

Xero's economic contribution to New Zealand

NZIER report to Xero January 2018

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NZIER was established in 1958.

Authorship

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Key points

Xero makes an important direct contribution to the New Zealand economy...

- It has contributed \$82 million directly to New Zealand's GDP since 2011.1
- It contributes \$30.9 million directly to New Zealand's GDP in 2017.²
- It generates nearly 80% of its global revenue from exports in 2017² (\$233 million), up from \$23 million in 2013.³
- These exports account for 27% of New Zealand's financial and accounting services exports (\$863 million).

...and creates jobs and incomes for nearly 1,000 workers

- Xero provides jobs and incomes nearly 10004 workers in New Zealand.
- It creates jobs in New Zealand 15 times faster than the rest of the economy, at an average of 39.7% per year since 2013.
- It delivered \$91 million in wages to its staff in 2017² at an average wage of \$91,790 per annum.⁵

Xero also buys inputs from other parts of the New Zealand economy...

- It has supported a range of supplying industries by purchasing \$133 million of inputs from them since 2011.¹
- It purchased \$34.4 million dollars of inputs from them in 2017.²
- In 2017, it spent \$15.9 million on telecommunications, internet and library services, \$7.5 million on advertising, market research and other management services, and \$3.9 million on electronic and electrical equipment manufacturing, and support from other sectors.²
- It supports 229 jobs² in these supplying sectors.

...and supports the rapidly-growing small business sector in New Zealand

- Xero saves 271,000 subscribers⁵ in New Zealand time and money, reducing their costs of doing business.
- New Zealand subscriptions have grown by nearly four times since 2013.

¹ Xero, as at 31 March 2011-2017.

² Xero, as at 31 March 2017.

³ Xero, as at 31 March 2013.

⁴ Xero, Headcount, as at 30 September 2017.

Xero, as at 30 September 2017

- Xero supports growth in the small business (SB) sector, which employs nearly 930,000 workers⁶ and accounts for \$134.6 billion,⁷ nearly half of New Zealand's GDP.
- The SB sector's GDP has grown by over 20% since 2013.8

Xero will boost New Zealand's GDP by \$330 million over the next decade⁹

- As Xero's growth continues over the next decade, it will generate an additional \$330 million of GDP for the New Zealand economy.
- This additional economic activity will create 570 jobs that otherwise would not have existed, and will generate an extra \$115 million of wages across the economy.

Xero is building a strong offshore footprint...

- Xero has 1.2 million⁵ subscribers globally, which has grown by over seven and a half times since 2013.
- On top of its 1000 New Zealand workers, Xero employs an additional 880 workers⁴ worldwide – up nearly five times since 2013.
- Xero provides subscriptions to 271,000 subscribers in New Zealand, 518,000 subscribers in Australia, 253,000 subscribers in UK and 110,000 subscribers in North America.⁵
- It has invested \$160 million globally in 2017² in sales and marketing. In New Zealand, Australia, UK and North America, this has increased by three times, five and a half times, 11 times and 14 times, respectively since 2013.
- It has also invested \$120 million in 2017² on global product design and development. This has increased by nearly six and a half times since 2013.

...and is attracting investment to support its growth

- Xero has raised capital to date of nearly \$474 million.²
- It has attracted significant investment from Valar Ventures LP and Technology Crossover Ventures (TCV) and strengthened its relationship with Silicon Valley Bank.

⁶ Statistics NZ, 2017.

According to Statistics NZ, 50% of total NZ output is from SBs in 2017. We assume the same proportion for SB contribution to NZ GDP.

⁸ NZIER, Statistics New Zealand.

⁹ NZIER computable general equilibrium model database.

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1. Objectives and scope

We have been asked to provide an overview of Xero's contribution to the New Zealand and global economy, focusing on:

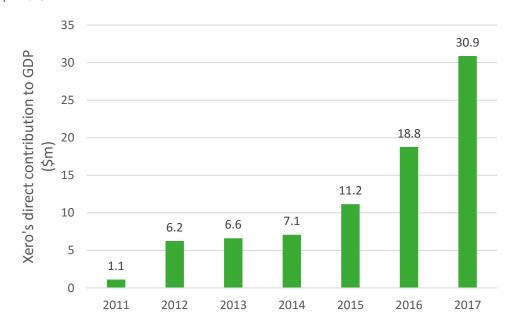
- GDP contribution
- Jobs and wages generated
- Other sectors supported
- Contribution to the Small Business (SB) sector
- Building a world class technology business from New Zealand through investment
- Building a global export business from New Zealand
- Contribution to SBs worldwide.

2. Xero's contribution to the NZ economy

2.1. GDP

Xero's operations directly account for \$30.9 million of New Zealand's total GDP. Since 2011, Xero's contribution to New Zealand's GDP has increased by 27.5 times, albeit from a low base (Figure 1). Xero's cumulative contribution to New Zealand's total GDP is \$82 million.

Figure 1 Xero's contribution to NZ GDP has increased sharply \$millions¹



Source: NZIER, Xero, Statistics NZ

2.2. Employment

In New Zealand, Xero employed **995**⁴ **staff** in 2017¹⁰. Since 2013, Xero's employment has nearly quadrupled (Figure 2).

Figure 2 Xero NZ employees have nearly quadrupled since 2013 2013-2017¹¹



Source: NZIER, Xero

Xero also currently supports 229 jobs in supplying sectors (Table 1).

Table 1 Supporting sector jobs 2017²

Sector	Jobs
Telecommunications, Internet and Library Services	104
Advertising, market research and management services	55
Travel agency and tour arrangement services	25
Employment and other administrative services	29
Electronic and electrical equipment manufacturing	14
Superannuation and individual pension services	1
Non-residential property operation	1
Total	229

Source: NZIER computable general equilibrium model database, Xero

While these staff are based in NZ, some work for the parent group of Xero rather than Xero NZ specifically.

¹¹ Xero, Headcount in 2013-2016 as at 31 March each year. Headcount in 2017 as at 30 September 2017.

The supporting sector jobs have increased by nearly four times since 2011 (Figure 3).

250

sq 200

150

50

0

Figure 3 Supporting sector jobs have nearly quadrupled 2011-2017¹

Source: NZIER computable general equilibrium model database, Xero

2013

2012

2011

Xero employment has been growing much faster than other related sectors. Figure 4 shows that over the past four years, **Xero's employment has grown by an average of 39.7% per year**, over 15 times faster than the 2.6% recorded for total employment and over five times as fast as employment for Computer system design and related services¹² at 7.8%.

2014

2015

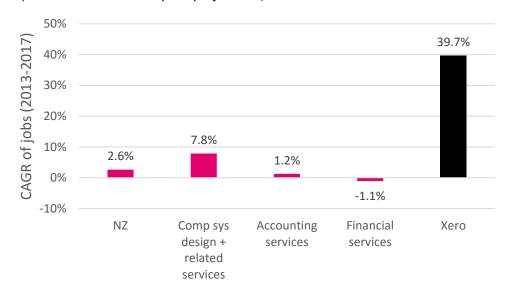
2016

2017

Statistics NZ identifies Xero to fall under the Computer system design and related services industry.

Figure 4 Xero employment has grown strongly

Compound Annual Growth Rate (CAGR) in jobs filled, 2013-2017¹³



Source: NZIER, Xero, Statistics NZ

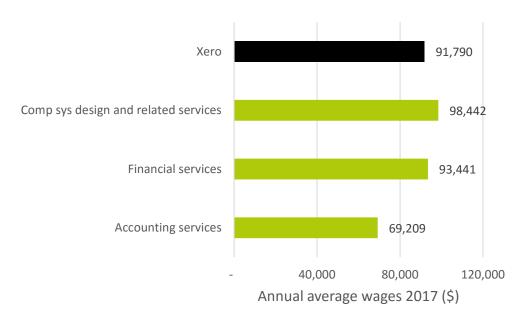
NZ, Comp sys design + related services, accounting services and financial services employment recorded at Feb 2013-2017. Xero, headcount, as at 31 March each 2013-2017.

2.3. Household incomes

Xero supports households in New Zealand by paying \$91 million² in wages at an average of **\$91,790 per year**. Figure 5 shows that Xero's wages are on par with comparable sectors.

Figure 5 Xero's contribution to household incomes on par with comparable sectors

201714



Source: NZIER, Xero, Statistics NZ

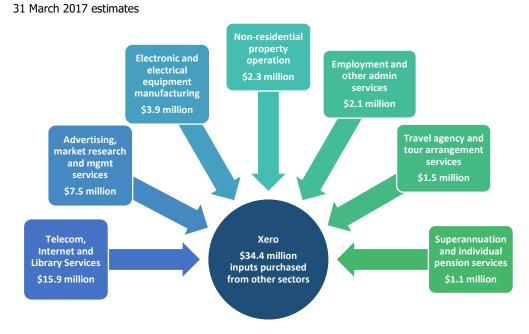
2.4. Flow-on impacts

As well as its direct impacts on export growth, employment and income generation, Xero also plays an important role in supporting activity in other parts of the New Zealand economy.

¹⁴ Xero average wage as at 30 September 2017. Comp sys design and related services, financial services and accounting services average wages as at Feb 2017.

Figure 6 shows the purchases made by Xero to support its operations in 2017.

Figure 6 Xero draws on inputs ¹⁵ from a wide range of supporting industries



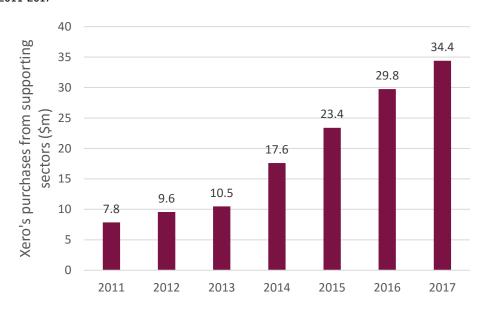
Source: NZIER computable general equilibrium model database, Xero

Inputs = Output - Value Added = \$63m - \$27.9m = \$34.4m
Value Added = GDP - tax = \$30.9 - \$3.0m = \$27.9m

Additionally, Xero's purchase of inputs from supporting sectors has increased by more than four times since 2011 (Figure 7). Since 2011, Xero has purchased a total of \$133 million of inputs¹ from these supporting sectors.

Figure 7 Xero's purchases from supporting sectors has increased by more than four times

2011-20171



Source: NZIER computable general equilibrium model database, Xero, Statistics NZ

2.5. Xero's projected future economic contribution

Below we project macroeconomic impacts and labour market impacts if Xero's current growth¹⁶ continues for the next ten years. To project these impacts, we use the Monash-NZ computable general equilibrium (CGE) model of the New Zealand economy¹⁷ to run two scenarios.

The first is a Business as Usual (BAU) scenario, which projects the economy out to 2027 using NZIER Quarterly Predictions forecasts and Statistics New Zealand's long-term productivity and labour supply predictions.

The second explores the economic impact of future Xero expansion. We boost the output of the accounting services industry by the dollar amount equivalent of 33% Xero revenue growth for each year over the next decade, while holding everything else constant in the BAU scenario. The 33% 'shock' imposed here is Xero NZ's output growth between 2016 and 2017.

Monash-NZ is a model of the NZ economy, comprising of 131 industries, 210 commodities, 14 regions, 1 household and 24 occupations. The Monash-NZ model we use is a 'dynamic' model. This means it allows us to measure the impact of imposed

Xero NZ maintains output growth as from 2016 to 2017 over the next ten years.

For more information on Monash-NZ, see https://nzier.org.nz/static/media/filer_public/01/e2/01e2cdb3-a355-4f01-998a-890da77780e2/nzier_cge_brochure.pdf

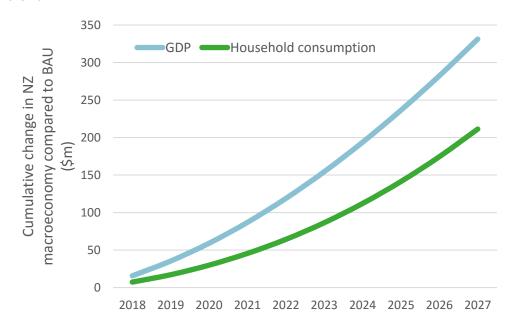
shocks on macroeconomic and labour market variables compared to BAU for each year of the projection period.

The key results are discussed below.

2.5.1. Macroeconomic impacts

If Xero's growth continues at recent strong rates, the New Zealand economy will be \$16 million larger in 2018 and a total of \$330 million larger by 2027 than it would be without Xero's growth (Figure 8).

Figure 8 Growth in New Zealand economy from Xero expansion 2018-2027



Source: NZIER computable general equilibrium model database

2.5.2. Labour market impacts

Xero's current growth rate will create an additional 53 jobs in the economy in 2018 compared to BAU. By 2027, a total of 566 jobs compared to BAU are forecasted to be created in the NZ economy. Nominal wages are expected to increase by \$1.3 million in 2018 compared to BAU and by 2027 are projected to have increased by a total of \$115 million (Figure 9).

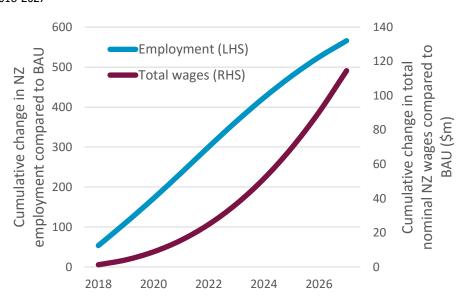


Figure 9 Ten year forecast of Xero's contribution to the labour market 2018-2027

Source: NZIER computable general equilibrium model database

With rising employment and wages, households have more purchasing power which increases household spending by \$7 million in 2018 and \$211 million by 2027 (Figure 8 on the previous page).

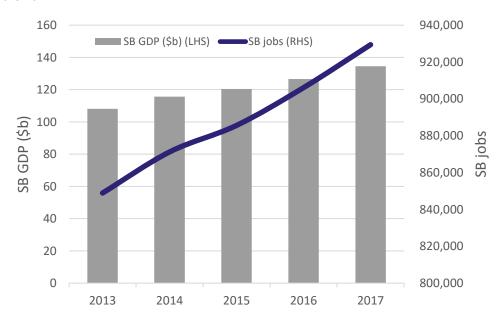
3. Xero supports the Small Business (SB) economy to grow & succeed

3.1. Economic contributions of SB sector

Xero supports the SB¹⁸ sector which accounts for \$134.6 billion¹⁹, nearly half of New Zealand's GDP in 2017. The SB sector GDP has grown by over 20% over the past four years. The SB sector also employs nearly 930,000 staff²⁰ in 2017. Employment numbers in this sector have increased by 10% since 2013 (Figure 10).

Figure 10 The SB sector accounts for nearly half of NZ's GDP and employs nearly 930,000 workers





Source: NZIER, Statistics NZ

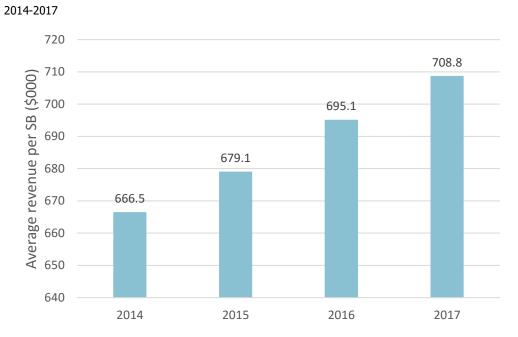
Businesses with less than 50 employees.

According to Statistics NZ, 50% of total NZ output is from SBs in 2017. We assume the same proportion for SB contribution to NZ GDP.

²⁰ Statistics NZ, 2017.

The SB sector's contribution to the NZ economy has steadily increased with **average revenue** per firm in 2017 at nearly **\$710,000**,²¹ a 6% increase since 2014²² (Figure 11).

Figure 11 Output per SB is steadily increasing



Source: NZIER, Statistics NZ

NZIER, Statistics NZ, 2017.

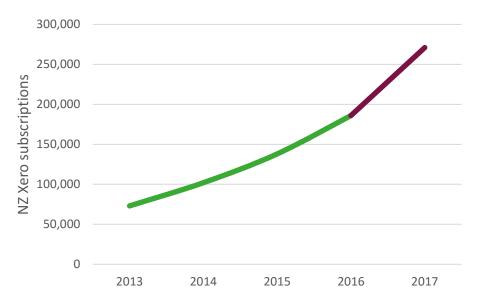
²² Statistics NZ does not include businesses with revenue < \$30,000. The revenue calculations are likely to be overestimates.

3.2. Xero platform interaction

In 2017, there were approximately **271,000 Xero subscribers in New Zealand.**⁵ Its subscriptions have increased by nearly 270% over the past four years (Figure 12).

Figure 12 NZ subscriptions have grown strongly

2013-2017



Green - subscriptions as at 31 March 2013-2016

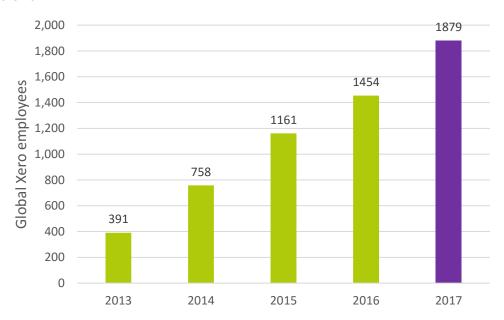
Brown – subscriptions as at 30 September 2017

4. Building a world class technology business through investment

4.1. Xero's history

Xero has rapidly expanded globally by employing **1,879 staff** in 2017⁴ (including New Zealand staff). That's an increase of almost five-fold in global employment since 2013 (Figure 13).

Figure 13 Xero's employment has increased by five times over four years 2013-2017

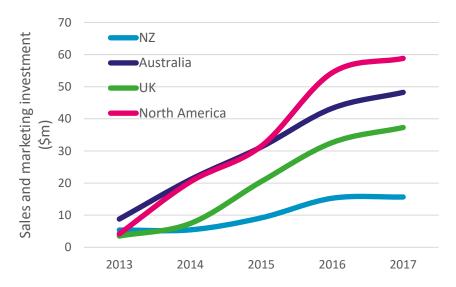


Green - headcount as at 31 March 2013-2016

Purple – headcount as at 30 September 2017

Along with rapid global expansion, Xero has also rapidly increased investment into sales and marketing worldwide (Figure 14). Sales and marketing investment in New Zealand, Australia, UK and North America have increased by three times, five and a half times, 11 times and 14 times, respectively over the past four years.

Figure 14 Sales and marketing investment has increased rapidly worldwide 2013-2017²³



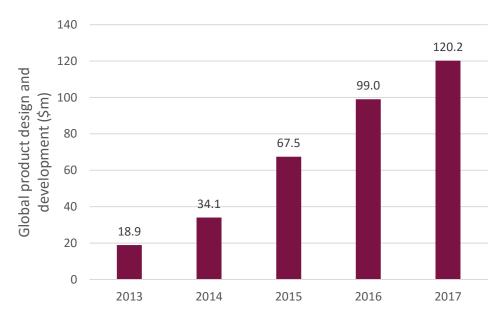
²³ Xero, as at 31 March 2013-2017.

Xero has invested **\$120 million** in 2017² on global product design and development. Since 2013, this investment has increased by nearly six and half times (Figure 15).

To date Xero has raised nearly \$474 million in capital.²

Figure 15 Global product design and development investment has increased six-fold

2013-201723



Source: NZIER, Xero

4.2. Bringing Silicon Valley to New Zealand

Xero has helped develop New Zealand's IT ecosystem by attracting investment from the likes of Peter Thiel, the co-founder of PayPal and early investor in Facebook who set up Valar Ventures LP to invest in Xero.

Additional Silicon Valley based investment came from Technology Crossover Ventures (TCV), an investment firm.

There have been several rounds of investments in Xero by these two firms. In 2010, Valar Ventures invested \$4 million, was part of two rounds of investment in 2012 (\$20 million and \$60 million), and was involved in a \$180 million investment along with other US based investors in 2013. TCV bought shares worth \$28.5 million from Matrix Capital Management in 2017. ²⁴ ²⁵ ²⁶

Xero has already established a relationship with Silicon Valley Bank, which was strengthened further in early 2017 by enabling startups to have more control over their financial data in a secure environment.²⁷

²⁴ Xero

²⁵ https://billbennett.co.nz/xero-silicon-valley-elite-tcv/

https://www.nbr.co.nz/article/xero-founder-encouraged-tech-entrepreneurs-nn-83948

²⁷ https://www.xero.com/blog/2017/02/xero-svb-helping-startups-get-investor-ready/

The multiple rounds of investment by Silicon Valley investors and the strengthening of these relationships with the investors allows Xero to access US networks by attracting partners who are familiar with the challenges and opportunities that exist in the US market.

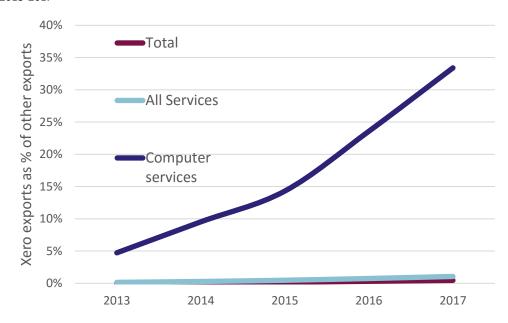
5. Building a global export business

5.1. Xero's contribution to New Zealand's export performance

Xero's contribution to total New Zealand exports and total services export has remained small but its contribution to computer system design and related services, and financial and accounting services has increased exponentially since 2013. Xero now accounts for 33.4% of computer system design and related services exports (\$698 million), and 27% of financial and accounting services exports (\$863 million) (Figure 16).

Figure 16 Xero contributes significantly to financial & accounting services, and computer services exports



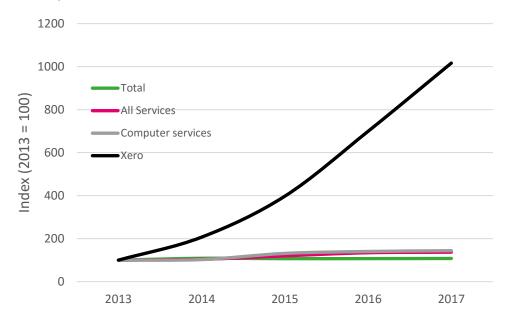


Source: NZIER, Xero, Statistics NZ

²⁸ Xero exports as at 31 March 2017. Total, All Services and Computer Services exports as at 30 June 2013-2017.

Xero's exports have grown much faster than total, all services and computer services exports (Figure 17).

Figure 17 Xero exports have grown faster than those of comparable sectors 2013-2017²⁸, Index: 2013 = 100

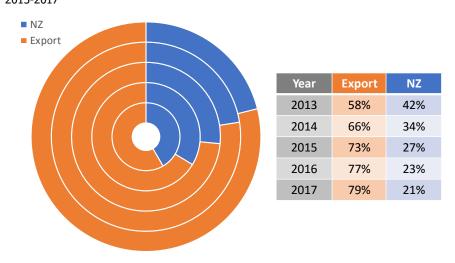


Source: NZIER, Xero, Statistics NZ

5.2. Xero's domestic vs. export revenue

In 2013, Xero's export revenue represented 58% of total revenue, whereas in 2017, its export revenue share has increased to 79% (Figure 18).

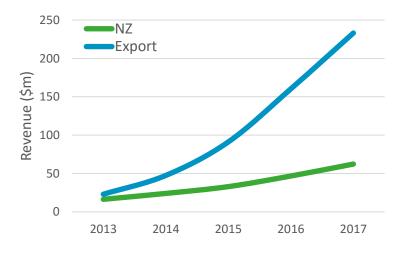
Figure 18 Xero's share of export revenue has increased over time 2013-2017²³



Source: NZIER, Xero

Additionally, in dollar terms, the rate of increase of Xero's exports is greater than that of its New Zealand revenue. In 2017, Xero's exports were \$233 million and its New Zealand revenue was \$62 million (Figure 19).

Figure 19 Xero's export revenue has increased faster than its NZ revenue 2013-2017²³

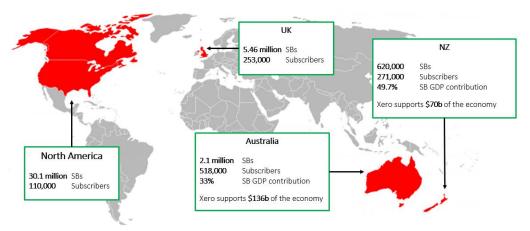


6. Global comparisons

Xero's presence is comfortably established in NZ and is increasingly establishing around the world. Figure 20 below shows that Xero's platform has 271,000 subscriptions in NZ, 518,000 subscriptions in Australia, 253,000 subscriptions in UK and 110,000 subscriptions in North America⁵.

This means on average, Xero facilitates SBs that account for \$70 billion of New Zealand's GDP and AUD 136 billion of Australia's GDP.²⁹

Figure 20 Xero is establishing a global presence and facilitating SBs 2017



Source: NZIER, Xero,³⁰ Statistics NZ, Australian Bureau of Statistics, Statistics Canada, Department for Business, Energy & Industrial Strategy, U.S. Small Business Administration

²⁹ This assumes that the distribution of Xero subscribers is representative of the distribution of the entire SB sector in each country.

³⁰ Statistics NZ does not count SBs with less than \$30,000 revenue. Additional SB numbers provided by Xero.