlled organisation. It facilitates business and industry sector development, investment attraction, tourism and major events activities, and markets Auckland as a destination.

ATEED works with public and private sector partners to drive the growth of Auckland's skilled workforce, support Auckland's advanced industries to increase trade and attract investment, and promote a culture of innovation and entrepreneurship through initiatives like GridAKL, Auckland's innovation precinct at Wynyard Quarter.