### Student loan debt: an albatross or an asset?

The ability of students to access loans to meet some of the cost of a university education has been a feature of our higher education system since 1992, when it followed closely the introduction of tuition fees. Since then, student/ graduate loan debt has been rising in New Zealand, as it has in many countries. This has resulted in claims that loan debt has negative consequences for graduates and for society generally. In fact, the recent move to provide a year of free tertiary study in New Zealand has been justified, in part, on the basis that student debt is a growing problem and one that holds people back after graduation.1

In this issue of *Commentary*, we examine the extent to which debt is an albatross around the necks of students and graduates, and whether the associated asset (a university qualification and its lifelong impact) still justifies taking on that burden.

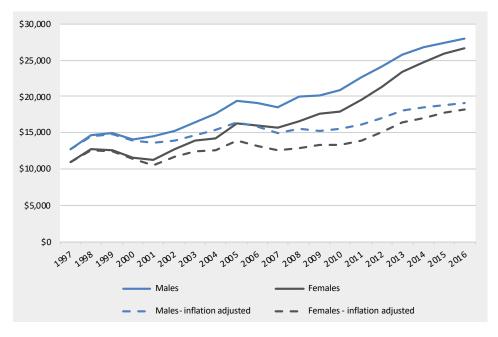
# The role and scale of student loans in New Zealand

Significant tuition fees were introduced in New Zealand in 1989 and, despite the recent introduction of the fees-free policy (for first-year students), they remain a key element of our university education financing system. Tuition fees are based on the principle of public-private cost-sharing, reflecting the fact that a university education confers both public and private benefits. Access to student loans is an important element of any funding system where significant tuition fees are charged,

enabling students to cover the upfront contribution to the cost of study so that, at least in principle, cost should not be a deterrent to participation.

The great majority of university students in New Zealand take out a student loan.<sup>2</sup> Leaving balances for students at bachelor level have increased, rising over the last twenty years by about 118% and 145% in absolute terms for males and females respectively, or 49% and 67% respectively when adjusted for inflation (Figure 1). They are commonly a little lower for women than for men.

Figure 1: Median leaving loan balances by gender for leavers who studied at bachelor level<sup>3</sup>



The vast majority of graduates leave university with modest amounts of student debt, and typically are able to repay their loans within less than a decade. In 2016, for example, graduates with bachelor and postgraduate degrees left study with average student loan debts of \$27,200 and \$35,300 respectively. Average repayment times were 8.3 and 7.4 years respectively.<sup>4</sup>

The distribution of debt was highly skewed such that some 70% left with debt of less than \$30,000, and only 11% had a debt of more than \$50,000 (Figure 2). By comparison, the average English university undergraduate leaves with debt of just over £50,000, and very few graduates are expected to repay their debt in full (83% will have some debt written off after 30 years).<sup>5</sup>

The total level of student debt in New Zealand has also been the subject of considerable comment. At \$15.9 billion it is indeed a large sum, but to put it in perspective it is a small fraction of total New Zealand housing loans at \$189 billion.<sup>6</sup>

## Concerns about student loan debt

Two primary concerns are often raised in relation to student loan

debt. The first centres on whether fear of student debt discourages people from studying at university (i.e. debt aversion) and thereby undermines societal efforts to promote participation. The second concerns the extent to which indebtedness has long-term negative implications for the life choices and behaviours of graduates.

Research on the impact of student debt on university participation is inconclusive. Some studies have found evidence of prospective students, especially those from lower socioeconomic groups, being deterred from applying to university because of fear of debt, while others have found no such impact.8 What we can observe is that participation in university study in New Zealand, as elsewhere, has increased at the same time as tuition fees and resulting student loan debt have increased (for example, 15% of 18 to 24 year-olds were at university in 1994, rising to 19-21% over the last decade). This suggests that student loan debt has not deterred participation. However, it is possible that other factors explain this trend (e.g. improvement in prior educational attainment, which is known to be the most important determinant of university participation, or university degrees

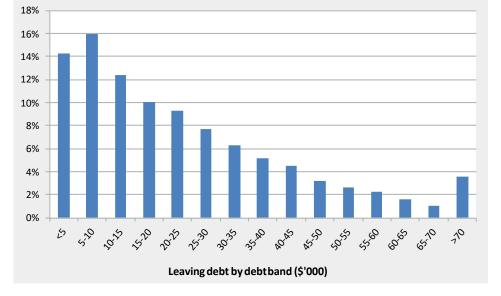
increasingly becoming a requirement for securing a 'good' job).

It has also been suggested that in addition to effects on participation, indebtedness may negatively impact graduates' ability to buy a home, and lead graduates to delay or avoid family formation (i.e. partnering/marriage, having children), and certain career choices.

Home ownership rates in New Zealand have been declining since 1991, especially for people in their 30s and 40s<sup>9</sup>, but this trend predates the rise in student loan debt. New Zealand evidence on the impact of student loan debt on home ownership is limited to survey results. The New Zealand Union of Students' Associations' (NZUSA) Income and Expenditure Survey 2017 found that 79% of students said that their loan would affect their ability to buy a house.<sup>10</sup> However, the empirical evidence (from overseas) is inconclusive. 11 Recent evidence from the US, suggests that "what divides the haves and have-nots [in home ownership] is not student debt. It's having a college education". 12 Home ownership rates were markedly lower for those without a college (university) degree than for those with a degree, with or without student loan debt. Notably, the differences in home ownership rates of graduates with or without student loan debt were negligible by the time graduates were in their thirties.

Empirical evidence on the impact of student loan debt on the timing of marriage and having children is again mostly from overseas and, as with home-ownership, is inconclusive. However, on balance the weight of evidence appears to support the theory that student loan debt delays marriage and having children<sup>13</sup>, although some studies find this to be the case only for women.<sup>14</sup> There is some survey evidence from New Zealand on the impact of student loan debt on the decision to have children.

Figure 2: Distribution of leaving debt balances for all borrowers who left study in 2016 (all tertiary, not just university)<sup>7</sup>



Almost 40% of graduates surveyed as part of the NZUSA's Income and Expenditure Survey 2017 expected that their student loan debt would affect their decision to have children, with most of these (88%) wishing to be more financially secure before becoming parents.<sup>15</sup>

Another concern about student loan debt relates to the impact on career choice, more specifically that it drives graduates away from low-paying public-interest jobs (e.g. health care workers, teachers). This is of concern as it has the potential to exacerbate labour shortages in those areas. There is some evidence that student loan debt impacts career decisions, with graduates choosing higher-salaried jobs over low-paid public-interest jobs (especially in the education sector).16 Further, driven by a desire to secure a high-paid job after graduation, students accumulating debt are also found to make different choices with regards to majors; that is, they are pushed towards engineering and economics, both of which are associated with access to higher-paid jobs.<sup>17</sup> An emerging area of research on the relationship between student loan debt and entrepreneurship also indicates that student loan debt acts as a barrier to entrepreneurial activity among young people because it reduces their willingness to take on the risk associated with entrepreneurship.<sup>18</sup>

The potential disadvantages of student loan debt are likely to be greater for some graduates than others, for example, students who fail to graduate or who fail to realise the earning premium associated with having a degree. While there is scant evidence on this topic from New Zealand, we know that Māori and Pasifika students have lower completion rates than other students<sup>19</sup>, and are therefore more likely to be disproportionately represented amongst those with student debt and no degree. It is also the case that Māori and Pasifika graduates tend to have lower median earnings 5-years post study than the non-Māori and non-Pasifika comparator groups, although this picture varies somewhat by level of qualification and field of study. 20 Recent research from the UK shows that socioeconomic differences persist in graduate outcomes, with graduates from low income families having 10% lower income than their peers from high income families even after controlling for subject choice and institution attended. 21

#### The value of a degree

For the average university graduate, successful completion of a degree represents a significant asset. The benefits it creates include increased lifetime earnings and savings, as well as non-market benefits that enhance quality of life (e.g. improved health and longevity, more satisfying careers).<sup>22</sup> The monetary private benefits are relatively easy to quantify. In New Zealand, a typical graduate with a bachelor's degree will earn around \$1.4 million more over their lifetime than a non-graduate, after accounting for years of lost earnings while studying and for the direct costs of study (e.g. tuition fees). The benefit may be as high as \$4 million for the holder of a medical degree.<sup>23</sup>

International evidence confirms the value of a degree. Across the OECD the average private net financial return to a degree (bachelor, masters, doctorate) compared with obtaining an upper secondary education is \$US312,000 for men and US\$220,900 for woman. The equivalent figures for New Zealand are US\$273,100 for men and US\$221,700 for women (OECD uses a different methodology to Universities New Zealand<sup>24</sup>). The lower returns for women are attributed to several factors e.g. lower earnings, lower employment rates, higher share of part-time work on average and differences in field of study.<sup>25</sup> Notably the gender difference is smaller in New Zealand than in the OECD on average.

In what is predicted to be a more uncertain future job market, one might argue that there are significant unknowns about future graduate employment outcomes. However, at no time in recent history has being highly educated been a disadvantage, and nothing points to that changing, with technological change accelerating the demand for highly-skilled workers.<sup>26</sup> Rather, being better educated is much more likely to increase a person's ability to adjust and adapt in the job market.<sup>27</sup>

# On balance, is a degree a worthwhile investment?

The public debate about student fees and loans often focuses on their negative impacts on students and graduates. While these things are difficult to quantify, it does seem likely that, compared to graduates without a loan, those with a loan will experience some combination of delayed partnering/marriage/ family formation/house buying, and perhaps different career choices, than those who are fortunate enough to complete their university education without a loan. The limited available evidence suggests that these are real, but perhaps not solely, consequences of having a student loan.

However, there is also another, and perhaps more appropriate way to think about this question: is it better to be a graduate with a loan, or a non-graduate without a loan? Given the size of the monetary and other benefits that accrue (on average) from being a graduate, and the apparently modest consequences of the typical New Zealand student loan, it seems clear that investing in acquiring a university education is still a sensible decision. That presumably explains why numbers of students attending and graduating from New Zealand universities have continued to increase throughout the period that student fees and loans have been in effect.

- <sup>1</sup> Labour (n.d). Making tertiary education & training affordable for all. Available: (https://www.labour.org.nz/tertiaryeducation
- <sup>2</sup> Data on student loan uptake by university students only is not readily available, but for all tertiary full-time student the uptake in 2017 was 80.3%. Data obtained from: Ministry of Education (2018). Student Loan Scheme Annual Report Data Tables 2018 (Table SLS 14). Available: https://www.educationcounts.govt.nz/publications/tertiary\_education/annual/student-loan-scheme-annual-report-2018
- <sup>3</sup> Ministry of Education (2018). Ibid. (Table SLS29). Note: Bachelor level includes people studying at graduate certificate and diploma level. The data is for all leavers with qualifications at these levels, not university graduates only.
- <sup>4</sup> Ministry of Education (2018). Ibid. (Table: SLS47). Refer to notes in endnote 3.
- <sup>5</sup> Belfield, C., Britton, J., Dearden, L. & Erve, L. (2017). Higher Education Funding in England: past, present and options for the future. Institute of Fiscal Studies. Available: https://www.ifs.org.uk/publications/9334. Belfield, C., Britton, J., Dearden, L. & Erve, L. (2017). Higher Education finance reform: Raising the repayment threshold to £25,000 and freezing the fee cap at £9,250. IFS Briefing note BN217. Available: https://www.ifs.org.uk/publications/9964
- <sup>6</sup> Reserve Bank of New Zealand (2018). Household balance sheet (\$M) – C22. Available: https://www.rbnz.govt.nz/statistics/c22
- <sup>7</sup> Ministry of Education (2018). Ibid. (Table: SLS47).
- <sup>8</sup> Callender, C. & Mason, G. (2017). Does student loan debt deter participation in higher education: new evidence from England. *The ANNALS of the American Academy of Political and Social Science*, 671(1), 20–48. Harrison, N. & Agnew, S. (2016). Individual and social influences on students' attitudes to debt: a cross-national path analysis using data from England and New Zealand. *Higher Education Quarterly*, 70(4), 332-353.
- <sup>9</sup> Johnson, A., Howden-Chapman, P & Eaqub, S. (2018). A stocktake of New Zealand's housing. Available: https://www.beehive.govt.nz/sites/default/files/2018-02/A%20Stocktake%20 Of%20New%20Zealand%27s%20Housing.pdf
- <sup>10</sup> The New Zealand Union of Students' Associations (NZUSA). Income and Expenditure Survey 2017. Available: https:// d3n8a8pro7vhmx.cloudfront.net/students/ pages/194/attachments/original/1491392091/ Income\_\_\_Expenditure\_Report\_2017\_\_for\_ online\_publish\_.pdf?1491392091

- <sup>11</sup> Studies that find a negative impact of student loan debt on home ownership include: Mezza, A. A., Ringo, D. R., Sherlund, S. M. and Sommer, K. (2016). On the Effect of Student Loans on Access to Homeownership. Finance and Economic Discussion Series, 2016-10. Washington: Board of Governors of the Federal Reserve System. Lew, I (2015). Student loan debt and the housing decisions of young households. Joint Center for Housing Studies of Harvard University. Research Brief, November 2015. Andrew, M. (2010). The Changing Route to Owner Occupation: The Impact of Student Debt. Housing Studies, 25(1), 39-62. Studies that fail to find a relationship include: Marks, G. N. (2009). The social effects of Australian Higher Education Contribution Scheme (HECS). Higher Education, 57(1), 71-84. Houle, J. N. & Berger, L. (2015). Is Student Loan Debt Discouraging Homeownership among Young Adults? Social Science Review, 89(4), 589-621.
- <sup>12</sup> Dynarski, S. M. (2016, p.3). The dividing line between haves and have-nots in home ownership: Education, not student debt. *Evidence Speaks Report*, 1(17), May 3. Available: https://www.brookings.edu/wp-content/uploads/2016/07/home-ownership-FINAL2b.pdf
- <sup>13</sup> Gicheva, D. (2011). In debt and alone? Examining the causal link between student loans and marriage. University of North Carolina: Department of Economics Working Paper. Velez, E., Cominole, M. & Bentz, A. (2018). Debt burden after college: the effect of student loan debt on graduates' employment, additional schooling, family formation, and home ownership. *Education Economics*, 27(2), 186-206.
- <sup>14</sup> Bozick, R. and Estacion, A. (2014). Do student loans delay marriage? Debt repayment and family formation in young adulthood. *Demographic Research*, 30 (696), 1865-1891. Addo, F. R. (2014). Debt, Cohabitation, and Marriage in Young Adulthood. *Demography*, 51(5), 1677-1701. Nau, M., Dwyer, R. E. and Hodson, R. (2015). Can't Afford a Baby? Debt and Young Americans. *Research in Social Stratification and Mobility*, 42 (2015), 114–122. Velez et. al. (2018). Op. cit.
- <sup>15</sup> The New Zealand Union of Students' Associations (NZUSA). Op. cit.
- <sup>16</sup> Rothstein, J. and Rouse, C.E. (2011). Constrained after college: student loans and early career occupations choice. *Journal of Public Economics*, 95(1-2), 149-163. Sieg, H. & Wang, Y. (2018). The impact of student debt on education, career, and marriage choices of female lawyers. *European Economic Review*, 109, 124-147. Luo, M. & Mongey, (2016). Student debt and initial labor market decisions: Search,

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- <sup>17</sup> Rothstein, J. and Rouse, C.E. (2011). Ibid.
- <sup>18</sup> Ambrose, B. W., Cordell, L. and Ma, S. (2015). The Impact of Student Loan Debt on Small Business Formation. Available: https://ideas.repec.org/p/fip/fedpwp/15-26.html. Krishnan, K. and Wang, P. (2015). The Cost of Financing Education: Can Student Debt Hinder Entrepreneurship? *Northeastern University*, D'Amore-McKim School of Business Research Paper, 2015.
- <sup>19</sup> Universities New Zealand (2018). Achieving Parity for Māori and Pasifika – the University Sector View. Available: https://www. universitiesnz.ac.nz/sites/default/files/ UNZ%20Parity%20Discussion%20Paper%20 One%20%28Aug%202018%29.pdf
- <sup>20</sup> Mahoney, P. (2014). The outcomes of tertiary education for Māori graduates. Ministry of Education. Mahoney, P. (2014). The outcomes of tertiary education for Pasifika graduates. Ministry of Education.
- <sup>21</sup> Britton, J., Dearden, L., Shephard, N. & Vignoles, A. (2019). Improving Access to University Enough? Socio-Economic Gaps in the Earnings of English Graduates. *Oxford Bulletin of Economics and Statistics*, 81(2), 328-368.
- <sup>22</sup> McMahon, W.W. (2009). Higher Learning, Greater Good: The Private and Social Benefits of Higher Education. Baltimore: Johns Hopkins University Press.
- <sup>23</sup> Universities New Zealand (2016). Press Release – 16 February 2016: A Degree is a smart investment. Available: https://www. universitiesnz.ac.nz/latest-news-andpublications/degree-smart-investment.
- <sup>24</sup> The apparent difference between the figures by UNZ and OECD is explained by differences in methodology, specifically the baseline used. UNZ values are compared against someone with no post-school qualifications, while OECD figures are compared against someone with upper-secondary school qualifications.
- <sup>25</sup> OECD (2018). *Education at a Glance 2018: OECD Indicators*, OECD Publishing, Paris. Refer to Table A5.3a and Table A5.3b.
- <sup>26</sup> Acemoglu, D. (2002). Technical change, inequality and the labor market. *Journal of Economic Literature*, Vol.XL (March 2002), 7-72.
- <sup>27</sup> World Bank (2019). *The Changing Nature of Work. World Development Report 2019.* Available: http://www.worldbank.org/en/publication/wdr2019

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