Building on strengths: Computing and IT

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These results are not official statistics. They have been created for research purposes from the Integrated Data Infrastructure (IDI) and Longitudinal Business Database (LBD) which are carefully managed by Stats NZ. For more information about the IDI or LBD please visit https://www.stats.govt.nz/integrated-data/.

The results are based in part on tax data supplied by Inland Revenue to Stats NZ under the Tax Administration Act 1994 for statistical purposes. Any discussion of data limitations or weaknesses is in the context of using the IDI for statistical purposes, and is not related to the data's ability to support Inland Revenue's core operational requirements.

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Abstract

This is one of 15 "specialty profiles" associated with the report "Building on strengths: Educational pathways that benefit Māori students" (2023). In this specialty profile we investigate the pathways through education associated with strong labour market outcomes for Māori men and women who showed an interest in and aptitude for Computing and Information Technology (IT) at NCEA level 2.

We find these women tend to do well relative to other women in the specialty if they gain a qualification at level 7 or above, particularly if they study Management and Commerce, Information Technology, Health, or Engineering and Related Technologies. Engineering and Related Technologies at levels 4 to 6 also leads to strong outcomes, but the other three fields at this level do not. Society and Culture and Creative Arts are popular fields of study for women, but they do not appear to yield strong labour market outcomes. Nonetheless, there may be good non-financial reasons for students to study in these fields. Industry training is an uncommon but lucrative pathway for women, especially at higher levels. Early career experience working for central government, in the Public Administration and Safety industry, or in the Education and Training industry appears beneficial for women.

We find limited evidence qualifications at level 7 or above benefit men, because higher study causes a long delay in entering work and is associated with only slightly higher earnings. Rather, men tend to do well compared with other men in the specialty if they gain industry training at level 4 or above. Men who study Engineering and Related Technologies at any level tend to do well, especially if they gain a qualification. Men who gain a bachelor's degree in Management and Commerce also do well. However, men who study Society and Culture at any level or Information Technology at levels 4 to 6 tend to have weak savings. Finally, men who gain early work experience in the Professional, Scientific, and Technical Services industry tend to enjoy success in the labour market.

It is notable that both men and women do very well comparatively if they study Engineering and Related Technologies or do higher level industry training, but these are both much more common for men than for women. Possible reasons for this gender disparity are discussed in the main report.

JEL codes

I20, I30, I23, I26, J15, J24

Keywords

education, Māori, tertiary study, New Zealand education system, employment, labour market

Contents

Tables and Figures

1. Introduction

This report details the pathways through education that are associated with strong labour market outcomes for Māori students in Aotearoa New Zealand who showed an interest and aptitude in Computing and Information Technology (IT) at NCEA level 2. It is one of 15 "specialty profiles" associated with the main report "Building on strengths: Educational pathways that benefit Māori students" (2023). The goals of the overall project are to support the development of policy that improves Māori outcomes and inform advice that will help Māori students choose beneficial pathways through education. See the main report for a description of the project and detailed explanations of the study population, outcomes, and pathway variables.

The first measure of labour market success we consider is cumulative savings, which measures the financial resources the students could have accumulated since gaining NCEA level 2.[1] This captures the opportunity cost of higher education as well as any earnings benefit it provides within the 12-year window after NCEA level 2 that we study. However, students who gain higher qualifications may have low cumulative savings even 12 years after NCEA level 2, but high annual income. This would mean they have the potential to rapidly increase their cumulative savings in subsequent years. We thus also consider annual savings, which captures the rate at which students' financial resources could be increasing each year.

The remainder of this report proceeds as follows. Section 2 describes the backgrounds and labour market outcomes of students who specialised in Computing and IT. Section 3 shows the levels of highest qualification that are associated with strong outcomes. Section 4 shows the fields of study at each level of education that are associated with strong outcomes. Section 5 investigates the self-employment of these students and its relationship to savings. Section 6 shows the pathways outside education that are associated with strong outcomes. Finally, Section 7 summarises the pathways through education and life that look likely to lead to strong labour market outcomes for men and women who specialised in Computing and IT at school.

2. Overview of the students who specialised in Computing and IT

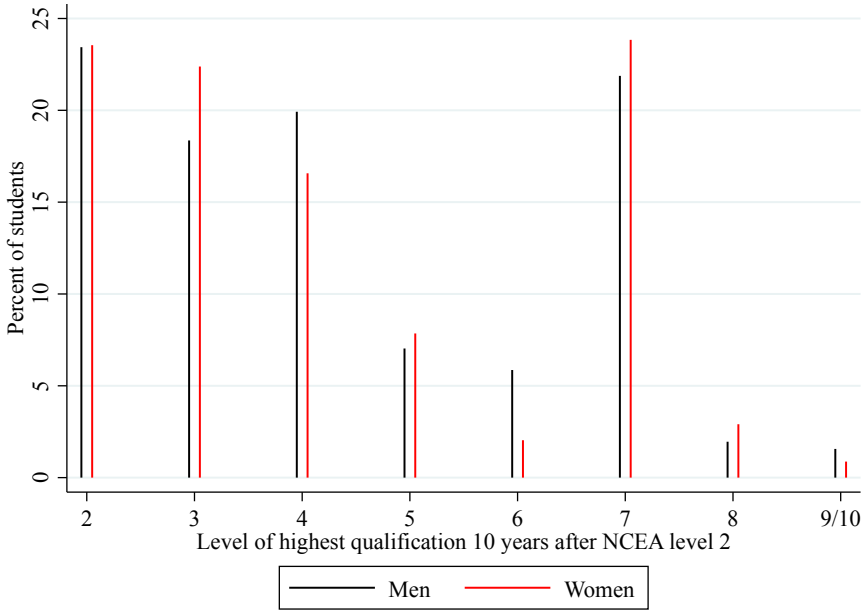
Māori students who specialised in Computing and IT are defined as students who showed strong results in NCEA level 2 standards in computing, computer programming, information processing,

[1] The overall magnitude of savings is sensitive to the assumptions we use to calculate it, so the dollar values should not be taken too seriously. However, differences between students are relatively robust, so more weight can be put on the comparisons between students with different characteristics.

or information technology.[2] The sample is limited to those who achieved NCEA level 2 between 2004 and 2007 when aged 16 to 19, and who were not in the top 10% of their year academically. A total of 1,809 students specialised in Computing and IT, 57% of whom are female, and 21% of whom gained NCEA level 2 at a tertiary institute.

Figure 1 shows the highest level of qualification attained within 10 years of gaining NCEA level 2 by men and women who specialised in Computing and IT. Nearly a quarter of women gain a highest qualification at level 7 (which includes bachelor's degrees and other qualifications at a similar level), yet almost as many end their education at each of level 2 and level 3. Men are almost as likely as women to gain levels 7 and 2, but less likely to gain level 3. Twenty percent of men and 17% of women gain a level 4 highest qualification. Under 5% of both men and women attain qualifications above level 7.

Figure 1: Distribution of level of highest qualification



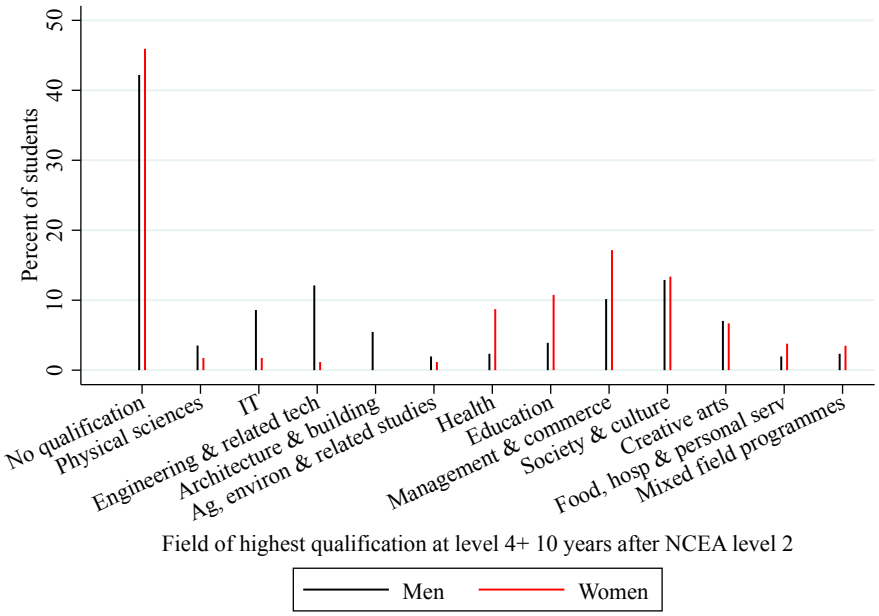
Notes: This figure shows the highest level of qualification gained by men and women who specialised in Computing and IT. To be counted, qualifications must have been gained within 10 years of achieving NCEA level 2.

Figure 2 shows the distribution across fields of study of the highest qualifications of men and women who specialised in Computing and IT at level 2. Among those who gain qualifications at level 4 or above, the most common field of study for women is Management and Commerce, with around 17% of women gaining a highest qualification at level 4 or above in this field. Society and Culture is next most common field for women and most common field for men (around 13%

[2] Not all of these subjects are necessarily available to study at level 2.

for each). Engineering and Related Technology is the second most common field in which men gain a highest qualification at level 4 or above (12%), but is studied by very few women. Management and Commerce and the male-dominated field of IT are also common fields of qualification for men, whereas the female-dominated fields of Education and Health are common for women.

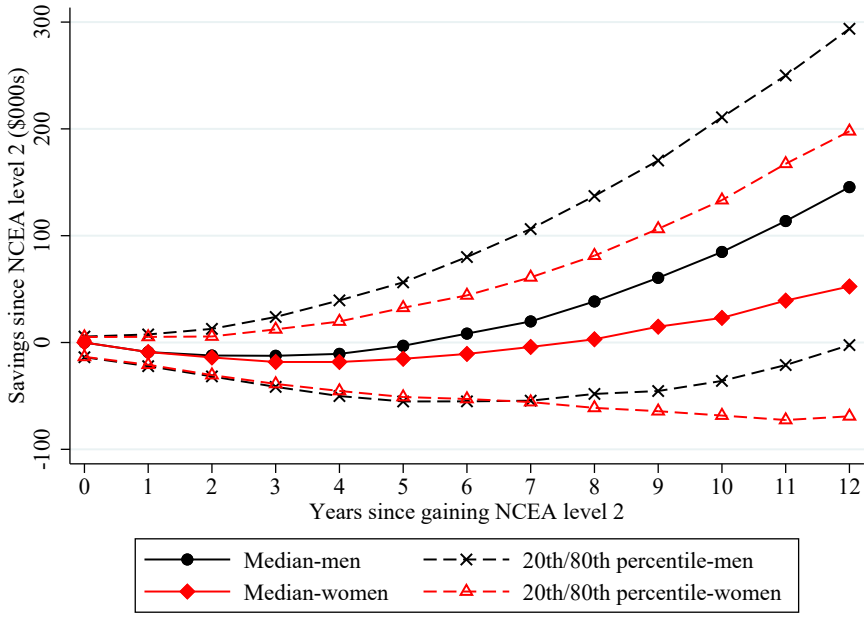
Figure 2: Distribution of field of highest qualification



Notes: This figure shows the percentage of students whose highest qualification (at level 4 or above) is in each field among those who specialised in Computing and IT. Students may be included in more than one field if they have multiple highest qualifications at the same level. Those whose highest qualification is below level 4 are included in the "No qualification" category. To be counted, qualifications must have been gained within 10 years of achieving NCEA level 2. Small but non-zero values may be presented as zeros for confidentiality reasons.

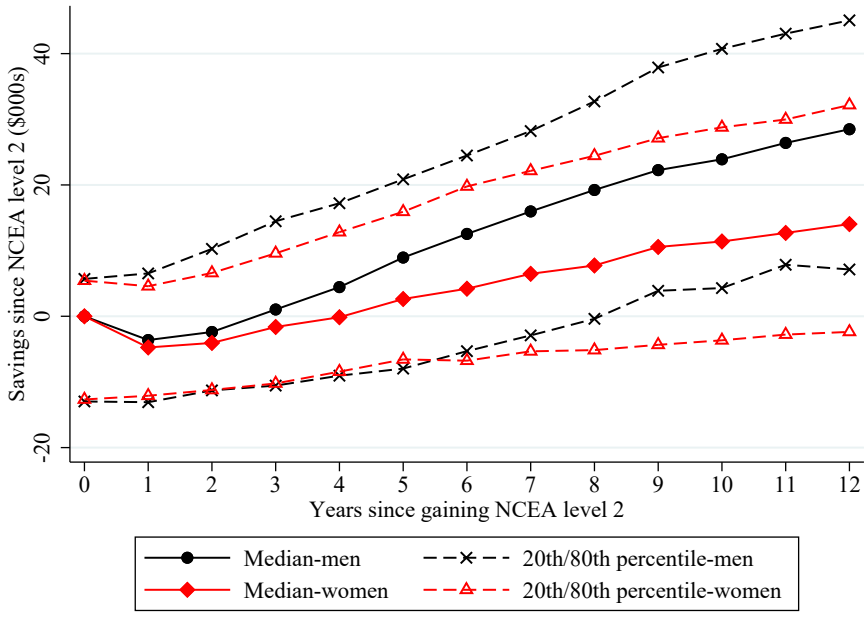
Figure 3 shows the evolution over time of the distribution of cumulative savings for men and women who specialised in Computing and IT. Median cumulative savings are negative for the first four years after NCEA level 2 for men and the first seven years for women, indicating any earnings the median students have over these years are insufficient to cover their estimated living costs and tertiary fees. By the time women's median cumulative savings become positive in year 8, men's are already around $40,000, and the two continue to diverge. By 12 years after NCEA level 2, median men's savings are almost $150,000, whereas women's are only $50,000. Men at the 80th percentile of the earnings distribution do better than women, as do men at the 20th percentile, though this wage gap opens only in year 8.

Figure 3: Cumulative savings over time by gender



Notes: This figure shows how the median, 20th percentile, and 80th percentile of cumulative savings since gaining NCEA level 2 change over time for men and women who specialised in Computing and IT.

Figure 4: Annual savings over time by gender



Notes: This figure shows how the median, 20th percentile, and 80th percentile of annual savings change over time for men and women who specialised in Computing and IT.

Figure 4 similarly shows how the distribution of annual savings changes over time for men and women who specialised in Computing and IT. It shows the median man's annual savings begin to pull ahead of the median woman's immediately after NCEA level 2, and by year 12 are $15,000 higher. The large annual savings gap in year 12 suggests men's cumulative savings in later years will continue to pull further ahead of women's.

3. How do savings vary with level of qualifications?

This section shows how the cumulative and annual savings of students who specialised in Computing and IT vary with their highest level of qualification.

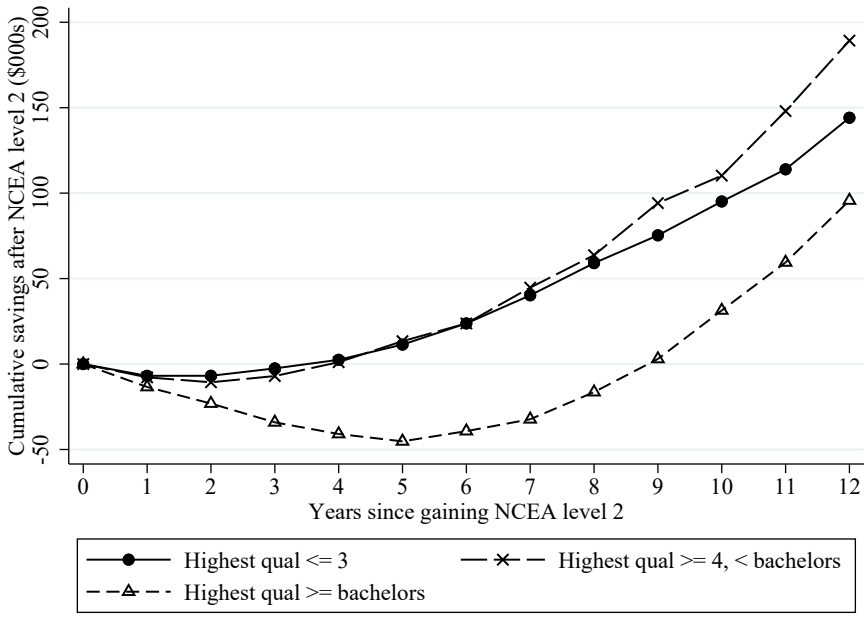
3.1 Cumulative and annual savings by level of highest qualification

Figures 5 and 6 show how median cumulative and annual savings change over time after gaining NCEA level 2 for men and women who achieve different levels of highest qualification. Figure 5 shows men with low qualifications (level 2 or 3) initially have the highest annual savings of all three qualification types. However, they are overtaken by men with intermediate qualifications (at least level 4 but below bachelor's level) around year 4, and subsequently fall progressively further behind. This results in a $45,000 cumulative savings gap by year 12. Men with high qualifications (bachelor's level or higher) have the lowest annual savings until 8 years after NCEA level 2, because their studies delay their entry into the labour market. Their annual savings overtake those of low qualified men in year 8, and those of intermediate qualified men in year 11. In year 12, their annual saving are barely ahead of those of intermediate-qualified men, and their cumulative savings are nearly $95,000 lower. From a purely financial standpoint, the returns from the bachelor's level qualifications might not make up for the foregone earnings in the long run.

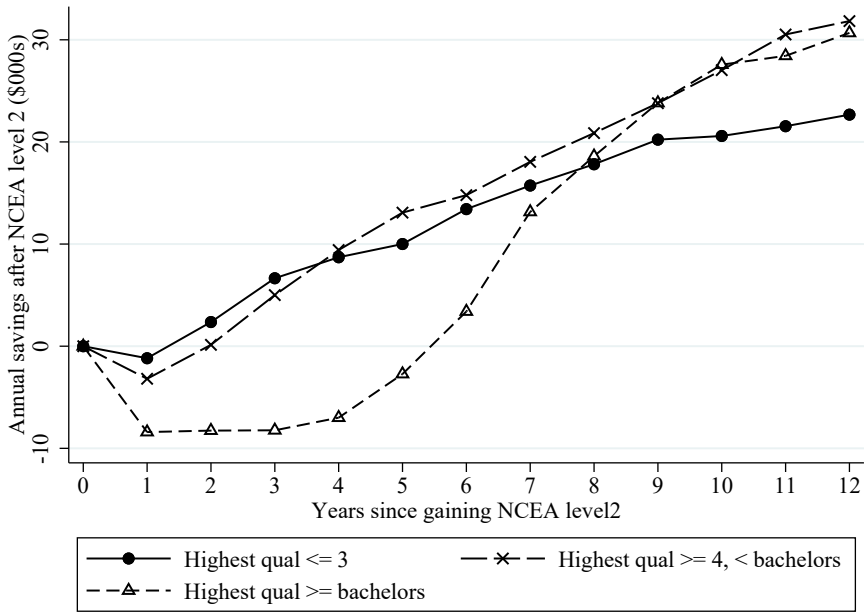
Figure 6 reveals quite a different story for women to the story for men. For the first five years after NCEA level 2, women's annual savings are inversely related to the level of highest qualification they will attain, and women with low qualifications develop a cumulative savings advantage over those who are gaining higher qualifications. However, around year 5 the annual savings of women with high qualifications grow sharply as these women complete their studies and enter the labour force. Their annual savings quickly overtake those of less qualified women, and by year 12 are $13,000 ahead. This results in the most qualified women overtaking less qualified women in terms of cumulative savings in year 9, and acquiring cumulative savings $55,000 higher than those of less qualified women by year 12.

Figure 5: Savings over time by level of highest qualification for men

Panel A: Cumulative savings



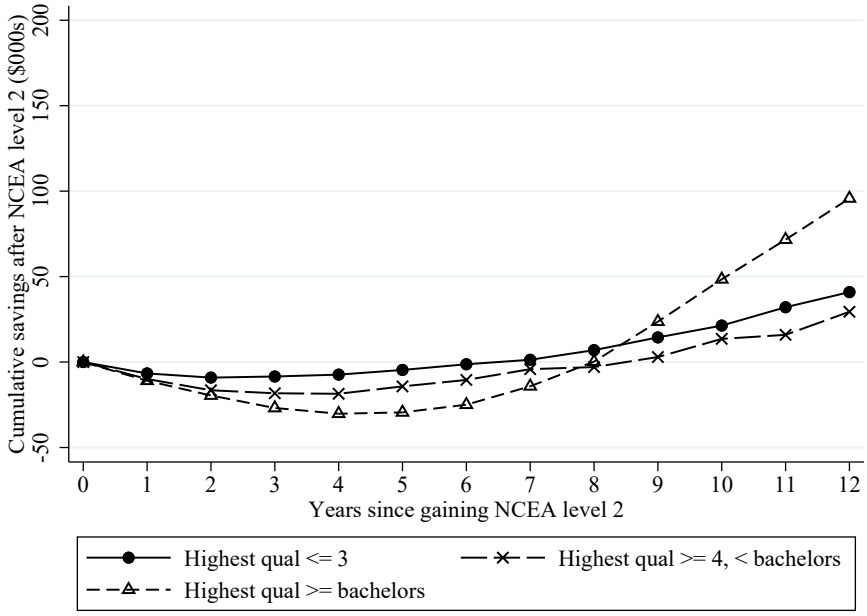
Panel B: Annual savings



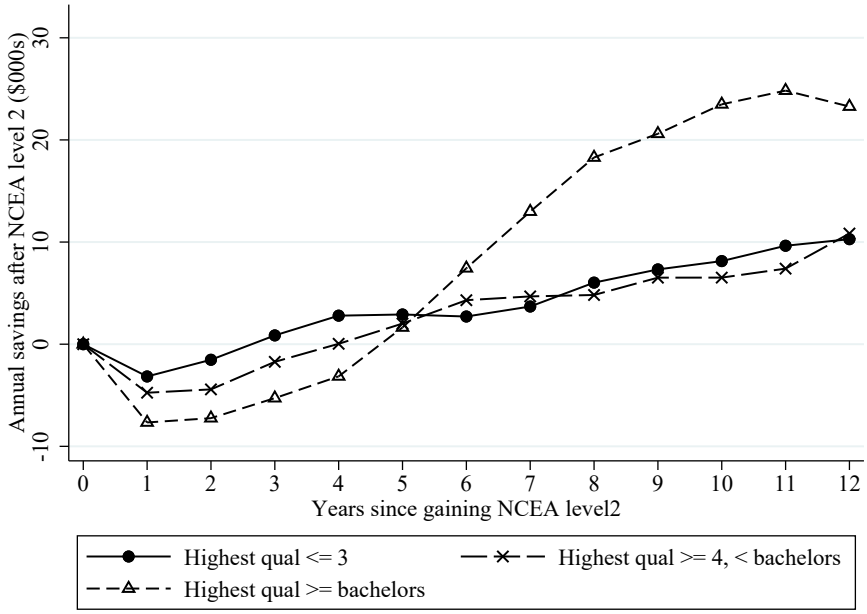
Notes: This figure shows changes over time in the median of cumulative savings since gaining NCEA level 2 (Panel A) and median of annual savings (Panel B) for men who specialised in Computing and IT and achieved different levels of highest qualification. Qualifications are included if they were gained within 10 years of NCEA level 2.

Figure 6: Savings over time by level of highest qualification for women

Panel A: Cumulative savings



Panel B: Annual savings

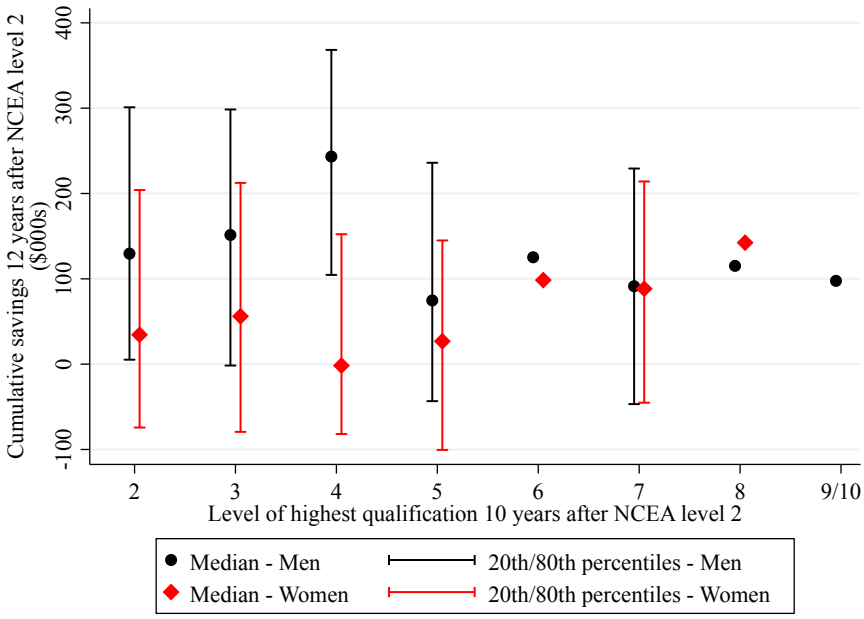


Notes: This figure shows changes over time in the median of cumulative savings since gaining NCEA level 2 (Panel A) and median of annual savings (Panel B) for women who specialised in Computing and IT and achieved different levels of highest qualification. Qualifications are included if they were gained within 10 years of NCEA level 2.

Taken together, these findings show men who specialised in Computing and IT tend to do better in the labour market if they leave education without gaining a bachelor's degree, but women with a bachelor's degree do substantially better than women without.

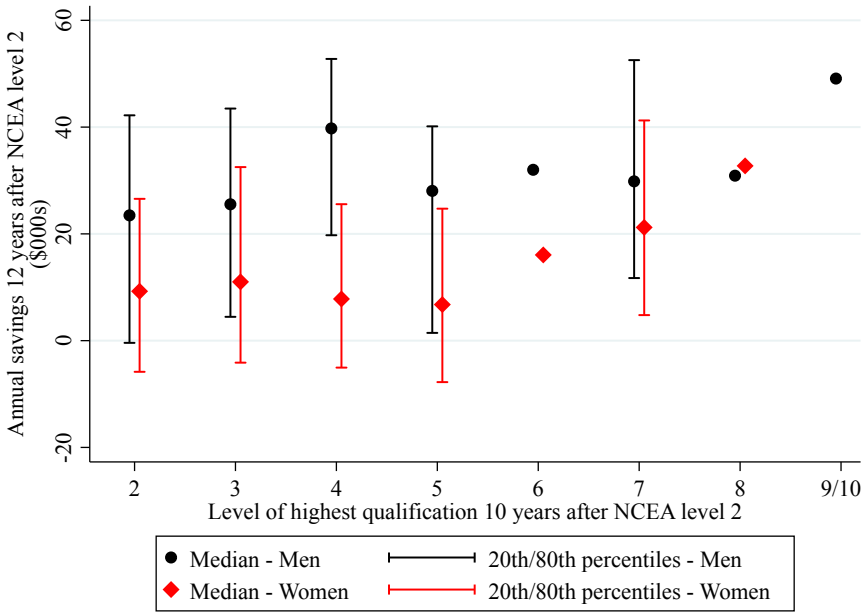
Figures 7 and 8 explore the distribution of cumulative and annual savings after 12 years for men and women with this specialty by disaggregated level of highest qualification. They show women's annual savings benefit from each level of qualification 6 and above. Their cumulative savings are similar with level 6 or 7 qualifications, and higher with level 8 or above. Men's savings may actually be strongest for those with level 4 qualifications (though the few men with level 9 or 10 qualifications have higher annual savings).

Figure 7: Cumulative savings 12 years after NCEA level 2 by gender and level of highest qualification



Notes: This figure shows the median and 20th and 80th percentiles of cumulative savings 12 years after NCEA level 2 of men and women who specialised in Computing and IT by the detailed level of their highest qualification. Qualifications are included if they were gained within 10 years of NCEA level 2. Note the median is plotted if the number of observations is 10 or larger, and the 20th and 80th percentiles are plotted if the number of observations is 50 or larger.

Figure 8: Annual savings 12 years after NCEA level 2 by gender and level of highest qualification



Notes: This figure shows the median and 20th and 80th percentiles of annual savings 12 years after NCEA level 2 of men and women who specialised in Computing and IT by the detailed level of their highest qualification. Qualifications are included if they were gained within 10 years of NCEA level 2. Note the median is plotted if the number of observations is 10 or larger, and the 20th and 80th percentiles are plotted if the number of observations is 50 or larger.

3.2 Qualification levels of top cumulative and annual savers

In this section we categorise men and women who specialised in Computing and IT by whether they are top cumulative savers or top annual savers, and show the level of qualifications and types of education providers attended that are associated with being a top saver. A student is considered a top cumulative (or annual) saver if their cumulative (annual) savings 12 years after NCEA level 2 are in the top 20% of cumulative (annual) savings for Māori students of their gender who specialised in Computing and IT. Note the comparisons in this section are all with other students of the same gender in the same specialty, so being a top saver means a student does well in the labour market compared with similar students. This can be but is not necessarily the same as doing well in absolute terms.

Appendix Tables 1 and 2 show for men and women respectively the characteristics associated with being a top cumulative saver or top annual saver. The left-hand side of each table describes each characteristic. Column (1) gives the percentage of students who are *not* top cumulative savers who have the characteristic, and column (2) gives the percentage of students who *are* top savers who have the characteristic. Column (3) is the odds ratio, defined as the proportion of students *with* the characteristic who are top cumulative savers divided by the

proportion of students *without* the characteristic who are top savers. Thus an odds ratio of 1 means the probability of being a top cumulative saver is unrelated to whether a student has the characteristic, an odds ratio above 1 means a student is *more* likely to be a top cumulative saver if they have the characteristic, and an odds ratio below 1 means a student is *less* likely to be a top cumulative saver if they have the characteristic. Asterisks on the odds ratio indicate whether it is statistically significantly different to 1. Columns (4) to (6) replicate columns (1) to (3) but for annual instead of cumulative savings.

Appendix Tables 1 and 2 explore the characteristics top savers are more likely to have, but they consider only one characteristic at a time. Appendix Tables 3 and 4 use regressions to explore for men and women respectively the relationship between having various characteristics and being a top saver, controlling for students' backgrounds and a selection of other characteristics. The first four columns of each of Appendix Tables 3 and 4 investigate the correlates of being a top cumulative saver, while the last four columns look at being a top *annual* saver. On each side of the tables, the first column controls for background characteristics only, the second adds level of highest qualification of any type, and the third distinguishes highest qualifications by whether they are industry training qualifications or not. In the third column, the comparison group for all the level of qualification variables is students whose highest qualifications are at level 2 and are not industry training qualifications. To compare, for instance, the probability a student with a level 4 industry training qualification is a top saver with the probability a comparison group student is a top saver, the coefficients on "highest qualification is level 4" and "highest industry training qualification is level 4" are added together. The fourth column on each side of the tables does not explicitly distinguish industry training qualifications from other types of qualifications, but controls for level of highest qualification and the types of tertiary institute attended. Here the coefficients on type of tertiary institute attended should be interpreted as conditional on students' background characteristics and level of highest qualification. The remainder of this section discusses the results from Appendix Tables 1 to 4.

Less than half of the students who specialised in Computing and IT achieve a level 3 NCEA certificate within 5 years of NCEA level 2, though the proportion who achieve a level 3 NCEA certificate is slightly higher among women than among men. The bivariate analysis shows women who achieve level 3 are significantly more likely than women who don't to be top cumulative savers and more than twice as likely to be top annual savers. Men who achieve level 3 are 58% more likely to be top annual savers than men who don't.

In the regressions that control for background characteristics, men with level 4 qualifications are more likely to be top cumulative savers than are similar men with any other

level of highest qualification. Men with level 4 or level 8 or above qualifications are the most likely to be top annual savers. However, qualifications at level 8 or above are associated with a very low probability of being a top cumulative saver. Compared with men with only level 2 qualifications, men with level 7 qualifications are insignificantly less likely to be top cumulative savers and weakly significantly more likely to be top annual savers. The regressions for women show that those with level 7 qualifications are more likely to be top annual savers than similar women with lower qualifications. Women with level 8 or above qualifications are even more likely. Women with level 4 to 6 qualifications are less likely than similar women with other levels of highest qualification to be top *cumulative* savers.

Industry training is a relatively common pathway taken by men: 37% of men complete some industry training credits and 24% gain an industry training qualification at level 2 or above. Both the bivariate analysis and regressions reveal this is highly beneficial for them, particularly in terms of cumulative savings but also in terms of annual savings. This is true regardless of the level of training and whether they successfully complete any industry training qualifications. Men who take any industry training are 2.3 times as likely as men who don't to be top cumulative savers and 1.5 times as likely to be top annual savers. This relationship holds in the regression analysis, which shows men with level 4 to 6 industry training qualifications are more likely to be top cumulative and annual savers than men with the same background with any other level or type of qualification. Men with level 3 industry training qualifications are also more likely to be top savers than are similar men with level 2 non-industry training qualifications. A more modest 19% of women gain any industry training credits, and less than 5% of women gain an industry training qualification at level 4 or above. The regressions show that women who do gain such a qualification are much more likely to be top cumulative and annual savers than are women with the same background with any other level or type of highest qualification.

In terms of the types of tertiary institute attended, the regressions show that men and women who attend industry training organisations are more likely than those who don't to be top cumulative and annual savers, conditional on their backgrounds and level of highest qualification. Men and women who attend wānanga are less likely to be top cumulative and annual savers. Men who attend universities and women who attend private training establishments are also less likely to be top cumulative savers.

Finally, the bivariate analysis shows attending a school or tertiary institute outside the main urban areas is not associated with a lower probability of being a top saver for men but

women who attend a school or tertiary institute in a minor urban area (which 33% do) are less likely than other women to be top savers, particularly top cumulative savers.

In addition to controlling for students' pathways through education, the regressions in Appendix Tables 3 and 4, described at the start of this section, control for various student background characteristics (the first five controls presented at the top of the table). They show men with high grades, as measured by percentile score, are much less likely to be top cumulative savers. Much of this is explained by the fact they tend to gain high level qualifications and not do industry training. In contrast, women with high grades are significantly more likely to be top annual savers, although over a third of this relationship is explained by the level and type of qualifications they gain. Men who specialised at level 2 in multiple fields are more likely to be top annual savers, and women from higher decile schools are more likely to be top cumulative and annual savers.

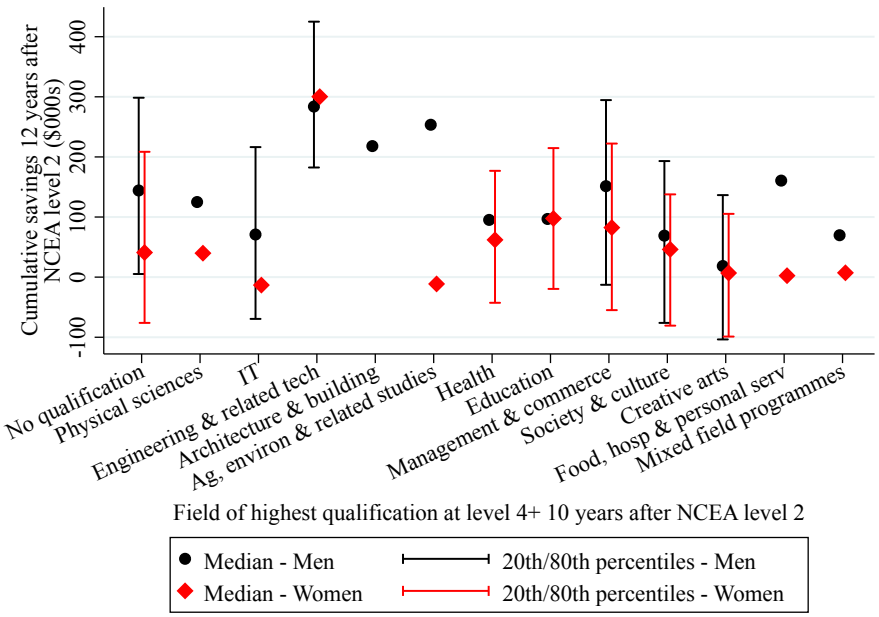
4. How do savings vary with fields of study in higher education?

This section shows how the cumulative and annual savings of students who specialised in Computing and IT vary with the fields in which they study at various levels and gain qualifications.

4.1 Cumulative and annual savings by fields of study

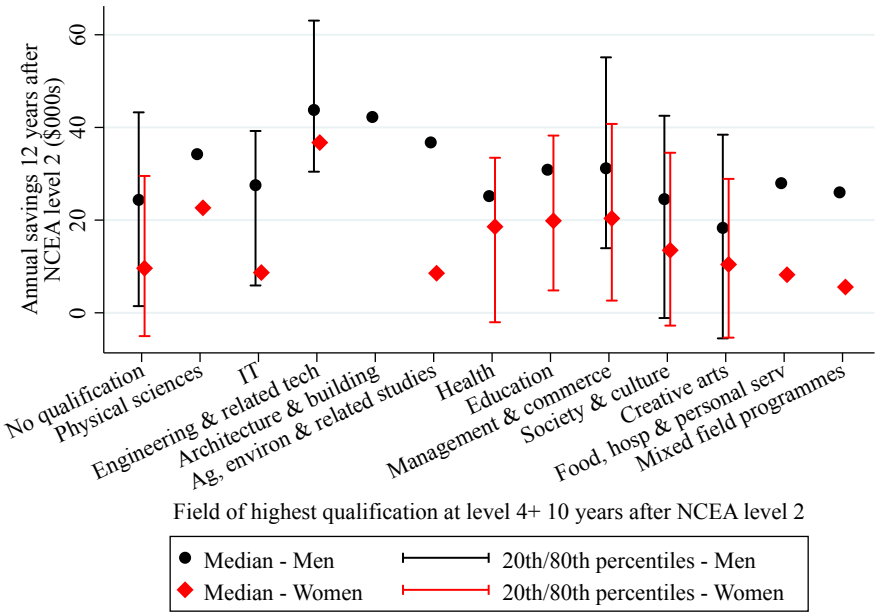
Figure 9 shows how the cumulative savings after 12 years differ for men and women whose highest qualifications at level 4 or above are in different fields. Figure 10 shows the same but for annual rather than cumulative savings. As Figure 2 showed, the highest proportion of men and women have no qualification at level 4 or above. Such men have cumulative savings in the middle of the range, around $145,000 at the median, compared with around $40,000 for women, but relatively low annual savings of $25,000 for men and $10,000 for women.

Figure 9: Cumulative savings 12 years after NCEA level 2 by gender and field of highest qualification



Notes: This figure shows the median and 20th and 80th percentiles of cumulative savings 12 years after NCEA level 2 of men and women who specialised in Computing and IT by the field of their highest qualification at level 4 or above gained within 10 years of NCEA level 2. "No qualification" includes qualifications at level 3 and below. The median is plotted if the number of observations is 10 or larger, and the 20th and 80th percentiles are plotted if the number of observations is 50 or larger.

Figure 10: Annual savings 12 years after NCEA level 2 by gender and field of highest qualification



Notes: This figure replicates Figure 9 but presents annual savings rather than cumulative savings.

Of the four most common fields in which women gain qualifications at level 4 or above, Health, Education, Management and Commerce, and Society and Culture, Society and Culture offers the lowest cumulative and lowest annual savings ($45,0000 and just under $15,000 respectively). However, both offer higher savings than those offered by no qualifications at this level. The field of Health offers women the second lowest cumulative and annual savings of the four. Overall, the field that offers women both the highest cumulative and annual savings by a considerable margin is Engineering and Related Technologies. The few women who gain at least a level 4 qualification in this field have median cumulative savings of $300,000, which is well above the 80th percentile of women's savings in any other field and is similar to the median for men in the field. Their median annual savings are over $35,000.

Engineering and Related Technologies also offers men the highest median cumulative and annual savings (nearly $285,000 and nearly $45,000 respectively), but for them it is a common field. Architecture and Building is another field that offers men strong savings. Management and Commerce offers cumulative savings barely above those offered by no qualifications at this level, but annual savings of over $30,000. Society and Culture is the most common field of higher study for men. It offers men cumulative and annual savings around the middle of the range. Creative Arts offers both men and women the lowest cumulative and annual savings of the commonly studied fields.

4.2 Fields of higher study of top cumulative and annual savers

In this section we again categorise men and women who specialised in Computing and IT by whether they are top cumulative savers or top annual savers, and show how the fields in which they study and gain qualifications are associated with being a top saver of either kind. As in Section 3.2, we conduct both bivariate and regression analysis. Again, being a top saver means doing well compared with other students of the same gender in the same specialty, and is not a statement about how well the student is doing in absolute terms.

4.2.1 Fields of study at school level

We first consider fields of study at NCEA levels 2 and 3. This is school-level study, but may be done either at school or at a tertiary institute after the student leaves school. The bivariate analysis discussed in this section is presented in Appendix Tables 5 and 6, and the regressions are in Appendix Tables 11 and 12. The first three columns in each regression table explore the correlates of being a top cumulative saver, and the other three columns look at being a top annual saver. On each side of the table, the first column controls only for student background characteristics (high school decile, percentile score etc) and fields of study at level 3. Here the

coefficient on passing 14 credits in a subject at level 3 compares students with the same background and who passed 14 credits in all the same level 3 subjects except for that one. The coefficient can be interpreted as the difference in probability of being a top saver related to that one field in which they differ.

In many cases, the subjects in which a student passes 14 credits at level 3 affect the student's subsequent pathway through education, such as their fields of study at higher levels, and these in turn affect their ability to save. In the first column, all such impacts are captured by the coefficients on the variables for passing credits in level 3 subjects. In subsequent columns, we add controls for either fields of higher study or fields of higher qualification. In these columns, the coefficients on level 3 subject credits can be interpreted as differences in the probability of being a top saver based on passing the level 3 credits in that field, given the field the student went on to study or gain qualifications in.

In simple bivariate comparisons, men who pass at least 14 credits at level 2 in English or Humanities are more likely than men who don't to be top annual savers. Women who pass credits at this level in English, Maths, Humanities, or Science are more likely to be top cumulative and annual savers than women who don't. Men and women who pass at least 14 credits of *achievement* standards in these subjects are similarly more likely to be top annual savers, and such women are also more likely to be top cumulative savers. For men only, level 2 credits in Māori are associated with a lower probability of being a top annual saver.

Passing at least 14 credits at level 3 in any of the more academic subjects is associated with a significantly higher probability of being a top annual saver for men, but the regressions show this is because the students who achieve such credits tend to have stronger backgrounds. Here men who pass credits in Science are weakly less likely to be top cumulative savers than men with the same background and who passed 14 credits in all the same level 3 subjects except for Science. The reason for this could be that students who take such these credits are more likely to go on to higher study in academic fields, which has a large opportunity cost for men and may not increase post-study earnings much. Credits in the more applied fields of the Service Sector, Engineering and Technology, and Manufacturing, Planning, and Construction are positively associated with being a top cumulative and annual saver in the bivariate analysis (significantly in most cases). Service Sector credits are the only one of the three also examined in the regressions, where they are at least weakly positively associated with being a top cumulative saver and being a top annual saver.[3] Both in the bivariate analysis and in the regressions, men who pass credits in Māori are substantially less likely to be top cumulative or annual savers.

[3] The regressions focus on fields of study that are more common among men and women overall.

Although all these students specialised in Computing and IT at level 2, only a third of the men pass at least 14 credits in Computing and IT at level 3. Once we control for student background in the regressions, these men are weakly less likely to be top annual savers.

For women, passing credits in each of the academic fields at level 3 is associated with a higher probability of being a top annual saver in the bivariate analysis. However, English is the only one of these subjects that remains significantly associated with being a top saver in the regressions, where women who take this subject are more likely to be top annual savers than those with the same background and other level 3 fields of study. English is also weakly positively associated with being a top cumulative saver. Similarly to the case for men, Māori credits at level 3 for women are negatively associated with being a top saver. Thirty seven percent of women pass at least 14 credits of Computing and IT at level 3 and, in contrast to the case for men, this is positively associated with being a top cumulative and annual saver, even after controlling for student backgrounds.

4.2.2 Tertiary-level fields of study

In this subsection, we consider fields of study primarily at levels 4 and higher. Study at level 4 and above is tertiary-level study, which is not done at school. Level 7 qualifications include bachelor's degrees and other qualifications at the same level. The qualifications above level 7 are honours degrees, master's degrees, and doctorates, all of which generally involve original research. Note the field categorisations available in the data at this level differ from the categorisations used above for school-level study (levels 2 and 3) above. The bivariate analysis discussed in this section in presented in Appendix Tables 7 to 10, and the regressions are in Appendix Tables 11 and 12.

Columns (2) and (5) in the regression tables control for student background and level 3 fields of study, and also the common fields in which students pass at least 0.5 EFTS of courses at level 4 and above and separately at level 7 and above. The coefficient on each field of study at level 4 and above compares the probability of being a top saver for two students with the same earlier educational history, but one of whom left education after level 3, and the other of whom studied in that field at level 4 to 6. To compare the probability of being a top saver of a student who completed at least 0.5 EFTS of courses in a field at level 7 or above with that of a similar student who left education after level 3, the coefficients on "passed at least 0.5 EFTS at level 4+ in the field" and "passed at least 0.5 EFTS at level 7+ in the field" must be added together. Columns (3) and (6) in the table replace the EFTS controls with controls for qualifications gained. Here the comparison student is someone with the same background and level 3 fields of study, but who left education without gaining a qualification at level 4 or above. As before, to compare

this student with a similar student who gained a qualification at bachelor's level or above in a particular field, the coefficients on "gained qualification at level 4+ in the field" and "gained bachelor's degree+ in the field" must be added together.

Despite these students specialising in Computing and IT at level 2, the most common field of higher study for men is the disparate field of Society and Culture. Nineteen percent of men pass at least 0.5 EFTS of courses in Society and Culture at level 4 or above, and 12% gain a qualification in the field at this level. The bivariate analysis shows men who study in this field are less likely to be top cumulative savers than men who don't. This result holds up in the regressions, where men who study this field are at least weakly less likely to be top cumulative savers than those with the same background and level 3 fields of study who do not study at level 4 or above. Men with qualifications in Society and Culture at levels 4 to 6 are also less likely to be top *annual* savers.

The next most common fields of higher study for men are Engineering and Related Technologies, Information Technology, and Management and Commerce. Fourteen percent of men pass 0.5 EFTS at level 4 or above in each of these fields, though they are more likely to gain a *qualification* at this level in Engineering and Related Technologies (12%) than in Management and Commerce (10%) or Information Technology (8%). Of the three, Engineering and Related Technologies is clearly associated with the strongest savings outcomes. The bivariate analysis shows men who pass 0.5 EFTS in the field at level 4 or above are twice as likely as men who don't to be top cumulative savers and 2.1 times as likely to be top annual savers. This association is even stronger for those who complete a qualification, and remains in the regressions. Men who study Information Technology and Management and Commerce at levels 4 to 6 are less likely to be top cumulative savers than similar men who do not study at above level 3. However, men with a bachelor's degree or higher in Management and Commerce (7% of men) are substantially more likely to be top annual savers.

Women are also most likely to pass 0.5 EFTS at level 4 or above in Society and Culture (26%). Thirteen percent of women gain a qualification in the field at level 4 or above, and 6% gain at least a bachelor's degree. The regressions show women who study or gain qualifications in this field are less likely to be top cumulative savers than women with the same background and level 3 fields but no study above level 3. This is especially the case if they study at a higher level or gain a qualification.

The two fields that are next most common for women are Management and Commerce and Education, in which 20% and 14% respectively pass 0.5 EFTS at level 4 or above. In the regressions, Management and Commerce is associated with a lower probability of being a top

cumulative and annual saver if studied at levels 4 to 6, but a higher probability if studied at level 7 or above. In general, outcomes for a woman who passes EFTS or gains qualifications in Education are not significantly different to those of a similar student who leaves education after level 3, but Education at level 7 and above tends to be more positively associated with being a top saver than Education at levels 4 to 6.

Several fields less commonly studied by women are associated with particularly strong or weak outcomes in the regressions. Information Technology at levels 4 to 6 is negatively associated with being a top saver, but at levels 7 and above is strongly, positively associated with being a top saver. Similarly, Health at levels 4 to 6 is negatively associated with being a top saver, but at levels 7 and above is positively associated. Engineering and Related Technologies is strongly positively associated with being a top saver, especially if studied at a higher level or if qualifications are completed. Creative Arts tends to be negatively associated with being a top saver regardless of level of study.

5. How do savings vary with self-employment?

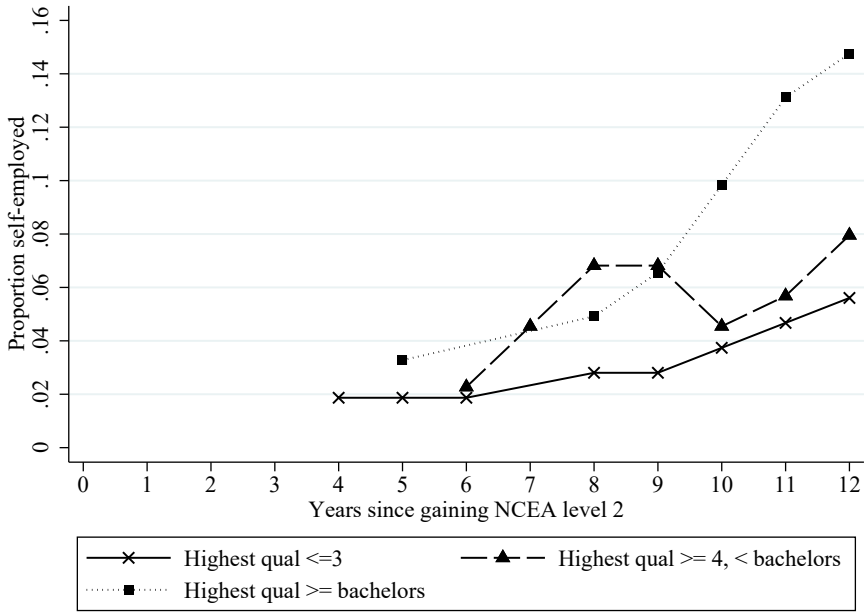
This section first shows how self-employment rates vary over time and by level of highest qualification for students who specialised in Computing and IT. It then shows how cumulative and annual savings differ for those who are ever self-employed.

5.1 Self-employment by level of highest qualification

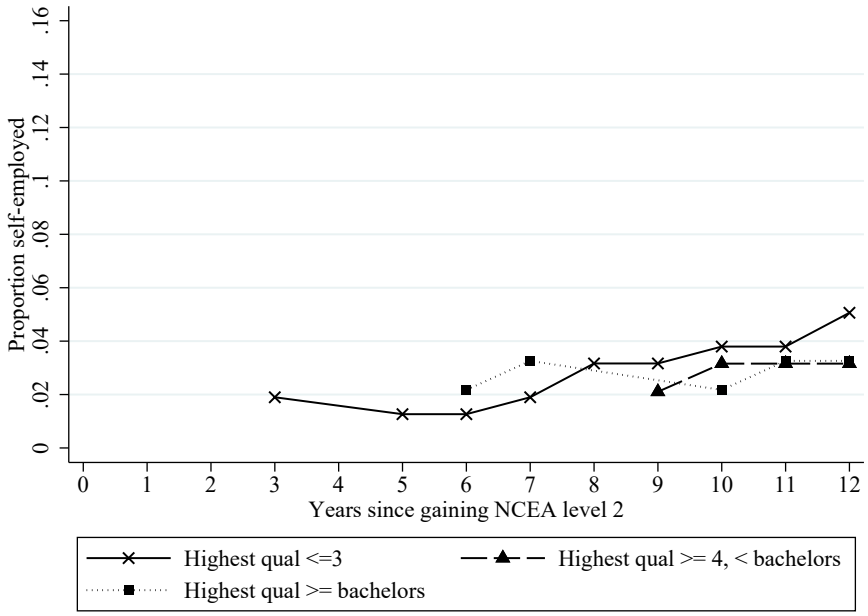
This section shows how the self-employment of students who specialised in Computing and IT varies over time for each level of highest qualification. Figure 11 shows self-employment is higher for men than for women. Men with qualifications at level 4 or above are much more likely than less qualified men to be self-employed, but level of qualification is at best weakly related to self-employment for women. Self-employment rates for men with bachelor's degrees begin to grow later than rates for men with level 4 to 6 qualifications, but by 12 years after NCEA level 2 are substantially higher (nearly 15%) and still growing. The self-employment of women grows only slightly over time, most obviously for women with level 2 or 3 qualifications.

Figure 11: Self-employment over time by highest qualification

Panel A: Men



Panel B: Women



Notes: This figure shows how the proportion of self-employed workers changes over time for men (Panel A) and women (Panel B) who specialised in Computing and IT and achieved different levels of highest qualification. Qualifications are included if they were gained within 10 years of NCEA level 2. Missing values denote self-employed counts so low they must be supressed under Statistics New Zealand's confidentiality rules.

5.2 Cumulative and annual savings by self-employment status

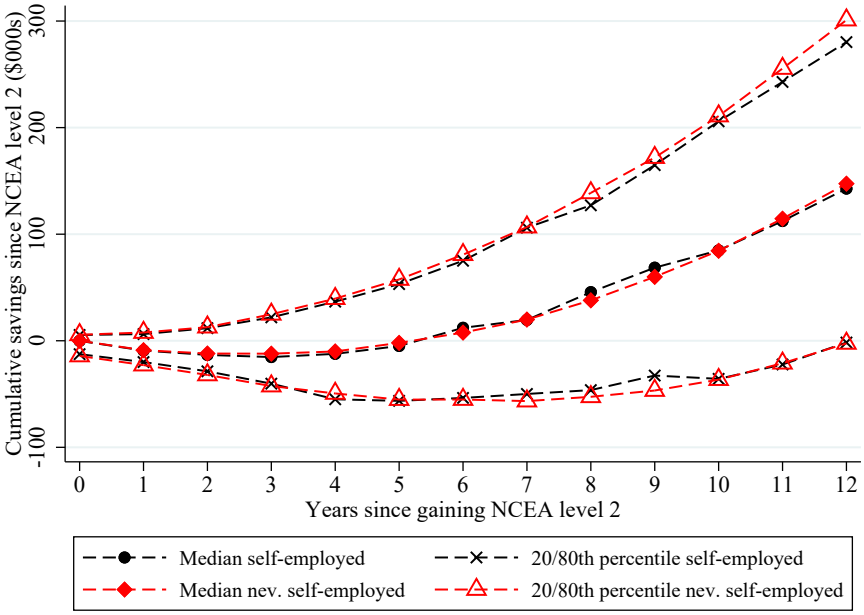
Figure 12 compares the cumulative savings of men and women who were ever self-employed in the first 12 years after NCEA level 2 with the savings of those who were never self-employed in this period. The savings of the two groups could differ for several reasons. First, self-employment could affect savings, for instance, if self-employed people give up wage income while establishing their businesses or earn profits that differ from what their wages would have been. Second, those who choose to become self-employed may not be representative of the population as a whole. They may have a history of higher or lower earnings, depending on the motivations that drive people to become self-employed.[4] Third, self-employment involves a change in the way income is recorded and reported, and for tax purposes self-employed individuals tend to have an incentive to make their income appear as low as possible. Thus the measurement error in income may differ for the self-employed relative to those not self-employed.

Figure 12 shows that among both men and women, the cumulative savings of those who are ever self-employed are quite similar to the savings of those who are never self-employed. The figure provides no evidence that self-employment either boosts or reduces the income of those who specialised in Computing and IT.

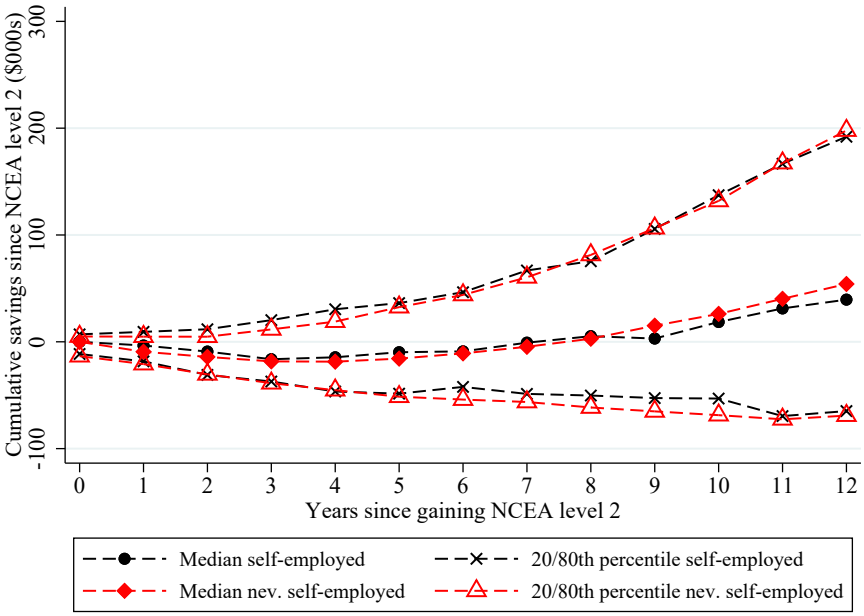
[4] For instance, self-employment may be a way for successful employees to keep a higher proportion of the value they create (positive selection into self-employment), or it may be a last resort for individuals who can't secure employment or who place high value on objectives other than income (negative selection).

Figure 12: Cumulative savings over time by whether ever self-employed

Panel A: Men



Panel B: Women



Notes: This figure shows the median and 20th and 80th percentiles of cumulative savings of men and women who specialised in Computing and IT by whether they were self-employed in any year from the year they gained NCEA level 2 to the 12th year after that.

6. How do savings vary with pathways through life outside education?

This section shows how the cumulative and annual savings of students who specialised in Computing and IT vary with their fertility decisions, overseas experience, and work experience in the first five years after NCEA level 2. We again categorise men and women by whether they are top cumulative savers or top annual savers, and show how the pathways they take outside education are associated with being a top saver of either kind. As in previous sections, we conduct both bivariate and regression analysis. Again, being a top saver means doing well compared with other students of the same gender in the same specialty.

The bivariate analysis is presented in Appendix Tables 13 and 14. As previously, these tables show the proportion of top and non-top savers who have each characteristic and the odds ratio (calculated as the probability a student with the characteristic is a top saver divided by the probability a student without the characteristic is a top saver). Many of the characteristics shown in these tables relate to work experience. In particular, we look at whether the student worked for a certain type of employer for at least one year or at least three years in the first five years after NCEA level 2. Note here we limit the sample considered to those students who had at least that many years of work experience for some employer. For example, when considering whether students had at least 3 years of experience working for central government, the students without the characteristic are those who have at least three years of work experience, but who do not have three years of experience working for central government.

The regression analysis is presented in Appendix Tables 15 and 16. The first three columns in each table explore the correlates of being a top cumulative saver, and the last three columns look at being a top annual saver. All columns control for students' backgrounds, level of highest qualification, fields of study, the timing of their children's births, and their overseas experience. The second and third columns on each side of the table also control for years of early work experience and various characteristics of the employers where the experience was gained. The coefficients on the employer type variables should be interpreted as comparisons with students who have the same education and years of experience, but who don't have that particular type of experience. The remainder of this section discusses the results from Appendix Tables 13 to 16.

In both the bivariate comparisons and the regressions that control for a wide range of characteristics including education and overseas experience, children are generally not associated with a man's probability of being a top cumulative or annual saver. In contrast, the regressions show women who have children any time in the first 12 years after NCEA level 2 are less likely to be top cumulative savers, less likely to be top annual savers, or both when

compared with women with the same educational and overseas history but no children. This is consistent with the large literature on the motherhood earnings penalty, which shows this penalty is partly driven by women exiting the labour market or reducing their work hours after having children.

Men and women who have overseas experience in year 11 or 12 are considerably more likely to be top cumulative and annual savers than are those with similar education, timing of children, and backgrounds but who don't go overseas. This is partly because we impute overseas earnings and assume overseas wages are higher than New Zealand wages. Conversely, men with overseas experience in years 3 to 5 are less likely than similar people who do not go overseas at this time to be top annual savers.

Unsurprisingly, the regressions show a history of work experience in the five years after NCEA level 2 significantly increases the likelihood of being a top cumulative saver and a top annual saver for men and women when compared with those with the same educational, fertility, and travel history but less work experience over this period. Further, central government experience (gained by 13% of women with work experience) contributes more strongly than other work experience to women being both top cumulative and annual savers, but the same is not true for men.

Men are most likely to gain early career work experience in Retail Trade (24% of men with any work experience), Manufacturing (20%), Construction (18%), or Accommodation and Food Services (14%). Retail Trade and Accommodation and Food Services experience tends not to increase the likelihood of being a top saver more than other work experience. Similarly, Manufacturing experience is not associated with a higher probability of being a top saver, but work experience in Construction increases the probability of being a top cumulative and annual saver. Eight percent of men get early experience in the Professional, Scientific, and Technical Services industry, and this seems beneficial for their likelihood of being a top saver.

Women are most likely to get early experience in Retail Trade (25% of women with any work experience) or Accommodation and Food Services (24%), neither of which is more associated with being a top cumulative or annual saver than other work experience. However, women who get work experience in the Education and Training industry (12%) or especially in the Public Administration and Safety industry (9%) seem to get on strong career trajectories.

7. Conclusions

In this specialty profile, we focussed on Māori men and women who specialised in Computing and IT at NCEA level 2, and who achieved a level 2 NCEA certificate by age 19 even though they

were not top academic performers. We investigated separately by gender the pathways through education and life that are associated with strong labour market outcomes relative to their same-gender peers in the specialty for these students, measuring labour market outcomes with cumulative and annual savings 12 years after NCEA level 2. In the regression analysis we controlled for several characteristics of students' backgrounds, but all the relationships we find should be considered suggestive of causality rather than necessarily causal.

Many Māori students who specialised in Computing and IT at level 2 finish their formal education with only a level 2, 3, or 4 qualification, though a quarter to a fifth gain a bachelor's level qualification and about 4% a postgraduate qualification. Women who gain higher qualifications seem to benefit from them, with those who complete a bachelor's degree having stronger savings than those with lower qualifications, and those with higher degrees having even stronger savings. In contrast, men seem to do best with level 4 qualifications. Although the few men who gain level 9 or 10 qualifications have slightly higher annual savings after 12 years, their cumulative savings are so much lower they may take another decade or longer to catch up.

Industry training is relatively common for men and less common for women, but both genders do well from it. In regressions that control for student background, higher level industry training qualifications are associated with higher cumulative and annual savings. Men with industry training qualifications at level 4 or above and women with such qualifications at level 5 or 6 have higher cumulative and annual savings than similar students with postgraduate degrees.

The field of higher study associated with the strongest outcomes for men is Engineering and Related Technologies, in which 12% of men gain a qualification at level 4 or above. Outcomes of students in this field are even stronger if they complete a qualification. Management and Commerce is another common field for men, but is beneficial only for those who gain a qualification at bachelor's level or above. Two common fields of study for men associated with weak outcomes are Society and Culture and Information Technology. While Society and Culture tends to lead to weak savings in general, Information Technology does only if studied at levels 4 to 6, not if studied at higher levels.

Many fields are associated with strong outcomes for women if studied at level 7 or above even when controlling for students' backgrounds. Management and Commerce, Information Technology, and Health are all associated with strong or very strong outcomes when studied at this level, but with weak outcomes when studied at levels 4 to 6. Engineering and Related Technologies is seldom studied by women, but those who do study it at any level have very strong outcomes. In contrast, the more common fields of Society and Culture and Creative Arts tend to lead to weak outcomes regardless of level of study.

It is perhaps surprising how few students who specialise in Computing at IT at level 2 go on to study Information Technology at level 4 or above. However, the study of Information Technology does not seem to lead to strong outcomes except for the few women who study it at level 7 or above. At this level it is likely to require moderate mathematical background, which may be a barrier for many students in this specialty: only 31% of men and 25% of women pass at least 14 credits of mathematics at level 2. The generally low returns to studying Information Technology mean it may not be a fruitful route to try to encourage more students from this specialty into.

Finally, men who gain early work experience in the Professional, Scientific, and Technical Services industry tend to enjoy success in the labour market, as do women who gain experience in central government, the Public Administration and Safety industry, or the Education and Training industry.

Appendix Table 1: Qualification levels of men who are top savers

	Cumulative savings			Annual savings			
	% of students with characteristic among:		Odds ratio	% of students with characteristic among:		Odds ratio	Students
	Non-top savers	Top savers		Non-top savers	Top savers		
Characteristic	(1)	(2)	(3)	(4)	(5)	(6)	(7)
School qualifications gained:							
NCEA cert level 3 within 1 yr	36.4	28.8	0.76*	33.2	41.2	1.31*	771
NCEA cert level 3 within 5 yrs	41.5	40.4	0.97	38.8	52.9	1.58***	771
University Entrance within 1 yr	27.8	23.5	0.83	26.2	32.7	1.28	771
Level of highest qualification gained within 10 years:							
Level 2	23.4	23.1	0.99	25.2	13.7	0.53***	771
Level 3	18.0	21.2	1.17	19.4	15.7	0.81	771
Level 4	16.6	33.3	2.01***	18.0	27.5	1.53***	771
Level 5	7.8	3.8	0.53*	7.8	3.8	0.53*	771
Level 6	6.3	5.8	0.93	5.8	7.8	1.28	771
Level 7	23.4	13.7	0.58**	20.9	25.0	1.20	771
Level 8	<5% have characteristic			<5% have characteristic			771
Level 9 or 10	<5% have characteristic			<5% have characteristic			771
Industry training credits gained within 10 years:							
Any credits	32.0	56.9	2.25***	34.1	47.1	1.53***	771
Any credits at level 4+	18.0	41.2	2.40***	19.5	33.3	1.75***	771
50+ credits	19.0	47.1	2.72***	21.8	37.3	1.79***	771
50+ credits at level 4+	9.3	27.5	2.56***	10.7	23.1	1.98***	771
Level of highest industry training qualification gained within 10 years:							
Level 2+	19.0	46.2	2.64***	21.5	35.3	1.71***	771
Level 3+	13.6	40.4	2.89***	15.6	31.4	1.98***	771
Level 4+	8.7	30.8	2.93***	10.2	25.5	2.24***	771
Types of tertiary institute where student enrolled within 10 years (for students who enrolled in any tertiary):							
Industry Training Organisation	39.4	61.2	2.04***	41.1	54.0	1.52***	759
Institute of Technology/Polytech	77.3	79.6	1.11	78.2	76.0	0.90	759
Private Training Establishment	62.6	66.7	1.16	64.4	58.0	0.81	759
University	41.9	24.5	0.52***	37.9	40.0	1.07	759
Wananga	12.3	6.1	0.52**	12.9	4.0	0.33***	759
Other Tertiary Provider	7.8	10.2	1.26	8.4	9.8	1.14	759
Locations of education providers where student enrolled within 10 years (including schools):							
Main urban area	<5% do not have characteristic			<5% do not have characteristic			771
Secondary urban area	29.8	34.6	1.19	29.6	33.3	1.15	771
Minor urban area	23.4	27.5	1.18	23.4	27.5	1.18	771
Rural centre or rural area	16.1	17.3	1.07	17.5	13.5	0.78	771
Different region to school	87.0	85.4	0.90	85.5	91.7	1.68*	699

Notes: The odds ratio is calculated as (probability a student with the characteristic is a top saver)/(probability a student without the characteristic is a top saver). Population percentages are expressed as bounds where affected by confidentialisation of values under 6. Asterisks denote the odds ratio is different to one at: * p<0.10, ** p<0.05, *** p<0.01, M p is missing.

Appendix Table 2: Qualification levels of women who are top savers

	Cumulative savings			Annual savings			
	% of students with characteristic among:		Odds ratio	% of students with characteristic among:		Odds ratio	Students
	Non-top savers	Top savers		Non-top savers	Top savers		
Characteristic	(1)	(2)	(3)	(4)	(5)	(6)	(7)
School qualifications gained:							
NCEA cert level 3 within 1 yr	39.9	48.6	1.32**	37.0	61.4	2.21***	1038
NCEA cert level 3 within 5 yrs	44.2	52.1	1.29**	41.5	63.8	2.07***	1038
University Entrance within 1 yr	31.4	43.5	1.51***	28.3	54.9	2.40***	1038
Level of highest qualification gained within 10 years:							
Level 2	22.8	24.6	1.08	25.4	14.5	0.56***	1038
Level 3	21.7	24.6	1.14	22.8	20.3	0.89	1038
Level 4	18.1	10.1	0.57***	18.8	8.5	0.46***	1038
Level 5	8.7	4.3	0.53**	8.7	5.7	0.69	1038
Level 6	<5% have characteristic			<5% have characteristic			1038
Level 7	23.2	25.7	1.11	20.0	38.6	2.01***	1038
Level 8	<5% have characteristic			<5% have characteristic			1038
Level 9 or 10	<5% have characteristic			<5% have characteristic			1038
Industry training credits gained within 10 years:							
Any credits	17.4	24.6	1.41**	18.8	18.6	0.99	1038
Any credits at level 4+	5.4	13.0	2.01***	6.2	10.0	1.49**	1038
50+ credits	7.2	15.7	1.89***	8.3	11.4	1.31	1038
50+ credits at level 4+	<5% have characteristic			<5% have characteristic			1038
Level of highest industry training qualification gained within 10 years:							
Level 2+	10.5	17.4	1.57***	11.2	13.0	1.14	1038
Level 3+	5.1	12.9	2.07***	6.1	10.0	1.50*	1038
Level 4+	<5% have characteristic			<5% have characteristic			1038
Types of tertiary institute where student enrolled within 10 years (for students who enrolled in any tertiary):							
Industry Training Organisation	21.7	33.3	1.59***	22.9	28.4	1.26	1017
Institute of Technology/Polytech	76.2	72.3	0.85	77.1	68.7	0.71**	1017
Private Training Establishment	69.2	56.1	0.64***	68.6	57.4	0.68***	1017
University	41.8	48.5	1.24	38.7	59.7	1.97***	1017
Wananga	27.9	10.6	0.36***	26.5	17.6	0.65***	1017
Other Tertiary Provider	6.2	6.1	0.98	6.3	4.5	0.75	1017
Locations of education providers where student enrolled within 10 years (including schools):							
Main urban area	<5% do not have characteristic			<5% do not have characteristic			1038
Secondary urban area	29.7	28.6	0.96	29.5	29.6	1.00	1038
Minor urban area	35.1	24.6	0.66***	34.1	28.6	0.81	1038
Rural centre or rural area	12.0	10.0	0.85	12.3	8.5	0.71*	1038
Different region to school	90.0	80.0	0.55***	89.1	82.1	0.65**	942

Notes: The odds ratio is calculated as (probability a student with the characteristic is a top saver)/(probability a student without the characteristic is a top saver). Population percentages are expressed as bounds where affected by confidentialisation of values under 6. Asterisks denote the odds ratio is different to one at: * p<0.10, ** p<0.05, *** p<0.01, M p is missing.

Appendix Table 3: Regressions of being a top saver on level of highest qualification for men

Dependent variable:	Student is a top cumulative saver				Student is a top annual saver			
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Age at NCEA level 2	-0.017	-0.010	0.004	-0.008	-0.016	-0.012	-0.004	-0.009
	(0.022)	(0.021)	(0.021)	(0.021)	(0.021)	(0.021)	(0.021)	(0.021)
Percentile score (0-1)	-0.446***	-0.283*	-0.197	-0.163	0.040	-0.000	0.060	0.064
	(0.160)	(0.162)	(0.157)	(0.161)	(0.169)	(0.169)	(0.167)	(0.170)
Multiple specialties	0.048	0.045	0.036	0.041	0.074**	0.066*	0.061*	0.059*
	(0.033)	(0.033)	(0.031)	(0.033)	(0.034)	(0.034)	(0.033)	(0.035)
School decile	0.004	0.008	0.007	0.006	0.008	0.008	0.008	0.004
	(0.006)	(0.006)	(0.006)	(0.006)	(0.006)	(0.006)	(0.006)	(0.006)
School not in main urban area	0.046	0.038	0.035	0.038	0.044	0.046	0.045	0.048
	(0.033)	(0.033)	(0.032)	(0.033)	(0.034)	(0.034)	(0.034)	(0.034)
Highest qualification gained within 10 years (omitted category: level 2):								
Level 3		0.023	-0.008	0.028		0.027	0.006	0.029
		(0.046)	(0.046)	(0.047)		(0.041)	(0.042)	(0.042)
Level 4		0.131***	-0.069	0.118**		0.137***	-0.001	0.136***
		(0.049)	(0.051)	(0.050)		(0.045)	(0.050)	(0.047)
Level 5 or 6		-0.058	-0.102**	-0.028		0.036	0.001	0.064
		(0.047)	(0.047)	(0.048)		(0.047)	(0.046)	(0.048)
Level 7		-0.058	-0.067	-0.000		0.072*	0.062	0.100**
		(0.044)	(0.044)	(0.045)		(0.043)	(0.044)	(0.044)
Level 8 to 10		-0.148***	-0.153***	-0.072		0.141	0.132	0.177*
		(0.056)	(0.057)	(0.058)		(0.096)	(0.097)	(0.096)
Highest industry training qualification gained within 10 years (omitted category: none):								
Level 2			0.026				-0.036	
			(0.064)				(0.051)	
Level 3			0.153**				0.101	
			(0.074)				(0.072)	
Level 4			0.345***				0.232***	
			(0.064)				(0.065)	
Level 5 or 6			0.324				0.283	
			(0.231)				(0.230)	
Any Gateway credits completed within 10 years				0.034				-0.000
				(0.044)				(0.043)
Enrolled in institute type within 10 years:								
Industry Training Organisation				0.076**				0.079**
				(0.031)				(0.032)
Institute of Technology/Polytech				-0.054				-0.029
				(0.035)				(0.035)
Private Training Establishment				-0.019				-0.041
				(0.031)				(0.032)
University				-0.101***				-0.030
				(0.031)				(0.031)
Wānanga				-0.098**				-0.125***
				(0.041)				(0.038)
Other Tertiary Provider				0.057				-0.008
				(0.055)				(0.052)
NCEA level 2 year fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
R-squared	0.018	0.049	0.099	0.078	0.019	0.034	0.059	0.057
Observations	771	771	771	771	771	771	771	771

Notes: This table presents the results of ordinary least squares regressions of dummy variables for being a top cumulative saver (columns 1-4) or top annual saver (columns 5-8) on educational controls. All regressions include dummies for missing school decile, missing percentile score, and missing school location. Standard errors are robust. Asterisks denote: * p<0.10, ** p<0.05, *** p<0.01.

Appendix Table 4: Regressions of being a top saver on level of highest qualification for women

Dependent variable:	Student is a top cumulative saver				Student is a top annual saver			
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Age at NCEA level 2	-0.026	-0.026	-0.021	-0.016	-0.011	-0.006	-0.003	0.000
	(0.018)	(0.018)	(0.017)	(0.018)	(0.017)	(0.017)	(0.017)	(0.017)
Percentile score (0-1)	0.178	0.147	0.156	0.113	0.636***	0.398***	0.400***	0.349**
	(0.134)	(0.140)	(0.138)	(0.140)	(0.136)	(0.141)	(0.141)	(0.142)
Multiple specialties	0.044*	0.042	0.037	0.041	0.034	0.033	0.030	0.028
	(0.026)	(0.026)	(0.025)	(0.025)	(0.026)	(0.025)	(0.025)	(0.025)
School decile	0.024***	0.024***	0.022***	0.020***	0.017***	0.016***	0.015***	0.015***
	(0.006)	(0.006)	(0.006)	(0.006)	(0.006)	(0.006)	(0.006)	(0.006)
School not in main urban area	-0.012	-0.009	-0.017	-0.010	-0.019	-0.015	-0.021	-0.014
	(0.028)	(0.028)	(0.027)	(0.028)	(0.027)	(0.027)	(0.026)	(0.027)
Highest qualification gained within 10 years (omitted category: level 2):								
Level 3		-0.024	-0.038	-0.016		0.019	0.012	0.022
		(0.039)	(0.039)	(0.039)		(0.035)	(0.036)	(0.036)
Level 4		-0.097***	-0.156***	-0.069*		-0.050	-0.086***	-0.038
		(0.037)	(0.035)	(0.037)		(0.032)	(0.030)	(0.033)
Level 5 or 6		-0.103**	-0.113***	-0.063		0.010	0.005	0.033
		(0.042)	(0.042)	(0.042)		(0.042)	(0.043)	(0.044)
Level 7		-0.039	-0.045	-0.001		0.143***	0.138***	0.157***
		(0.039)	(0.039)	(0.041)		(0.038)	(0.039)	(0.042)
Level 8 to 10		0.116	0.115	0.139		0.282***	0.283***	0.286***
		(0.086)	(0.087)	(0.085)		(0.090)	(0.090)	(0.090)
Highest industry training qualification gained within 10 years (omitted category: none):								
Level 2			0.012				0.000	
			(0.055)				(0.054)	
Level 3			0.107				0.052	
			(0.071)				(0.067)	
Level 4			0.465***				0.296***	
			(0.110)				(0.109)	
Level 5 or 6			0.602***				0.497***	
			(0.185)				(0.162)	
Any Gateway credits completed within 10 years				-0.016				0.032
				(0.031)				(0.032)
Enrolled in institute type within 10 years:								
Industry Training Organisation				0.112***				0.079***
				(0.031)				(0.030)
Institute of Technology/Polytech				-0.023				-0.041
				(0.030)				(0.030)
Private Training Establishment				-0.079***				-0.044
				(0.027)				(0.027)
University				-0.023				0.006
				(0.029)				(0.029)
Wānanga				-0.104***				-0.050*
				(0.024)				(0.026)
Other Tertiary Provider				-0.007				-0.057
				(0.051)				(0.050)
NCEA level 2 year fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
R-squared	0.042	0.056	0.091	0.092	0.059	0.095	0.111	0.111
Observations	1,038	1,038	1,038	1,038	1,038	1,038	1,038	1,038

Notes: This table presents the results of ordinary least squares regressions of dummy variables for being a top cumulative saver (columns 1-4) or top annual saver (columns 5-8) on educational controls. All regressions include dummies for missing school decile, missing percentile score, and missing school location. Standard errors are robust. Asterisks denote: * p<0.10, ** p<0.05, *** p<0.01.

Appendix Table 5: Fields of study at school of men who are top savers

	Cumulative savings			Annual savings			
	% of students with characteristic among:		Odds ratio	% of students with characteristic among:		Odds ratio	Students
Characteristic	Non-top savers (1)	Top savers (2)	(3)	Non-top savers (4)	Top savers (5)	(6)	(7)
Passed at least 14 credits at level 2 by year of NCEA level 2 in:							
English	38.8	44.2	1.19	37.1	51.0	1.57***	771
Maths	31.1	30.8	0.99	29.8	35.3	1.22	771
Māori	8.3	5.9	0.74	9.3	<3.8	<0.45**	771
Humanities	59.5	65.4	1.22	57.8	71.2	1.61***	771
Social Science	17.0	19.6	1.15	17.1	18.0	1.05	771
Science	48.1	47.1	0.97	46.6	52.9	1.23	771
Passed at least 14 achievement standard credits at level 2 by year of NCEA level 2 in:							
English	17.6	17.6	1.00	15.5	25.5	1.61***	771
Maths	21.5	19.6	0.91	19.9	27.5	1.39**	771
Māori	5.8	<3.8	<0.70	6.3	<3.8	<0.64**	771
Humanities	34.0	33.3	0.98	32.0	43.1	1.46***	771
Social Science	13.6	17.3	1.25	13.6	15.7	1.14	771
Science	34.0	37.3	1.12	32.5	43.1	1.43**	771
Passed at least 14 credits at level 3 within 5 years in:							
English	15.0	13.7	0.92	13.1	21.6	1.58**	771
Maths	23.9	19.2	0.80	21.4	30.8	1.47**	771
Māori	7.3	<3.8	<0.56**	7.7	<3.8	<0.53**	771
Humanities	25.2	25.5	1.01	22.9	33.3	1.50***	771
Social Science	14.1	17.6	1.23	13.6	21.6	1.54**	771
Science	29.1	23.1	0.78*	26.3	33.3	1.30**	771
Arts & Crafts	9.3	5.8	0.65*	8.3	9.6	1.14	771
Computing & IT	34.1	27.5	0.77	33.5	30.8	0.90	771
Business	<5% have characteristic			<5% have characteristic			771
Agriculture, Forestry, & Fisheries	6.3	<3.8	<0.65	7.7	<3.7	<0.52M	771
Community & Social Services	8.3	3.9	0.51	8.3	3.9	0.51	771
Education	<5% have characteristic			<5% have characteristic			771
Service Sector	15.5	25.5	1.61***	16.5	23.1	1.38*	771
Engineering & Technology	10.7	28.8	2.42***	11.2	27.5	2.25***	771
Manufacturing, Planning & Constrn	8.3	15.7	1.73***	8.7	13.5	1.45	771
Passed at least 14 achievement standard credits at level 3 within 5 years in:							
English	9.2	7.8	0.87	7.8	13.7	1.62**	771
Maths	18.0	13.7	0.77	15.5	25.0	1.58***	771
Māori	<5% have characteristic			<5% have characteristic			771
Humanities	18.5	18.0	0.97	17.0	26.9	1.57***	771
Social Science	11.7	13.7	1.16	10.7	17.3	1.53**	771
Science	21.5	17.3	0.81	18.5	28.8	1.56***	771
Arts & Crafts	7.8	3.8	0.53*	6.8	7.7	1.11	771
Computing & IT	<5% have characteristic			<5% have characteristic			771
Business	<5% have characteristic			<5% have characteristic			771
Agriculture, Forestry, & Fisheries	<5% have characteristic			<5% have characteristic			771
Community & Social Services	<5% have characteristic			<5% have characteristic			771
Education	<5% have characteristic			<5% have characteristic			771
Service Sector	<5% have characteristic			<5% have characteristic			771
Engineering & Technology	<5% have characteristic			<5% have characteristic			771
Manufacturing, Planning & Constrn	<5% have characteristic			<5% have characteristic			771

Notes: The odds ratio is calculated as (probability a student with the characteristic is a top saver)/(probability a student without the characteristic is a top saver). Population percentages are expressed as bounds where affected by confidentialisation of values under 6. Asterisks denote the odds ratio is different to one at: * p<0.10, ** p<0.05, *** p<0.01, M p is missing.

Appendix Table 6: Fields of study at school of women who are top savers

	Cumulative savings			Annual savings			
	% of students with characteristic among:		Odds ratio	% of students with characteristic among:		Odds ratio	Students
Characteristic	Non-top savers (1)	Top savers (2)	(3)	Non-top savers (4)	Top savers (5)	(6)	(7)
Passed at least 14 credits at level 2 by year of NCEA level 2 in:							
English	50.7	64.3	1.57***	48.9	71.4	2.18***	1038
Maths	23.6	30.4	1.32**	22.1	35.7	1.68***	1038
Māori	15.5	12.9	0.84	14.9	15.5	1.04	1038
Humanities	65.1	77.1	1.62***	63.5	82.6	2.30***	1038
Social Science	22.8	23.9	1.05	22.1	25.7	1.17	1038
Science	42.8	50.0	1.26*	41.5	54.9	1.54***	1038
Passed at least 14 achievement standard credits at level 2 by year of NCEA level 2 in:							
English	19.9	32.9	1.68***	18.9	35.7	1.93***	1038
Maths	11.2	17.1	1.46**	9.8	20.3	1.89***	1038
Māori	11.6	10.0	0.87	10.9	11.4	1.05	1038
Humanities	32.2	46.4	1.60***	31.5	50.0	1.84***	1038
Social Science	14.8	18.6	1.24	14.9	18.6	1.23	1038
Science	20.3	27.1	1.35**	18.8	32.9	1.77***	1038
Passed at least 14 credits at level 3 within 5 years in:							
English	19.9	27.1	1.37**	18.1	35.7	2.01***	1038
Maths	17.0	17.4	1.02	14.9	25.7	1.68***	1038
Māori	14.1	7.1	0.53***	13.4	10.0	0.76	1038
Humanities	29.0	34.3	1.21	26.4	44.3	1.85***	1038
Social Science	15.9	17.4	1.09	14.5	24.3	1.63***	1038
Science	23.6	27.1	1.16	21.7	34.3	1.63***	1038
Arts & Crafts	10.5	11.6	1.09	9.4	16.9	1.65***	1038
Computing & IT	34.8	47.1	1.50***	33.2	53.6	1.95***	1038
Business	10.5	10.1	0.97	10.5	10.1	0.97	1038
Agriculture, Forestry, & Fisheries	<5% have characteristic			<5% have characteristic			1038
Community & Social Services	<5% have characteristic			<5% have characteristic			1038
Education	<5% have characteristic			<5% have characteristic			1038
Service Sector	28.2	32.9	1.19	28.5	31.4	1.12	1038
Engineering & Technology	<5% have characteristic			<5% have characteristic			1038
Manufacturing, Planning & Constrn	<5% have characteristic			<5% have characteristic			1038
Passed at least 14 achievement standard credits at level 3 within 5 years in:							
English	8.7	13.0	1.42**	7.9	17.1	1.90***	1038
Maths	7.6	10.1	1.28	6.5	15.5	2.01***	1038
Māori	8.3	4.3	0.55**	7.9	5.7	0.75	1038
Humanities	16.7	23.9	1.42**	15.2	29.6	1.89***	1038
Social Science	11.6	14.3	1.21	10.5	17.1	1.54***	1038
Science	10.5	17.4	1.56***	9.4	20.3	1.94***	1038
Arts & Crafts	9.0	10.0	1.09	7.9	15.5	1.75***	1038
Computing & IT	<5% have characteristic			<5% have characteristic			1038
Business	<5% have characteristic			<5% have characteristic			1038
Agriculture, Forestry, & Fisheries	<5% have characteristic			<5% have characteristic			1038
Community & Social Services	<5% have characteristic			<5% have characteristic			1038
Education	<5% have characteristic			<5% have characteristic			1038
Service Sector	<5% have characteristic			<5% have characteristic			1038
Engineering & Technology	<5% have characteristic			<5% have characteristic			1038
Manufacturing, Planning & Constrn	<5% have characteristic			<5% have characteristic			1038

Notes: The odds ratio is calculated as (probability a student with the characteristic is a top saver)/(probability a student without the characteristic is a top saver). Population percentages are expressed as bounds where affected by confidentialisation of values under 6. Asterisks denote the odds ratio is different to one at: * p<0.10, ** p<0.05, *** p<0.01, M p is missing.

Appendix Table 7: Fields of tertiary study of men who are top savers

	Cumulative savings			Annual savings			
	% of students with characteristic among:		Odds ratio	% of students with characteristic among:		Odds ratio	Students
Characteristic	Non-top savers (1)	Top savers (2)	(3)	Non-top savers (4)	Top savers (5)	(6)	(7)
Fields and levels in which student passed at least 0.5 EFTS within 10 years:							
Natural & Physical Sciences at level 2+	19.9	17.3	0.87	16.6	27.5	1.64***	771
Natural & Physical Sciences at level 4+	5.8	<3.8	<0.70	4.4	5.9	1.27	771
Natural & Physical Sciences at level 7+	<5% have characteristic			<5% have characteristic			771
Natural & Physical Sciences at level 8+	<5% have characteristic			<5% have characteristic			771
Information Technology at level 2+	33.2	23.1	0.66**	31.1	31.4	1.01	771
Information Technology at level 4+	15.5	7.7	0.52**	14.1	11.5	0.83	771
Information Technology at level 7+	5.8	3.9	0.71	5.4	5.9	1.08	771
Information Technology at level 8+	<5% have characteristic			<5% have characteristic			771
Engineering & Related Technologies at level 2+	22.4	41.2	1.97***	22.9	38.5	1.77***	771
Engineering & Related Technologies at level 4+	11.7	25.5	2.02***	11.7	26.9	2.13***	771
Engineering & Related Technologies at level 7+	<5% have characteristic			<5% have characteristic			771
Engineering & Related Technologies at level 8+	<5% have characteristic			<5% have characteristic			771
Architecture & Building at level 2+	10.2	13.5	1.28	10.2	13.5	1.28	771
Architecture & Building at level 4+	6.8	11.5	1.55	6.8	11.5	1.55	771
Architecture & Building at level 7+	<5% have characteristic			<5% have characteristic			771
Architecture & Building at level 8+	<5% have characteristic			<5% have characteristic			771
Ag, Environmental & Related Studies at level 2+	10.2	5.9	0.61	11.2	<3.8	<0.37***	771
Ag, Environmental & Related Studies at level 4+	<5% have characteristic			<5% have characteristic			771
Ag, Environmental & Related Studies at level 7+	<5% have characteristic			<5% have characteristic			771
Ag, Environmental & Related Studies at level 8+	<5% have characteristic			<5% have characteristic			771
Health at level 2+	7.8	5.8	0.77	7.3	7.7	1.04	771
Health at level 4+	<5% have characteristic			<5% have characteristic			771
Health at level 7+	<5% have characteristic			<5% have characteristic			771
Health at level 8+	<5% have characteristic			<5% have characteristic			771
Education at level 2+	<5% have characteristic			<5% have characteristic			771
Education at level 4+	<5% have characteristic			<5% have characteristic			771
Education at level 7+	<5% have characteristic			<5% have characteristic			771
Education at level 8+	<5% have characteristic			<5% have characteristic			771
Management & Commerce at level 2+	21.4	15.7	0.73	19.9	21.6	1.08	771
Management & Commerce at level 4+	14.6	9.8	0.69	13.1	15.7	1.18	771
Management & Commerce at level 7+	6.8	5.9	0.88	5.9	9.8	1.53	771
Management & Commerce at level 8+	<5% have characteristic			<5% have characteristic			771
Society & Culture at level 2+	42.2	33.3	0.74*	40.8	39.2	0.95	771
Society & Culture at level 4+	21.5	9.6	0.45***	19.4	17.6	0.91	771
Society & Culture at level 7+	7.7	<3.8	<0.54*	6.3	7.8	1.20	771
Society & Culture at level 8+	<5% have characteristic			<5% have characteristic			771
Creative Arts at level 2+	17.6	9.6	0.56**	16.5	13.5	0.82	771
Creative Arts at level 4+	12.2	5.9	0.51**	11.7	9.6	0.84	771
Creative Arts at level 7+	<5% have characteristic			<5% have characteristic			771
Creative Arts at level 8+	<5% have characteristic			<5% have characteristic			771
Food, Hospitality & Personal Servs at level 2+	<5% have characteristic			<5% have characteristic			771
Food, Hospitality & Personal Servs at level 4+	<5% have characteristic			<5% have characteristic			771
Food, Hospitality & Personal Servs at level 7+	<5% have characteristic			<5% have characteristic			771
Food, Hospitality & Personal Servs at level 8+	<5% have characteristic			<5% have characteristic			771
Mixed Field Programmes at level 2+	<5% have characteristic			<5% have characteristic			771
Mixed Field Programmes at level 4+	<5% have characteristic			<5% have characteristic			771
Mixed Field Programmes at level 7+	<5% have characteristic			<5% have characteristic			771
Mixed Field Programmes at level 8+	<5% have characteristic			<5% have characteristic			771

Notes: The odds ratio is calculated as (probability a student with the characteristic is a top saver)/(probability a student without the characteristic is a top saver). Population percentages are expressed as bounds where affected by confidentialisation of values under 6. Asterisks denote the odds ratio is different to one at: * p<0.10, ** p<0.05, *** p<0.01, M p is missing.

Appendix Table 8: Fields of tertiary study of women who are top savers

	Cumulative savings			Annual savings			
	% of students with characteristic among:		Odds ratio	% of students with characteristic among:		Odds ratio	Students
Characteristic	Non-top savers (1)	Top savers (2)	(3)	Non-top savers (4)	Top savers (5)	(6)	(7)
Fields and levels in which student passed at least 0.5 EFTS within 10 years:							
Natural & Physical Sciences at level 2+	10.1	14.3	1.36*	9.4	17.1	1.68***	1038
Natural & Physical Sciences at level 4+	<5% have characteristic			<5% have characteristic			1038
Natural & Physical Sciences at level 7+	<5% have characteristic			<5% have characteristic			1038
Natural & Physical Sciences at level 8+	<5% have characteristic			<5% have characteristic			1038
Information Technology at level 2+	20.3	21.4	1.06	18.9	25.7	1.36**	1038
Information Technology at level 4+	<5% have characteristic			<5% have characteristic			1038
Information Technology at level 7+	<5% have characteristic			<5% have characteristic			1038
Information Technology at level 8+	<5% have characteristic			<5% have characteristic			1038
Engineering & Related Technologies at level 2+	5.8	8.6	1.38	5.8	7.1	1.19	1038
Engineering & Related Technologies at level 4+	<5% have characteristic			<5% have characteristic			1038
Engineering & Related Technologies at level 7+	<5% have characteristic			<5% have characteristic			1038
Engineering & Related Technologies at level 8+	<5% have characteristic			<5% have characteristic			1038
Architecture & Building at level 2+	<5% have characteristic			<5% have characteristic			1038
Architecture & Building at level 4+	<5% have characteristic			<5% have characteristic			1038
Architecture & Building at level 7+	<5% have characteristic			<5% have characteristic			1038
Architecture & Building at level 8+	<5% have characteristic			<5% have characteristic			1038
Ag, Environmental & Related Studies at level 2+	<5% have characteristic			<5% have characteristic			1038
Ag, Environmental & Related Studies at level 4+	<5% have characteristic			<5% have characteristic			1038
Ag, Environmental & Related Studies at level 7+	<5% have characteristic			<5% have characteristic			1038
Ag, Environmental & Related Studies at level 8+	<5% have characteristic			<5% have characteristic			1038
Health at level 2+	12.3	8.6	0.72*	11.6	10.1	0.89	1038
Health at level 4+	10.1	7.1	0.73	9.1	10.0	1.09	1038
Health at level 7+	<5% have characteristic			<5% have characteristic			1038
Health at level 8+	<5% have characteristic			<5% have characteristic			1038
Education at level 2+	15.2	15.7	1.03	14.5	18.6	1.26	1038
Education at level 4+	13.8	12.9	0.94	13.0	16.9	1.27	1038
Education at level 7+	9.0	10.0	1.09	8.0	13.0	1.52**	1038
Education at level 8+	<5% have characteristic			<5% have characteristic			1038
Management & Commerce at level 2+	39.1	40.0	1.03	38.8	40.8	1.07	1038
Management & Commerce at level 4+	20.3	18.8	0.93	19.6	24.3	1.24	1038
Management & Commerce at level 7+	5.8	12.9	1.89***	5.1	14.5	2.26***	1038
Management & Commerce at level 8+	<5% have characteristic			<5% have characteristic			1038
Society & Culture at level 2+	52.9	46.4	0.81*	49.6	60.0	1.40***	1038
Society & Culture at level 4+	27.1	21.4	0.78*	24.5	32.9	1.38**	1038
Society & Culture at level 7+	8.3	4.3	0.55*	6.5	10.0	1.42*	1038
Society & Culture at level 8+	<5% have characteristic			<5% have characteristic			1038
Creative Arts at level 2+	18.4	10.0	0.55***	16.7	15.7	0.95	1038
Creative Arts at level 4+	10.9	5.7	0.56**	9.8	10.0	1.02	1038
Creative Arts at level 7+	<5% have characteristic			<5% have characteristic			1038
Creative Arts at level 8+	<5% have characteristic			<5% have characteristic			1038
Food, Hospitality & Personal Servs at level 2+	9.1	4.3	0.51**	9.1	4.3	0.51**	1038
Food, Hospitality & Personal Servs at level 4+	<5% have characteristic			<5% have characteristic			1038
Food, Hospitality & Personal Servs at level 7+	<5% have characteristic			<5% have characteristic			1038
Food, Hospitality & Personal Servs at level 8+	<5% have characteristic			<5% have characteristic			1038
Mixed Field Programmes at level 2+	<5% have characteristic			<5% have characteristic			1038
Mixed Field Programmes at level 4+	<5% have characteristic			<5% have characteristic			1038
Mixed Field Programmes at level 7+	<5% have characteristic			<5% have characteristic			1038
Mixed Field Programmes at level 8+	<5% have characteristic			<5% have characteristic			1038

Notes: The odds ratio is calculated as (probability a student with the characteristic is a top saver)/(probability a student without the characteristic is a top saver). Population percentages are expressed as bounds where affected by confidentialisation of values under 6. Asterisks denote the odds ratio is different to one at: * p<0.10, ** p<0.05, *** p<0.01, M p is missing.

Appendix Table 9: Fields of tertiary qualification of men who are top savers

	Cumulative savings			Annual savings			
	% of students with characteristic among:		Odds ratio	% of students with characteristic among:		Odds ratio	Students
	Non-top savers	Top savers		Non-top savers	Top savers		
Characteristic	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Fields of highest qualification gained within 10 years:							
Natural & Physical Sciences	<5% have characteristic			<5% have characteristic			771
Information Technology	12.2	9.6	0.80	12.2	9.8	0.82	771
Engineering & Related Technologies	11.7	30.8	2.42***	11.7	27.5	2.17***	771
Architecture & Building	5.8	9.6	1.51	5.8	9.8	1.53*	771
Ag, Environmental & Related Studies	<5% have characteristic			<5% have characteristic			771
Health	<5% have characteristic			<5% have characteristic			771
Education	<5% have characteristic			<5% have characteristic			771
Management & Commerce	11.7	11.5	0.99	10.7	13.7	1.25	771
Society & Culture	12.7	9.6	0.78	12.1	9.8	0.82	771
Creative Arts	8.3	3.8	0.50*	8.3	3.8	0.50*	771
Food, Hospitality & Personal Services	<5% have characteristic			<5% have characteristic			771
Mixed Field Programmes	35.9	33.3	0.91	37.6	26.9	0.67***	771
Fields of qualifications at level 4+ gained within 10 years:							
Natural & Physical Sciences	<5% have characteristic			<5% have characteristic			771
Information Technology	9.3	3.9	0.46*	9.2	5.9	0.67	771
Engineering & Related Technologies	8.3	26.0	2.64***	8.3	26.9	2.69***	771
Architecture & Building	4.4	7.7	1.56	4.4	7.8	1.59	771
Ag, Environmental & Related Studies	<5% have characteristic			<5% have characteristic			771
Health	<5% have characteristic			<5% have characteristic			771
Education	<5% have characteristic			<5% have characteristic			771
Management & Commerce	10.2	9.6	0.95	9.2	13.7	1.41	771
Society & Culture	14.1	5.9	0.44**	13.6	9.6	0.73	771
Creative Arts	7.8	3.8	0.53*	7.8	3.8	0.53*	771
Food, Hospitality & Personal Services	<5% have characteristic			<5% have characteristic			771
Mixed Field Programmes	<5% have characteristic			<5% have characteristic			771
Fields of qualifications at bachelor's level+ gained within 10 years:							
Natural & Physical Sciences	<5% have characteristic			<5% have characteristic			771
Information Technology	<5% have characteristic			<5% have characteristic			771
Engineering & Related Technologies	<5% have characteristic			<5% have characteristic			771
Architecture & Building	<5% have characteristic			<5% have characteristic			771
Ag, Environmental & Related Studies	<5% have characteristic			<5% have characteristic			771
Health	<5% have characteristic			<5% have characteristic			771
Education	<5% have characteristic			<5% have characteristic			771
Management & Commerce	6.8	5.8	0.87	4.9	11.5	1.96**	771
Society & Culture	6.8	<3.8	<0.60*	5.9	7.7	1.26	771
Creative Arts	<5% have characteristic			<5% have characteristic			771
Food, Hospitality & Personal Services	<5% have characteristic			<5% have characteristic			771
Mixed Field Programmes	<5% have characteristic			<5% have characteristic			771

Notes: The odds ratio is calculated as (probability a student with the characteristic is a top saver)/(probability a student without the characteristic is a top saver). Population percentages are expressed as bounds where affected by confidentialisation of values under 6. Asterisks denote the odds ratio is different to one at: * p<0.10, ** p<0.05, *** p<0.01, M p is missing.

Appendix Table 10: Fields of tertiary qualification of women who are top savers

	Cumulative savings			Annual savings			
	% of students with characteristic among:		Odds ratio	% of students with characteristic among:		Odds ratio	Students
	Non-top savers	Top savers		Non-top savers	Top savers		
Characteristic	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Fields of highest qualification gained within 10 years:							
Natural & Physical Sciences	<5% have characteristic			<5% have characteristic			1038
Information Technology	11.2	7.2	0.67	11.6	5.7	0.52**	1038
Engineering & Related Technologies	<5% have characteristic			<5% have characteristic			1038
Architecture & Building	<5% have characteristic			<5% have characteristic			1038
Ag, Environmental & Related Studies	<5% have characteristic			<5% have characteristic			1038
Health	9.8	8.6	0.89	9.1	9.9	1.07	1038
Education	11.2	12.9	1.13	10.5	15.7	1.43**	1038
Management & Commerce	20.7	27.1	1.32**	20.4	27.1	1.34**	1038
Society & Culture	14.5	7.1	0.51***	12.7	12.9	1.01	1038
Creative Arts	7.6	2.9	0.41**	7.2	5.7	0.81	1038
Food, Hospitality & Personal Services	6.2	<2.8	<0.50***	5.8	<2.9	<0.53**	1038
Mixed Field Programmes	39.7	42.9	1.11	42.5	31.4	0.68***	1038
Fields of qualifications at level 4+ gained within 10 years:							
Natural & Physical Sciences	<5% have characteristic			<5% have characteristic			1038
Information Technology	<5% have characteristic			<5% have characteristic			1038
Engineering & Related Technologies	<5% have characteristic			<5% have characteristic			1038
Architecture & Building	<5% have characteristic			<5% have characteristic			1038
Ag, Environmental & Related Studies	<5% have characteristic			<5% have characteristic			1038
Health	9.0	7.1	0.81	8.7	8.6	0.99	1038
Education	10.5	12.9	1.20	9.5	14.5	1.45**	1038
Management & Commerce	16.6	18.8	1.13	15.2	24.3	1.56***	1038
Society & Culture	14.9	7.1	0.50***	13.4	14.3	1.06	1038
Creative Arts	7.6	2.9	0.41**	6.9	5.7	0.85	1038
Food, Hospitality & Personal Services	<5% have characteristic			<5% have characteristic			1038
Mixed Field Programmes	<5% have characteristic			<5% have characteristic			1038
Fields of qualifications at bachelor's level+ gained within 10 years:							
Natural & Physical Sciences	<5% have characteristic			<5% have characteristic			1038
Information Technology	<5% have characteristic			<5% have characteristic			1038
Engineering & Related Technologies	<5% have characteristic			<5% have characteristic			1038
Architecture & Building	<5% have characteristic			<5% have characteristic			1038
Ag, Environmental & Related Studies	<5% have characteristic			<5% have characteristic			1038
Health	<5% have characteristic			<5% have characteristic			1038
Education	6.2	8.6	1.32	5.8	10.0	1.56**	1038
Management & Commerce	4.3	10.1	1.94***	3.3	14.3	2.87***	1038
Society & Culture	6.2	2.9	0.51*	5.1	10.0	1.72**	1038
Creative Arts	<5% have characteristic			<5% have characteristic			1038
Food, Hospitality & Personal Services	<5% have characteristic			<5% have characteristic			1038
Mixed Field Programmes	<5% have characteristic			<5% have characteristic			1038

Notes: The odds ratio is calculated as (probability a student with the characteristic is a top saver)/(probability a student without the characteristic is a top saver). Population percentages are expressed as bounds where affected by confidentialisation of values under 6. Asterisks denote the odds ratio is different to one at: * p<0.10, ** p<0.05, *** p<0.01, M p is missing.

Appendix Table 11: Regressions of being a top saver on field of higher study for men

Dependent variable:	Student is a top cumulative saver			Student is a top annual saver		
	(1)	(2)	(3)	(4)	(5)	(6)
Passed at least 14 credits at level 3 within 5 years in:						
English	0.002	0.014	0.019	0.039	0.038	0.050
	(0.057)	(0.057)	(0.054)	(0.061)	(0.060)	(0.058)
Maths	0.061	0.069	0.042	0.062	0.034	0.025
	(0.056)	(0.059)	(0.059)	(0.064)	(0.066)	(0.061)
Māori	-0.140***	-0.111**	-0.125***	-0.156***	-0.137***	-0.124***
	(0.047)	(0.048)	(0.045)	(0.043)	(0.045)	(0.043)
Humanities	0.008	0.030	0.021	0.031	0.057	0.041
	(0.048)	(0.048)	(0.047)	(0.051)	(0.051)	(0.051)
Social science	0.069	0.073	0.079*	0.065	0.053	0.063
	(0.043)	(0.045)	(0.043)	(0.045)	(0.047)	(0.045)
Science	-0.099*	-0.104*	-0.084	-0.018	-0.022	-0.030
	(0.050)	(0.054)	(0.053)	(0.059)	(0.059)	(0.054)
Computing & IT	-0.040	-0.017	-0.035	-0.058*	-0.055*	-0.072**
	(0.031)	(0.032)	(0.031)	(0.032)	(0.033)	(0.032)
Service sector	0.095**	0.079*	0.086**	0.078*	0.066	0.069
	(0.042)	(0.041)	(0.041)	(0.041)	(0.042)	(0.042)
# of other fields	0.045**	0.021	0.014	0.024	0.004	-0.003
	(0.023)	(0.023)	(0.022)	(0.023)	(0.024)	(0.023)
Passed at least 0.5 EFTS at level 4+ within 10 years in:						
Information Technology		-0.148***			-0.060	
		(0.038)			(0.050)	
Engineering & Related Technologies		0.155***			0.153***	
		(0.052)			(0.053)	
Health		-0.158***			-0.191***	
		(0.041)			(0.037)	
Education		-0.204***			-0.224***	
		(0.039)			(0.045)	
Management & Commerce		-0.122**			-0.063	
		(0.050)			(0.055)	
Society & Culture		-0.072*			-0.009	
		(0.040)			(0.046)	
Creative Arts		-0.027			0.016	
		(0.046)			(0.051)	
# of other fields		-0.022			0.002	
		(0.038)			(0.039)	
Passed at least 0.5 EFTS at level 7+ within 10 years in:						
Information Technology		0.113			0.097	
		(0.070)			(0.079)	
Engineering & Related Technologies		-0.249***			0.200	
		(0.096)			(0.155)	
Health		0.020			0.090	
		(0.050)			(0.086)	
Education		0.159**			0.162	
		(0.070)			(0.101)	
Management & Commerce		0.128*			0.139*	
		(0.076)			(0.084)	
Society & Culture		-0.020			0.029	
		(0.055)			(0.069)	
Creative Arts		-0.085			-0.123*	
		(0.069)			(0.074)	
# of other fields		0.031			0.002	
		(0.104)			(0.110)	

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	(1)	(2)	(3)	(4)	(5)	(6)
Gained qualification at level 4+ within 10 years in:						
Engineering & Related Technologies			0.296***			0.268***
			(0.060)			(0.060)
Health			-0.198***			-0.061
			(0.059)			(0.112)
Education			-0.045			-0.138*
			(0.079)			(0.080)
Management & Commerce			-0.040			-0.051
			(0.068)			(0.066)
Society & Culture			-0.059			-0.096**
			(0.048)			(0.043)
Creative Arts			-0.043			-0.009
			(0.061)			(0.061)
# of other fields			-0.039			0.021
			(0.037)			(0.036)
Gained bachelor's degree+ within 10 years in:						
Engineering & Related Technologies			-0.367***			0.130
			(0.099)			(0.156)
Health			0.049			0.143
			(0.080)			(0.202)
Education			0.059			0.184
			(0.150)			(0.157)
Management & Commerce			0.024			0.203**
			(0.092)			(0.099)
Society & Culture			-0.044			0.128*
			(0.065)			(0.070)
Creative Arts			-0.064			-0.105
			(0.074)			(0.077)
# of other fields			0.028			0.049
			(0.068)			(0.072)
NCEA level 2 year fixed effects	Yes	Yes	Yes	Yes	Yes	Yes
Background characteristics	Yes	Yes	Yes	Yes	Yes	Yes
R-squared	0.046	0.102	0.112	0.048	0.092	0.110
Observations	771	771	771	771	771	771

Notes: This table presents the results of ordinary least squares regressions of dummy variables for being a top cumulative saver (columns 1-3) or top annual saver (columns 4-6) on field of study controls. Background characteristics are the first five controls shown in Appendix Table 3. Fields of study controlled for are the more common fields. Standard errors are robust. Asterisks denote: * p<0.10, ** p<0.05, *** p<0.01.

Appendix Table 12: Regressions of being a top saver on field of higher study for women

Dependent variable:	Student is a top cumulative saver			Student is a top annual saver		
	(1)	(2)	(3)	(4)	(5)	(6)
Passed at least 14 credits at level 3 within 5 years in:						
English	0.083*	0.084*	0.080*	0.112**	0.115**	0.101**
	(0.048)	(0.047)	(0.047)	(0.051)	(0.050)	(0.050)
Maths	-0.073	-0.122**	-0.118**	0.017	-0.007	-0.030
	(0.051)	(0.048)	(0.049)	(0.054)	(0.052)	(0.053)
Māori	-0.099***	-0.068**	-0.064**	-0.069*	-0.056	-0.042
	(0.033)	(0.033)	(0.032)	(0.036)	(0.037)	(0.036)
Humanities	-0.043	-0.031	-0.039	-0.017	-0.023	-0.022
	(0.043)	(0.043)	(0.043)	(0.045)	(0.044)	(0.044)
Social science	-0.039	-0.043	-0.036	0.014	-0.006	-0.005
	(0.038)	(0.036)	(0.036)	(0.041)	(0.039)	(0.039)
Science	0.037	0.040	0.039	0.023	0.008	0.011
	(0.046)	(0.045)	(0.045)	(0.047)	(0.047)	(0.047)
Computing & IT	0.061**	0.065**	0.067**	0.074**	0.070**	0.067**
	(0.029)	(0.028)	(0.029)	(0.030)	(0.029)	(0.029)
Service sector	0.019	0.025	0.029	0.028	0.043	0.042
	(0.028)	(0.028)	(0.028)	(0.028)	(0.028)	(0.028)
# of other fields	0.002	0.024	0.012	0.027	0.041*	0.039
	(0.024)	(0.024)	(0.024)	(0.025)	(0.024)	(0.024)
Passed at least 0.5 EFTS at level 4+ within 10 years in:						
Information Technology		-0.111**			-0.047	
		(0.053)			(0.077)	
Engineering & Related Technologies		0.282**			0.029	
		(0.119)			(0.089)	
Health		-0.142***			-0.089*	
		(0.037)			(0.047)	
Education		-0.039			-0.071	
		(0.057)			(0.048)	
Management & Commerce		-0.106***			-0.082**	
		(0.032)			(0.033)	
Society & Culture		-0.023			0.006	
		(0.031)			(0.033)	
Creative Arts		-0.080*			-0.009	
		(0.045)			(0.048)	
# of other fields		-0.074*			-0.059	
		(0.038)			(0.040)	
Passed at least 0.5 EFTS at level 7+ within 10 years in:						
Information Technology		0.649***			0.490**	
		(0.246)			(0.235)	
Engineering & Related Technologies		0.288			0.470*	
		(0.232)			(0.245)	
Health		0.202***			0.234***	
		(0.069)			(0.083)	
Education		0.068			0.147**	
		(0.068)			(0.064)	
Management & Commerce		0.237***			0.225***	
		(0.063)			(0.065)	
Society & Culture		-0.073			0.021	
		(0.050)			(0.059)	
Creative Arts		-0.181***			-0.064	
		(0.061)			(0.099)	
# of other fields		0.052			0.123	
		(0.092)			(0.115)	

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	(1)	(2)	(3)	(4)	(5)	(6)
Gained qualification at level 4+ within 10 years in:						
Engineering & Related Technologies			0.440***			0.235*
			(0.137)			(0.126)
Health			-0.142***			-0.136***
			(0.036)			(0.037)
Education			0.017			0.076
			(0.057)			(0.066)
Management & Commerce			-0.062*			-0.022
			(0.036)			(0.038)
Society & Culture			-0.100***			-0.050
			(0.036)			(0.038)
Creative Arts			-0.117**			-0.074
			(0.049)			(0.054)
# of other fields			-0.123***			-0.089***
			(0.027)			(0.029)
Gained bachelor's degree+ within 10 years in:						
Engineering & Related Technologies			0.318**			0.535***
			(0.146)			(0.133)
Health			0.218***			0.297***
			(0.072)			(0.079)
Education			0.041			0.033
			(0.076)			(0.085)
Management & Commerce			0.231***			0.281***
			(0.074)			(0.077)
Society & Culture			-0.028			0.121*
			(0.059)			(0.072)
Creative Arts			-0.030			0.004
			(0.076)			(0.088)
# of other fields			0.044			0.200*
			(0.077)			(0.110)
NCEA level 2 year fixed effects	Yes	Yes	Yes	Yes	Yes	Yes
Background characteristics	Yes	Yes	Yes	Yes	Yes	Yes
R-squared	0.059	0.118	0.121	0.090	0.127	0.142
Observations	1,038	1,038	1,038	1,038	1,038	1,038

Notes: This table presents the results of ordinary least squares regressions of dummy variables for being a top cumulative saver (columns 1-3) or top annual saver (columns 4-6) on field of study controls. Background characteristics are the first five controls shown in Appendix Table 3. Fields of study controlled for are the more common fields. Standard errors are robust. Asterisks denote: * p<0.10, ** p<0.05, *** p<0.01.

Appendix Table 13: Non-education characteristics of men who are top savers

	Cumulative savings			Annual savings			
	% of students with characteristic among:		Odds ratio	% of students with characteristic among:		Odds ratio	Students
	Non-top savers	Top savers		Non-top savers	Top savers		
Characteristic	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Years student had any children:							
Fifth year after NCEA level 2 or earlier	14.0	13.7	0.98	14.6	11.5	0.80	771
Years 6 to 10 after NCEA level 2	23.4	31.4	1.37**	25.2	25.0	0.99	771
Years 11 to 12 after NCEA level 2	15.5	17.3	1.11	16.1	13.7	0.86	771
Years of early work experience:							
Any work experience in year of NCEA level 2 or earlier	20.0	43.1	2.32***	22.8	33.3	1.51***	771
Any work experience in years 1 to 5 after NCEA level 2	84.5	>96.2	>3.85***	85.9	92.3	1.77**	771
Three+ years of work experience in years 1 to 5	54.4	90.2	5.76***	57.1	76.9	2.12***	771
Sectors of work experience in years 1 to 5 after gaining NCEA level 2:							
Central government in at least one year	9.8	13.7	1.33	9.7	10.6	1.09	672
Central government in at least 3 years	6.3	13.0	1.66**	7.6	10.0	1.24	471
Other government in at least one year	5.8	11.5	1.70*	6.8	8.3	1.18	672
Other government in at least 3 years	<5% have characteristic			<5% have characteristic			471
Non-profit organisation in at least one year	9.8	11.8	1.17	10.2	10.4	1.02	672
Non-profit organisation in at least 3 years	4.5	6.7	1.32	5.9	5.1	0.89	471
Firm size of work experience in years 1 to 5 after gaining NCEA level 2:							
Small employer (<10 employees) in at least one year	29.9	26.0	0.86	30.5	25.0	0.80	672
Small employer (<10 employees) in at least 3 years	16.2	15.2	0.95	16.2	15.0	0.93	471
Medium employer (10-99 employees) in at least one year	40.5	40.0	0.99	40.7	40.4	0.99	672
Medium employer (10-99 employees) in at least 3 years	18.0	26.1	1.38	19.5	22.5	1.14	471
Large employer (100+ employees) in at least one year	63.2	68.6	1.21	62.7	70.8	1.34*	672
Large employer (100+ employees) in at least 3 years	46.4	55.6	1.30**	46.6	56.4	1.34*	471
Industries of work experience in years 1 to 5 after gaining NCEA level 2:							
Agriculture, Forestry, Fishing in at least one year	6.9	4.0	0.62	7.4	<4.2	<0.61	672
Agriculture, Forestry, Fishing in at least 3 years	<5% have characteristic			<5% have characteristic			471
Manufacturing in at least one year	18.5	27.5	1.46**	19.3	25.0	1.29*	672
Manufacturing in at least 3 years	12.6	19.6	1.42	13.7	17.5	1.24	471
Construction in at least one year	15.0	27.5	1.74***	16.4	25.5	1.53**	672
Construction in at least 3 years	8.2	19.6	1.86***	8.5	17.9	1.79***	471
Wholesale Trade in at least one year	6.9	7.8	1.11	7.9	6.3	0.82	672
Wholesale Trade in at least 3 years	<5% have characteristic			<5% have characteristic			471
Retail Trade in at least one year	26.6	14.0	0.52***	25.4	18.8	0.73	672
Retail Trade in at least 3 years	17.1	8.9	0.56**	16.2	10.3	0.66*	471
Accommodation & Food Services in at least one year	15.6	6.0	0.41***	14.8	8.3	0.59**	672
Accommodation & Food Services in at least 3 years	8.0	<4.3	<0.60**	7.6	<4.9	<0.69*	471
Transport, Post, Warehousing in at least one year	5.2	6.0	1.12	5.1	6.4	1.20	672
Transport, Post, Warehousing in at least 3 years	<5% have characteristic			<5% have characteristic			471
Financial & Insurance Services in at least one year	<5% have characteristic			<5% have characteristic			672
Financial & Insurance Services in at least 3 years	<5% have characteristic			<5% have characteristic			471
Professional, Scientific, Technical Services in at least 1 year	7.5	10.0	1.27	7.9	10.4	1.26	672
Professional, Scientific, Technical Services in at least 3 years	<5% have characteristic			<5% have characteristic			471
Administrative & Support Services in at least one year	7.5	4.0	0.58	7.4	<4.2	<0.61**	672
Administrative & Support Services in at least 3 years	<5% have characteristic			<5% have characteristic			471
Public Administration & Safety in at least one year	9.2	13.7	1.40	9.1	12.5	1.31	672
Public Administration & Safety in at least 3 years	6.3	10.9	1.47	7.6	10.0	1.24	471
Education & Training in at least one year	6.3	6.0	0.96	5.1	8.3	1.48	672
Education & Training in at least 3 years	<5% have characteristic			<5% have characteristic			471
Health Care & Social Assistance in at least one year	<5% have characteristic			<5% have characteristic			672
Health Care & Social Assistance in at least 3 years	<5% have characteristic			<5% have characteristic			471
Arts & Recreation Services in at least one year	5.2	<3.9	<0.79	5.1	<4.2	<0.84	672
Arts & Recreation Services in at least 3 years	<5% have characteristic			<5% have characteristic			471
Other industry in at least one year	9.8	11.8	1.17	9.7	12.5	1.25	672
Other industry in at least 3 years	4.5	8.9	1.60**	5.1	7.5	1.34	471

Notes: Employment counts as work experience if it is by the highest-paying employer in the year and wages are at least $10,000. Work experience in at least one year characteristics are defined only for those with at least a year of work experience. Work experience in at least three years characteristics are defined only for those with at least three years of work experience. The odds ratio is calculated as (probability a student with the characteristic is a top saver)/(probability a student without the characteristic is a top saver). Population percentages are expressed as bounds where affected by confidentialisation of values under 6. Asterisks denote the odds ratio is different to one at: * p<0.10, ** p<0.05, *** p<0.01, M p is missing.

Appendix Table 14: Non-education characteristics of women who are top savers

	Cumulative savings			Annual savings			
	% of students with characteristic among:		Odds ratio	% of students with characteristic among:		Odds ratio	Students
	Non-top savers	Top savers		Non-top savers	Top savers		
Characteristic	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Years student had any children:							
Fifth year after NCEA level 2 or earlier	35.1	14.3	0.37***	35.4	13.0	0.34***	1038
Years 6 to 10 after NCEA level 2	44.0	14.3	0.27***	43.3	17.1	0.34***	1038
Years 11 to 12 after NCEA level 2	21.7	19.7	0.91	23.9	10.1	0.42***	1038
Years of early work experience:							
Any work experience in year of NCEA level 2 or earlier	15.2	26.1	1.68***	16.7	20.0	1.19	1038
Any work experience in years 1 to 5 after NCEA level 2	76.2	>97.2	>8.38***	77.8	93.0	3.11***	1038
Three+ years of work experience in years 1 to 5	43.1	80.0	3.91***	46.7	65.7	1.87***	1038
Sectors of work experience in years 1 to 5 after gaining NCEA level 2:							
Central government in at least one year	10.0	26.1	2.18***	10.7	24.2	1.98***	840
Central government in at least 3 yrs	5.9	16.1	1.90***	7.0	15.2	1.78**	525
Other government in at least one year	5.2	8.6	1.46	4.7	7.7	1.47**	840
Other government in at least 3 yrs	<5% have characteristic			<5% have characteristic			525
Non-profit organisation in at least one year	15.6	7.2	0.50***	14.0	10.8	0.79	840
Non-profit organisation in at least 3 yrs	8.4	<3.5	<0.50***	7.0	<4.3	<0.68*	525
Firm size of work experience in years 1 to 5 after gaining NCEA level 2:							
Small employer (<10 employees) in at least one year	28.9	18.6	0.64***	28.5	18.2	0.63***	840
Small employer (<10 employees) in at least 3 yrs	11.8	<3.5	<0.36***	12.3	<4.3	<0.39***	525
Medium employer (10-99 employees) in at least 1 yr	47.6	39.1	0.77**	44.9	48.5	1.12	840
Medium employer (10-99 employees) in at least 3 yrs	26.9	16.1	0.63***	24.6	23.4	0.95	525
Large employer (100+ employees) in at least one year	58.8	76.8	1.93***	61.7	68.2	1.25	840
Large employer (100+ employees) in at least 3 yrs	39.5	69.6	2.37***	44.2	63.0	1.77***	525
Industries of work experience in years 1 to 5 after gaining NCEA level 2:							
Agriculture, Forestry, Fishing in at least one year	<5% have characteristic			<5% have characteristic			840
Agriculture, Forestry, Fishing in at least 3 yrs	<5% have characteristic			<5% have characteristic			525
Manufacturing in at least one year	11.3	14.5	1.23	11.7	10.8	0.93	840
Manufacturing in at least 3 yrs	5.0	10.7	1.64***	7.0	6.5	0.95	525
Construction in at least one year	<5% have characteristic			<5% have characteristic			840
Construction in at least 3 yrs	<5% have characteristic			<5% have characteristic			525
Wholesale Trade in at least one year	<5% have characteristic			<5% have characteristic			840
Wholesale Trade in at least 3 yrs	<5% have characteristic			<5% have characteristic			525
Retail Trade in at least one year	28.0	20.3	0.72**	28.0	21.2	0.75**	840
Retail Trade in at least 3 yrs	14.2	12.7	0.92	13.2	15.2	1.13	525
Accommodation & Food Services in at least one year	26.7	13.0	0.49***	25.7	16.7	0.65**	840
Accommodation & Food Services in at least 3 yrs	13.4	<3.6	<0.32***	12.3	4.4	0.41**	525
Transport, Post, Warehousing in at least one year	<5% have characteristic			<5% have characteristic			840
Transport, Post, Warehousing in at least 3 yrs	<5% have characteristic			<5% have characteristic			525
Financial & Insurance Services in at least one year	2.4	17.4	3.26***	3.3	13.6	2.60***	840
Financial & Insurance Services in at least 3 yrs	<5% have characteristic			<5% have characteristic			525
Professional, Scientific, Technical Services in at least 1 yr	8.1	10.0	1.19	7.4	12.3	1.50**	840
Professional, Scientific, Technical Services in at least 3 yrs	5.9	<3.5	<0.67*	5.4	<4.3	<0.84	525
Administrative & Support Services in at least one year	9.5	11.6	1.18	9.8	10.6	1.07	840
Administrative & Support Services in at least 3 yrs	<5% have characteristic			<5% have characteristic			525
Public Administration & Safety in at least one year	6.6	17.4	2.06***	7.5	13.8	1.63***	840
Public Administration & Safety in at least 3 yrs	5.0	17.9	2.16***	7.0	15.6	1.82***	525
Education & Training in at least one year	11.8	13.0	1.09	10.7	17.9	1.54**	840
Education & Training in at least 3 yrs	7.5	3.6	0.56	6.2	6.5	1.04	525
Health Care & Social Assistance in at least one year	15.2	10.3	0.71*	14.9	12.3	0.84	840
Health Care & Social Assistance in at least 3 yrs	9.2	<3.5	<0.46***	8.5	<4.3	<0.57*	525
Arts & Recreation Services in at least one year	<5% have characteristic			<5% have characteristic			840
Arts & Recreation Services in at least 3 yrs	<5% have characteristic			<5% have characteristic			525
Other industry in at least one year	9.0	7.2	0.83	8.9	9.1	1.02	840
Other industry in at least 3 yrs	<5% have characteristic			<5% have characteristic			525

Notes: Employment counts as work experience if it is by the highest-paying employer in the year and wages are at least $10,000. Work experience in at least one year characteristics are defined only for those with at least a year of work experience. Work experience in at least three years characteristics are defined only for those with at least three years of work experience. The odds ratio is calculated as (probability a student with the characteristic is a top saver)/(probability a student without the characteristic is a top saver). Population percentages are expressed as bounds where affected by confidentialisation of values under 6. Asterisks denote the odds ratio is different to one at: * p<0.10, ** p<0.05, *** p<0.01, M p is missing.

Appendix Table 15: Regressions of being a top saver on pathways outside education for men

Dependent variable:	Student is a top cumulative saver			Student is a top annual saver		
	(1)	(2)	(3)	(4)	(5)	(6)
Any children born in year relative to NCEA level 2:						
Year 5 or earlier	-0.055	-0.032	-0.025	-0.043	-0.041	-0.030
	(0.045)	(0.042)	(0.042)	(0.042)	(0.042)	(0.042)
Years 6 to 10	0.096**	0.059	0.045	0.048	0.032	0.028
	(0.041)	(0.039)	(0.038)	(0.038)	(0.038)	(0.038)
Years 11 and 12	-0.045	-0.023	-0.014	-0.004	0.003	0.005
	(0.043)	(0.042)	(0.041)	(0.043)	(0.044)	(0.043)
Overseas at least 6 months in year relative to NCEA level 2:						
Any year 3 to 5	-0.082	-0.040	-0.028	-0.129**	-0.107*	-0.099*
	(0.066)	(0.062)	(0.065)	(0.056)	(0.055)	(0.057)
Any year 6 to 10	0.085*	0.076*	0.071	0.012	0.006	0.001
	(0.049)	(0.046)	(0.046)	(0.048)	(0.048)	(0.049)
Year 11 or 12	0.138**	0.139***	0.141***	0.323***	0.325***	0.318***
	(0.057)	(0.053)	(0.053)	(0.060)	(0.060)	(0.062)
Years of work experience in years 1 to 5 after NCEA level 1 (omitted category: 0):						
1		0.020	0.027		-0.036	-0.014
		(0.036)	(0.033)		(0.047)	(0.044)
2		0.104**	0.107**		0.015	0.043
		(0.048)	(0.046)		(0.051)	(0.050)
3		0.087*	0.085*		0.070	0.098*
		(0.051)	(0.047)		(0.057)	(0.055)
4		0.166***	0.176***		0.076	0.112**
		(0.049)	(0.046)		(0.051)	(0.049)
5		0.388***	0.393***		0.158***	0.185***
		(0.052)	(0.049)		(0.053)	(0.051)
Any work experience in years 1 to 5 in:						
Central government		0.037			-0.016	
		(0.051)			(0.051)	
Medium-sized firm (10-99 employees)		-0.041			-0.009	
		(0.034)			(0.034)	
Large firm (100+ empployees)		-0.005			0.045	
		(0.034)			(0.033)	
Manufacturing			-0.000			0.038
			(0.044)			(0.044)
Construction			0.070			0.064
			(0.045)			(0.046)
Retail Trade			-0.112***			-0.055
			(0.036)			(0.037)
Accommodation & Food Services			-0.128***			-0.079**
			(0.040)			(0.039)
Professional, Scientific, and Technical Services			0.173***			0.059
			(0.063)			(0.065)
Administrative & Support Services			-0.055			-0.075
			(0.056)			(0.049)
Public Administration & Safety			0.024			-0.014
			(0.053)			(0.050)
Education & Training			-0.027			0.035
			(0.065)			(0.075)
Health Care & Social Assistance			-0.028			0.103
			(0.096)			(0.105)
NCEA level 2 year fixed effects	Yes	Yes	Yes	Yes	Yes	Yes
Background characteristics	Yes	Yes	Yes	Yes	Yes	Yes
Level of highest qualification fixed effects	Yes	Yes	Yes	Yes	Yes	Yes
Fields of study controls	Yes	Yes	Yes	Yes	Yes	Yes
R-squared	0.145	0.244	0.280	0.171	0.199	0.213
Observations	771	771	771	771	771	771

Notes: This table presents the results of ordinary least squares regressions of dummy variables for being a top cumulative saver (columns 1-3) or top annual saver (columns 4-6) on pathways outside education. Fields of study controls are those presented in column 2 of Appendix Table 11. Employment counts as work experience if it was for the highest paying employer in the year and at least $10,000 of wages were paid. Standard errors are robust. Asterisks denote: * p<0.10, ** p<0.05, *** p<0.01.

Appendix Table 16: Regressions of being a top saver on pathways outside education for women

Dependent variable:	Student is a top cumulative saver			Student is a top annual saver		
	(1)	(2)	(3)	(4)	(5)	(6)
Any children born in year relative to NCEA level 2:						
Year 5 or earlier	-0.076***	-0.006	-0.013	-0.047*	-0.004	-0.006
	(0.025)	(0.023)	(0.022)	(0.024)	(0.024)	(0.024)
Years 6 to 10	-0.133***	-0.137***	-0.138***	-0.090***	-0.094***	-0.093***
	(0.024)	(0.022)	(0.022)	(0.022)	(0.022)	(0.022)
Years 11 and 12	0.006	0.002	0.004	-0.093***	-0.099***	-0.098***
	(0.028)	(0.026)	(0.026)	(0.025)	(0.025)	(0.025)
Overseas at least 6 months in year relative to NCEA level 2:						
Any year 3 to 5	-0.061	0.007	0.016	-0.003	0.037	0.021
	(0.061)	(0.056)	(0.055)	(0.064)	(0.063)	(0.061)
Any year 6 to 10	0.088*	0.082*	0.083*	-0.010	-0.011	-0.007
	(0.047)	(0.044)	(0.043)	(0.042)	(0.042)	(0.042)
Year 11 or 12	0.137**	0.126**	0.109*	0.272***	0.258***	0.252***
	(0.062)	(0.058)	(0.058)	(0.062)	(0.062)	(0.062)
Years of work experience in years 1 to 5 after NCEA level 1 (omitted category: 0):						
1		0.027	0.120***		-0.001	0.068*
		(0.035)	(0.035)		(0.040)	(0.041)
2		0.031	0.134***		-0.030	0.060
		(0.036)	(0.037)		(0.040)	(0.039)
3		0.058	0.167***		-0.004	0.076*
		(0.042)	(0.043)		(0.045)	(0.046)
4		0.122***	0.250***		0.025	0.120**
		(0.044)	(0.045)		(0.045)	(0.047)
5		0.369***	0.489***		0.151***	0.235***
		(0.046)	(0.047)		(0.046)	(0.047)
Any work experience in years 1 to 5 in:						
Central government		0.185***			0.145***	
		(0.045)			(0.046)	
Medium-sized firm (10-99 employees)		-0.024			0.069**	
		(0.029)			(0.030)	
Large firm (100+ empployees)		0.055*			0.046	
		(0.030)			(0.030)	
Manufacturing			0.004			0.011
			(0.043)			(0.043)
Construction			0.035			-0.048
			(0.114)			(0.105)
Retail Trade			-0.101***			-0.065**
			(0.031)			(0.031)
Accommodation & Food Services			-0.132***			-0.047
			(0.030)			(0.033)
Professional, Scientific, and Technical Services			-0.091			0.072
			(0.057)			(0.060)
Administrative & Support Services			0.035			0.042
			(0.047)			(0.044)
Public Administration & Safety			0.097*			0.102*
			(0.055)			(0.057)
Education & Training			-0.010			0.085*
			(0.047)			(0.049)
Health Care & Social Assistance			-0.080**			-0.041
			(0.039)			(0.040)
NCEA level 2 year fixed effects	Yes	Yes	Yes	Yes	Yes	Yes
Background characteristics	Yes	Yes	Yes	Yes	Yes	Yes
Level of highest qualification fixed effects	Yes	Yes	Yes	Yes	Yes	Yes
Fields of study controls	Yes	Yes	Yes	Yes	Yes	Yes
R-squared	0.189	0.325	0.331	0.204	0.253	0.255
Observations	1,038	1,038	1,038	1,038	1,038	1,038

Notes: This table presents the results of ordinary least squares regressions of dummy variables for being a top cumulative saver (columns 1-3) or top annual saver (columns 4-6) on pathways outside education. Fields of study controls are those presented in column 2 of Appendix Table 11. Employment counts as work experience if it was for the highest paying employer in the year and at least $10,000 of wages were paid. Standard errors are robust. Asterisks denote: * p<0.10, ** p<0.05, *** p<0.01.