Building on strengths: Top 10%

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Disclaimer

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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 were in the top 10% academically 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 Health or Management and Commerce. Many of the popular fields for post-school study, such as Society and Culture, Natural and Physical Sciences, Creative Arts, and Education do not appear to benefit women financially. Nonetheless, there may be good non-financial reasons for students to study them.

We find men also tend to do comparatively well if they complete at least a bachelor's degree, and the fields of study that lead to strong or weak labour market outcomes for women lead to similar outcomes for men. In addition, many men gain qualifications in Engineering and Related Technologies at level 4 or above, and such men tend to enjoy labour market success.

For both men and women, early career experience working in the Professional, Scientific, and Technical Services industry appears beneficial.

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 were in the top 10% academically 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 were in the top 10% academically. 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 were in the top 10% academically at school.

2. Overview of the students who were in the top 10% academically

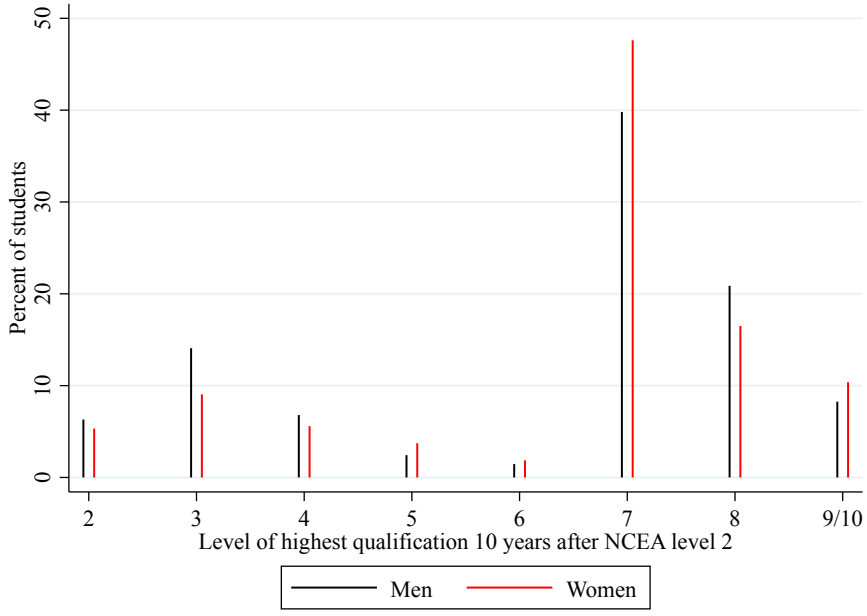
Māori students who are in the top 10% specialty are defined as students who achieved NCEA level 2 between 2004 and 2007 when aged 16 to 19, and whose level 2 percentile scores at the

[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.

end of the year they gained NCEA level 2 were in the top 10% of students in our sample.[2] A total of 1,749 students were in the top 10% academically, 65% of whom are female, and 7% 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 were in the top 10% academically. Many of these students gain high level qualifications. The most common highest qualification level for both genders is level 7 (which includes bachelor's degrees and other qualifications at a similar level), which is attained by 40% of men and 48% of women. Further, around 30% of both men and women attain qualifications at levels 8 to 10. Relatively low proportions of each gender gain highest qualifications at each level below 7.

Figure 1: Distribution of level of highest qualification



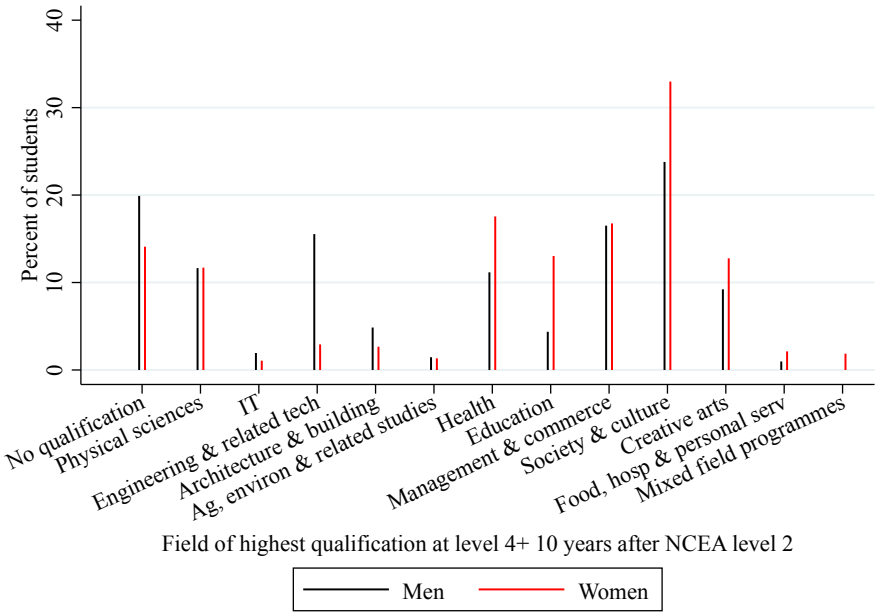
Notes: This figure shows the highest level of qualification gained by men and women who were in the top 10% academically. To be counted, qualifications must have been gained within 10 years of achieving NCEA level 2.

Figure 2 shows the distribution across fields of study of the highest qualifications of men and women who were in the top 10% academically at level 2. Among those who gain qualifications at level 4 or above, the most common field of study for both genders is Society and Culture, with around a quarter of male students and a third of female students gaining a highest qualification at level 4 or above in this field. Management and Commerce and Physical Sciences

[2] We analyse these students separately because they are highly academically capable and would likely do well in the labour market no matter what educational route they took. Top 10% students are excluded from the other specialties.

are each taken by similar proportions of men and women. Men are much more likely than women to gain highest qualifications in Engineering and Related Technologies. Women are considerably more likely than men to gain highest qualifications in Health and Education, and somewhat more like to gain highest qualifications in Creative Arts.

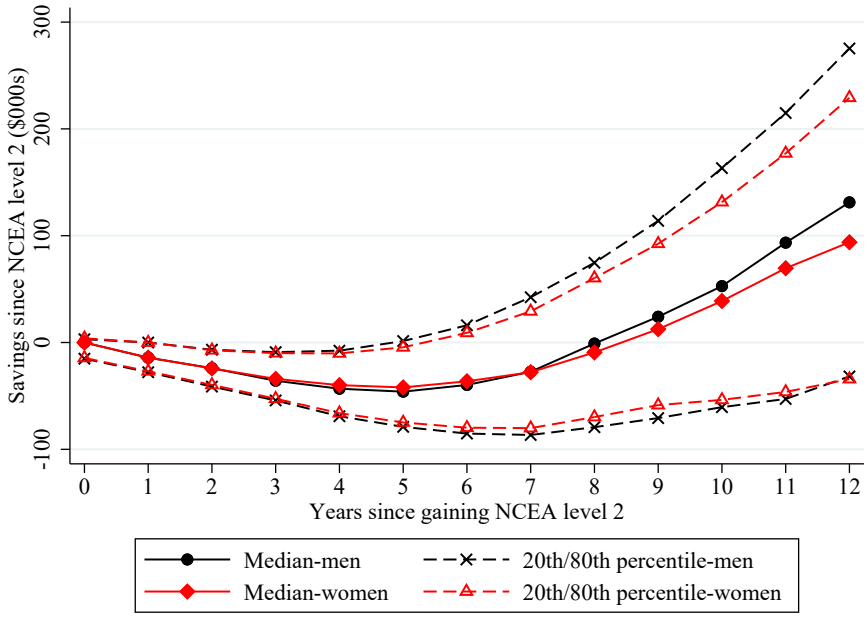
Figure 2: Distribution of field of highest qualification



Notes: This figure shows the percentage of students whose highest qualification (at level 4 or above) is in each field among those who were in the top 10% academically. 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.

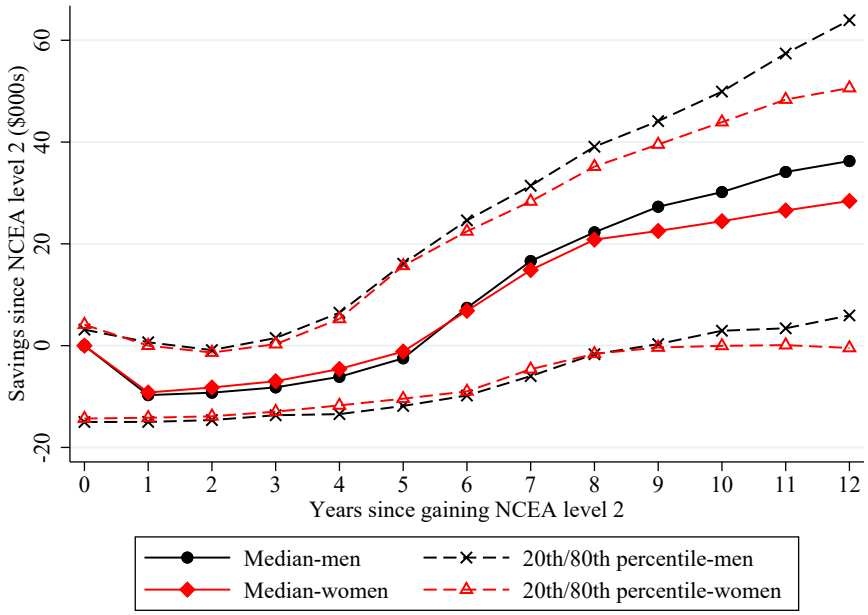
Figure 3 shows the evolution over time of the distribution of cumulative savings for men and women who were in the top 10% academically. Median cumulative savings for men and women are similarly negative for the first eight years, indicating any earnings the median students have over these years are insufficient to cover their estimated living costs and tertiary fees. This reflects the higher proportion of students who stay in higher education. By year 8, cumulative saving are close to zero for both genders. Beyond this point, median savings diverge slightly for the genders, with men's savings pulling ahead. By 12 years after NCEA level 2, median men's savings are around $130,000, whereas women's are around $95,000. Men at the upper end of the savings distribution again do slightly better than women, but men's and women's earnings at the lower end of the distribution are similar.

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 were in the top 10% academically.

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 were in the top 10% academically.

Figure 4 similarly shows how the distribution of annual savings changes over time for men and women who were in the top 10% academically. It shows median men's annual savings are

extremely similar to median women's until year 8, when men's gain a small lead over women's. From 10 years after NCEA level 2 onwards, men's median savings are around $7,000 higher. The annual savings gap persists in year 12, suggesting 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 were in the top 10% academically vary with their highest level of qualification.

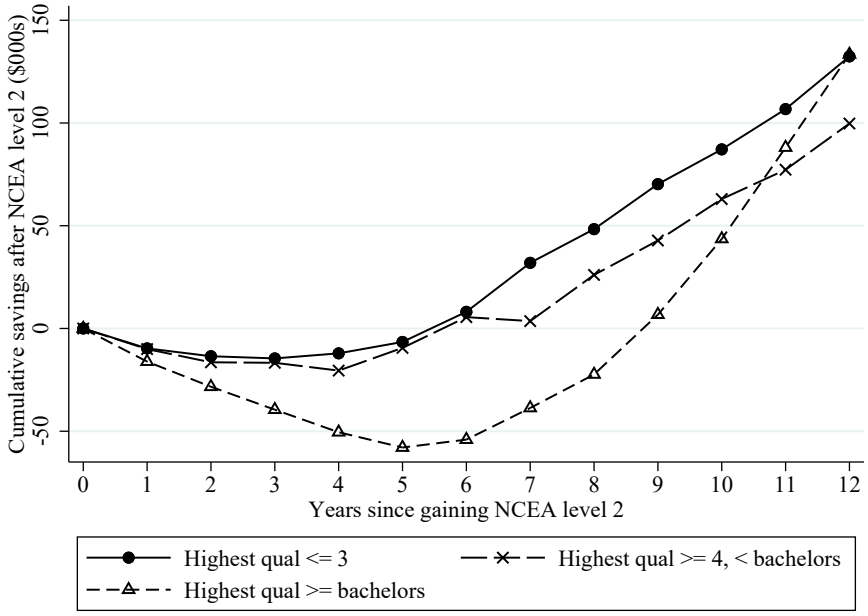
3.1 Cumulative and annual savings by level of highest qualification

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) have relatively similar annual savings over time to those with intermediate qualifications (at least level 4 but below bachelor's level) for 12 years after NCEA level 2. The median cumulative savings of these two groups of men are also similar for 6 years after NCEA level 2, after which point those of intermediate-qualified men fall behind those of low-qualified men. Men with high qualifications (bachelor's level and above) have lower annual savings than other men for 6 years after NCEA level 2, but then their annual savings grow and overtake those of less qualified men. Their cumulative savings, which fall well behind those of less qualified men while they are studying, quickly gain ground and by 12 years after NCEA level 2 are equal to those of low-qualified men and higher than those of intermediate-qualified men. Because high-qualified men have substantially higher annual savings in year 12, their cumulative savings are likely to pull increasingly ahead of those of less qualified men in subsequent years.

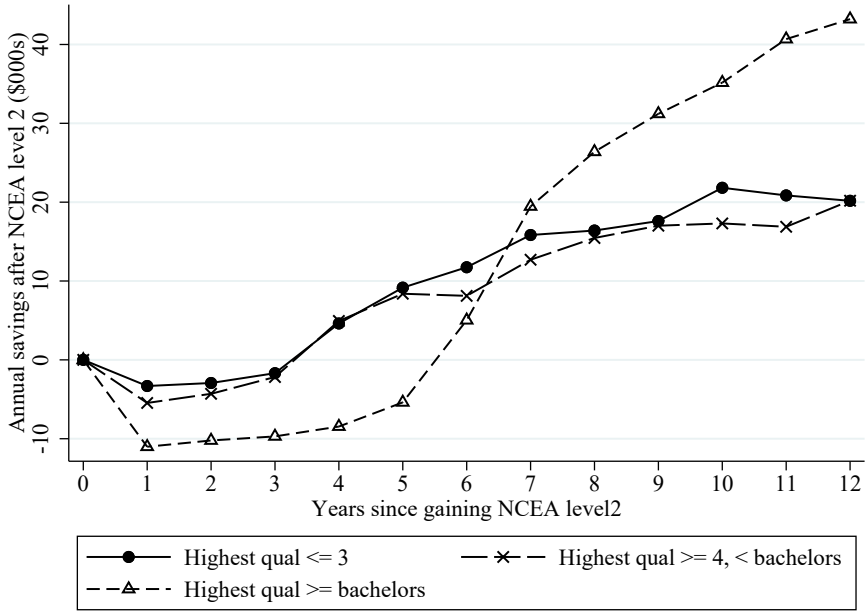
Figure 6 reveals that for the first five years after NCEA level 2, women's annual savings are lowest for those who have the highest qualification levels, and women with low and, to a lesser extent, intermediate qualifications develop a cumulative savings advantage over those who are gaining higher qualifications. However, around year 6 the annual savings of women with high qualifications grow sharply as these women complete their studies and enter the labour force. Their annual savings then overtake those of less qualified women rapidly, and by year 12 are $25,000 ahead and still growing strongly. This results in the most qualified women overtaking less qualified women in terms of cumulative savings in year 9, and pulling further ahead by year 12.

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

Panel A: Cumulative savings



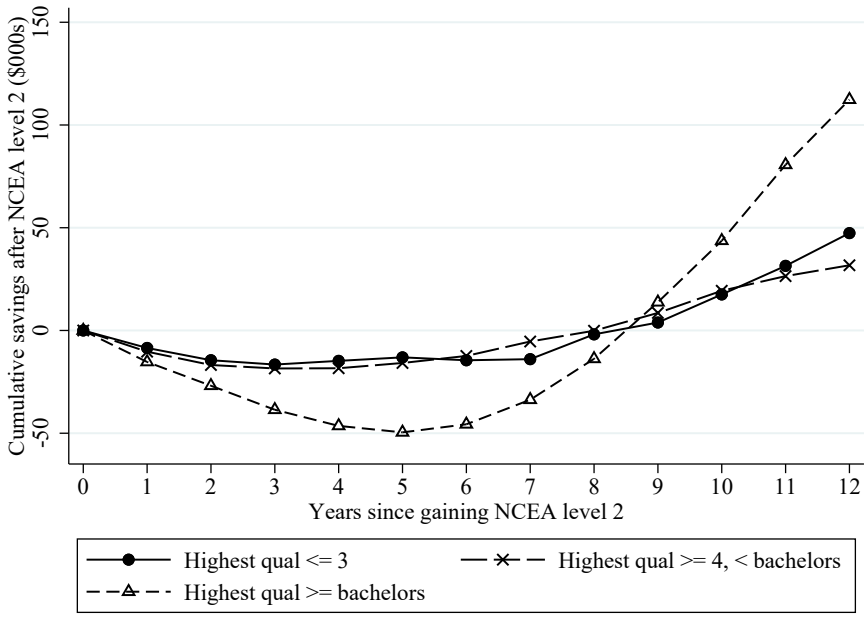
Panel B: Annual savings



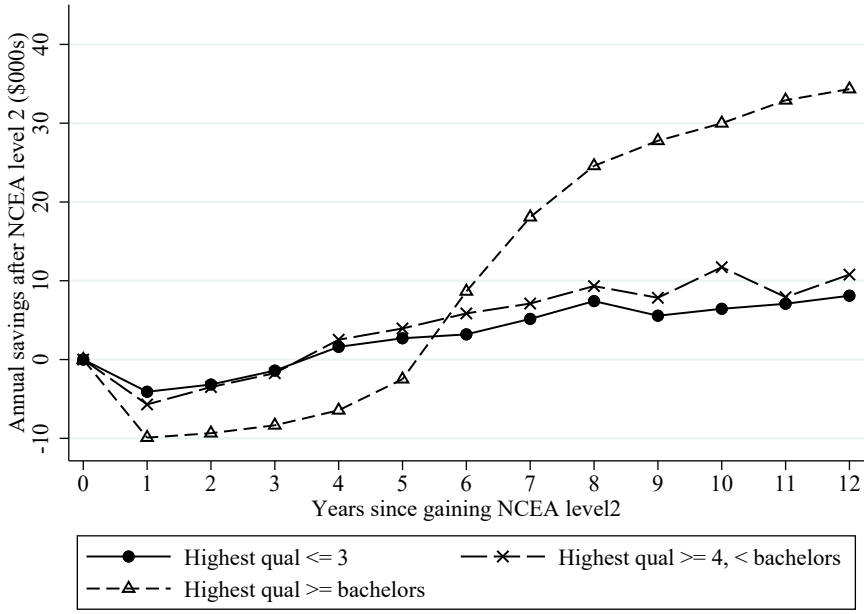
Notes: This figure shows changes over time in the median of cumulative savings since gaining NCEA level 2 (Panel A) and median of annual savings (Panel B) for men who were in the top 10% academically and achieved different levels of highest qualification. Qualifications are included if they were gained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



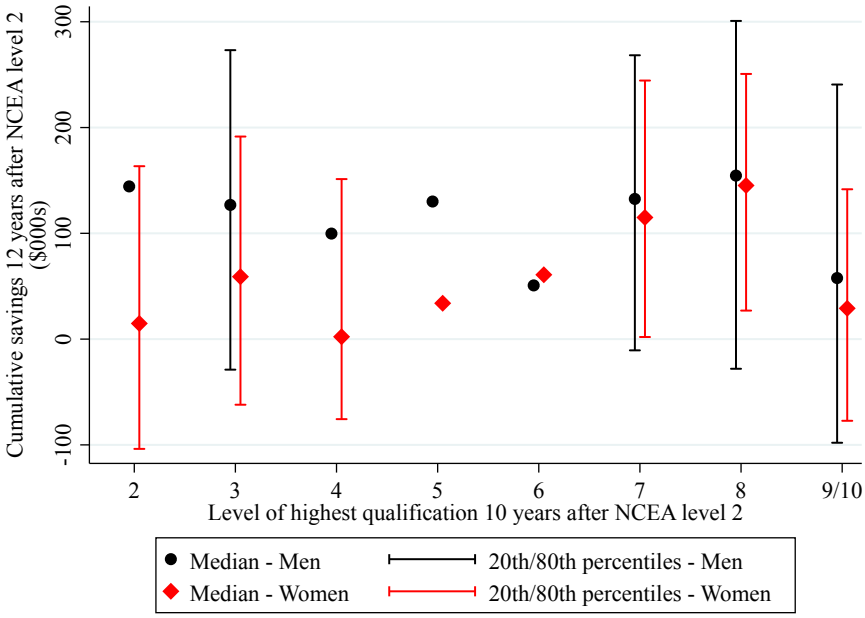
Notes: This figure shows changes over time in the median of cumulative savings since gaining NCEA level 2 (Panel A) and median of annual savings (Panel B) for women who were in the top 10% academically and achieved different levels of highest qualification. Qualifications are included if they were gained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

These findings show that, among those who were in the top 10% academically, the higher earnings of men who gain a bachelor's degree compensate for the opportunity cost of their education within 12 years of NCEA level 2. At a longer time horizon the benefit of such

qualifications will become even clearer. Women with a bachelor's degree similarly do substantially better than women without. However, after 12 years the annual savings of women lag about $10,000 behind those of men with the same level of qualifications.

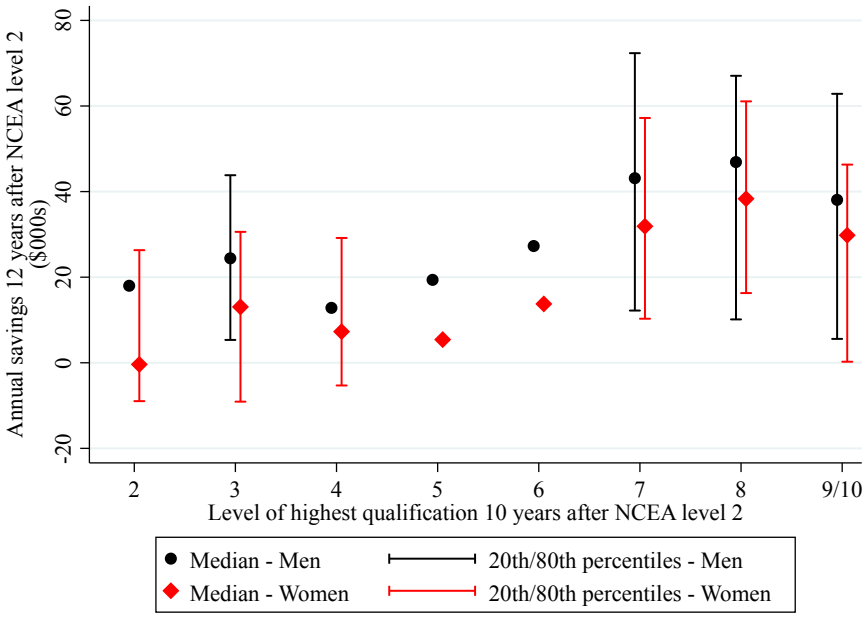
Figures 7 and 8 explore the distribution of cumulative and annual savings after 12 years for men and women with this specialty by disaggregated level of highest qualification. They show women's savings don't benefit much from higher qualifications below level 7, but do benefit from level 8 relative to level 7. Similarly, men's cumulative and annual savings are both highest for those with level 8 qualifications.

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 were in the top 10% academically 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 were in the top 10% academically 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 were in the top 10% academically 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 were in the top 10% academically. 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.

Around 80% of both men and women gain a level 3 NCEA certificate the year after their level 2 certificate. The bivariate analysis shows women who achieve level 3 this year are 64% more likely than women who don't to be top cumulative savers, and men and women who do so are 96% and 140% more likely to be top annual savers respectively.

In regressions that control for students' backgrounds, men's highest qualifications are not significantly related to their cumulative savings. However, men who achieve level 7 or level 8 or higher qualifications are substantially more likely to be top annual savers than are men with similar backgrounds who gain lower qualifications. In these regressions for women, those with

level 7 qualifications are most likely to be top cumulative and annual savers. Those with level 8 or higher qualifications are almost as likely as those with level 7 to be top annual savers, but are less likely to be top cumulative savers.

Industry training is a relatively uncommon pathway for these academically-inclined students: only 17% of men complete any industry training credits and 10% gain an industry training qualification. It generally appears beneficial for their cumulative savings, but not their annual savings. Ten percent of men achieve any industry training credits at level 4 or above. These men are 2.5 times as likely as men who do not achieve any industry training credits at this level to be top cumulative savers but insignificantly more likely to be top *annual* savers. The regression analysis tells a similar story, with industry training qualifications at level 4 or above associated with the highest probability of being a top cumulative saver of any qualification level and type. Men with level 4 industry training qualifications and those with qualifications at level 7 are equal most likely to be top annual savers. Only 10% of women gain any industry training credits, and 6% any industry training qualification. The regressions show the few women with level 4 industry training qualifications are more likely to be top cumulative and annual savers than women with similar backgrounds who have any other level or type of qualification.

Eighty percent of men and 84% of women who were top academic students attend a university. In the bivariate analysis, this is associated with a dramatically higher probability of being a top annual saver, especially for men: women who attend a university are 2.2 times as likely as women who don't to be top annual savers, but men who do are more than 5 times as likely as those who don't to be top annual savers. The difference weakens substantially for men and disappears for women in the regressions, which control for student background and level of highest qualification. This suggests students who attend universities are primarily likely to be top annual savers because they tend to gain high-level qualifications. Men and women who attend wānanga are less likely to be top cumulative and annual savers (statistically significantly except for annual savings for men) than those with the same level of qualifications gained elsewhere; women who attend industry training organisations (14%) are more likely to be top cumulative savers.

In the bivariate analysis, women who attend a school or tertiary institute in a secondary or minor urban area are less likely than other women to be top annual savers, and weakly less likely to be 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

no significant relationship between men's background characteristics and being a top cumulative saver, though men who are stronger academically (indicated by a high percentile score) are weakly more likely to be top annual savers and those with multiple specialties are much more likely to be top annual savers. Men at higher decile schools are slightly more likely to be top annual savers, partly because they tend to achieve higher level qualifications. For women, strong academic ability, multiple specialties, and a high decile school are all strongly positively associated with being a top annual saver, and women with multiple specialties are also significantly more likely to be top cumulative savers.

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

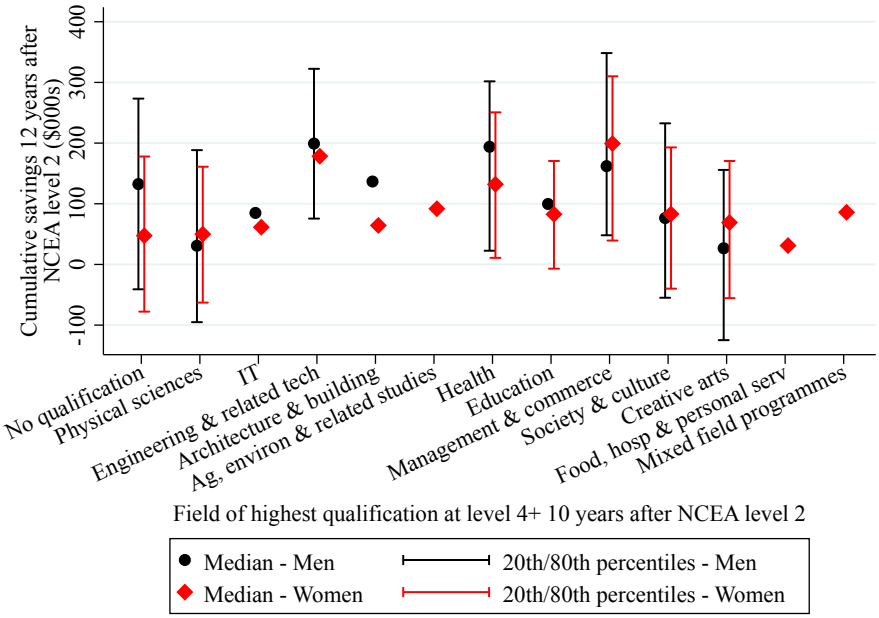
This section shows how the cumulative and annual savings of students who were in the top 10% academically vary with the fields in which they study at various levels and gain qualifications.

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, relatively low proportions of men and women do not have qualifications at level 4 or above. Such men have mid-range cumulative savings of about $130,000 and annual savings of just over $20,000, whereas the women have cumulative savings of $50,000 and annual savings of only $10,000.

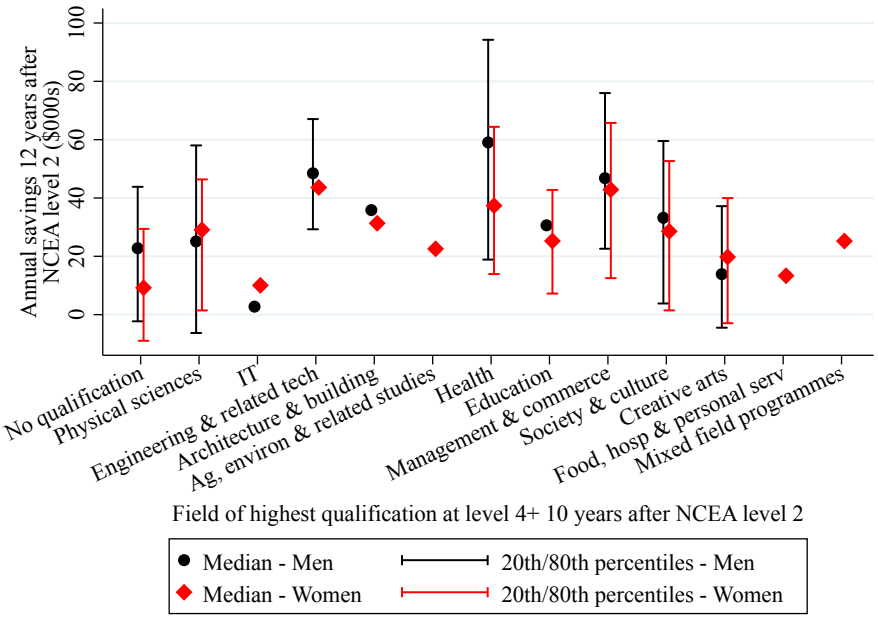
The highest proportion of men and women have qualifications at level 4 or above in Society and Culture. Such men have lower median cumulative savings than men with no qualifications at this level (around $75,000), but higher annual savings (nearly $35,000). Women with Society and Culture qualifications have higher cumulative and annual savings than women with no qualifications.

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 were in the top 10% academically 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.

Engineering and Related Technologies, Management and Commerce, and Health are particularly good fields for men and women who perform in the top 10% academically, with Engineering and Related Technologies being male-dominated, Health female-dominated, and Management and Commerce balanced in terms of gender. Health offers men the highest median annual savings ($60,000) and the equal highest median cumulative savings ($195,000), but much more variable annual savings than Engineering and Related Technologies, which offers the next highest cumulative and annual savings. Women too do well in Health, but considerably less well than men; the field has one of the largest gender savings gaps at the median. Management and Commerce offers women the highest median cumulative savings ($200,000) and equal highest median annual savings (about $45,000, similar to Engineering and Related Technologies).

4.2 Fields of higher study of top cumulative and annual savers

In this section we again categorise men and women who were in the top 10% academically 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, Maths, Humanities, Social Science, or Science are more likely than men who don't to be top annual savers. This difference is particularly large for Maths and Science. Seventy-one percent of men gain these credits in Maths, and those who do are 3.9 times as likely as those who don't to be top annual savers. They are also 54% more likely to be top cumulative savers. Seventy-nine percent of men gain these credits in Science, and these men are 3.7 times as likely as others to be top annual savers. However, men who pass 14 credits at level 2 in Māori are less than 40% as likely as other men to be top annual savers. The majority of men who pass at least 14 credits in any of these subjects also pass at least 14 *achievement* standard credits in the subject, so achievement standard credits are similarly related to being a top saver.

For women, the bivariate analysis shows level 2 credits in English, Maths, Humanities, Social Science, and Science are all associated with higher probabilities of being both top annual savers and top cumulative savers (cumulative savings for Social Science is the only insignificant relationship). Women with credits in Māori are less likely to be top annual savers and less likely to be top cumulative savers. Achievement standard credits at this level are also strongly associated with being a top saver for women (negatively for Māori and positively for the other subjects).

In the bivariate analysis, passing at least 14 credits at level 3 in any of the same academic subjects is associated with being a top annual saver for men. However, in regressions that control for student background, the only subject that remains significantly positively associated with being a top annual saver is Maths. This relationship is substantially explained by the higher level subjects that the 65% of men who gain these Maths credits go on to study. Maths is also weakly positively associated with being a top *cumulative* saver in the regressions. In the bivariate analysis, passing 14 level 3 credits in Engineering and Technology is associated with a somewhat higher probability of being a top cumulative saver for men.[3]

Similarly for women, passing level 3 credits in any of the academic fields is associated with a significantly higher probability of being a top annual saver in the bivariate analysis. In addition, the 10% of women who pass 14 credits in Business are more than twice as likely as women who

[3] This field is not examined separately in the regressions, which focus on the fields that are common among men and women.

don't to be top cumulative savers and top annual savers. When we compare women with similar backgrounds in the regressions, those with Business credits are still substantially more likely to be top cumulative and annual savers, and this is partially explained by the fields they study at higher levels. Here credits in Māori are associated with a decreased likelihood of being a top cumulative saver, whereas Maths credits are weakly positively associated with being a top cumulative saver and Science credits are weakly positively associated with being a top annual saver.

The difference in results for level 3 credits in different fields between the bivariate and regression analysis suggests it is students with stronger academic backgrounds who tend to pass 14 credits in the more academic subjects, and their higher earnings are primarily explained by their backgrounds rather than by their success in these subjects.

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.

Society and Culture is the field in which men are most likely to pass at least 0.5 EFTS of courses at level 4 and above. Forty-three percent of men do so, though only 24% gain a qualification in this field at level 4 or above. In the regressions, men who pass EFTS (gain qualifications) in this field at level 4 or above are less likely to be top cumulative savers and no more likely to be top annual savers than are students with the same backgrounds and level 3 fields of study, but who don't study above level 3 (don't gain any qualifications above level 3). However, the study of Society and Culture, may be attractive for reasons unrelated to labour market returns.

Natural and Physical Sciences is the second most common field in which men pass at least 0.5 EFTS of courses at level 4 or above (30%), but is only the fourth most common field for them to gain qualifications in at this level (11% of men do so). This suggests many men who are studying in other fields also take a substantial number of Natural and Physical Sciences credits. The regressions show that, relative to men with similar backgrounds who studied the same level 3 subjects but then left education, men who study in this field at level 4-6 are similarly likely to be top savers. If they gain a qualification in the field at this level, they are substantially less likely that similar men who do not gain any qualifications at level 4 or above to be top cumulative or annual savers. Those who study or gain qualifications in Natural and Physical Sciences at level 7 or above are somewhat less likely than education-leavers to be top cumulative savers.

Management and Commerce is men's third most common field of study at level 4 and above (21% of men) and second most common field of qualification (17%). The majority men who study in the field gain a qualification in it at bachelor's level or above (15% of men). Compared with similar men who leave education without gaining a qualification above level 3, men who gain such a bachelor's or higher degree in Management and Commerce are weakly more likely to be both top cumulative and top annual savers.

Engineering and Related Technologies is another common field of study for men: 19% of men pass 0.5 EFTS in it at level 4 or above, 16% gain a qualification at level 4 or above, and 12% gain a bachelor's degree or above. Compared with similar men who leave education without a qualification above level 3, those who gain a qualification in Engineering and Related Technologies at level 4 or above are substantially more likely to be top annual savers, and if the qualification is below bachelor's level they are also substantially more likely to be top cumulative savers.

In addition, the 15% of men who gain a qualification in Health at bachelor's level or above (which includes medical degrees) are about 40 percentage points more likely than similar education-leavers to be top annual savers.

Like men, women are particularly likely to pass 0.5 EFTS in Society and Culture (55%) and to gain qualifications in this field (33%). In the regressions where we compare women with similar backgrounds and level 3 subjects, women with these EFTS or qualifications at level 4 to 6 are less likely than women who don't have them to be top cumulative and top annual savers, whereas women with EFTS or qualifications at level 7 or above are only less likely to be top *cumulative* savers.

Natural and Physical Sciences is second most common field women study at level 4 or above (24%), but only 12% of women gain a qualification at this level in the field, nearly all of which are bachelor's level or above. The regressions show no evidence studying or gaining qualifications at level 4 or above in this field leads to a higher probability of being a top cumulative or annual saver than does leaving education after level 3.

Twenty-two percent of women pass at least 0.5 EFTS in Health at level 4 or above, and 15% gain a bachelor's or higher degree in the field. Compared with similar women who leave education without any qualifications above level 3, these women with bachelor's degrees are no more likely to be top cumulative savers, but are 15 percentage points (weakly significant) more likely to be top annual savers.

Management and Commerce is another common field of study for women, with 21% passing at least 0.5 EFTS in it at level 4 or above and 13% gaining a qualification at bachelor's level or above. Although level 4 to 6 Management and Commerce study does not appear to increase women's chances of being top savers compared with leaving education after level 3, level 7 and above study, particularly if it results in a qualification, is associated with a higher probability of being a top cumulative and annual saver. In contrast, study in Creative Arts or Education tends to associated with a low probability of being a top saver, or at best a similar probability to leaving education after level 3.

5. How do savings vary with self-employment?

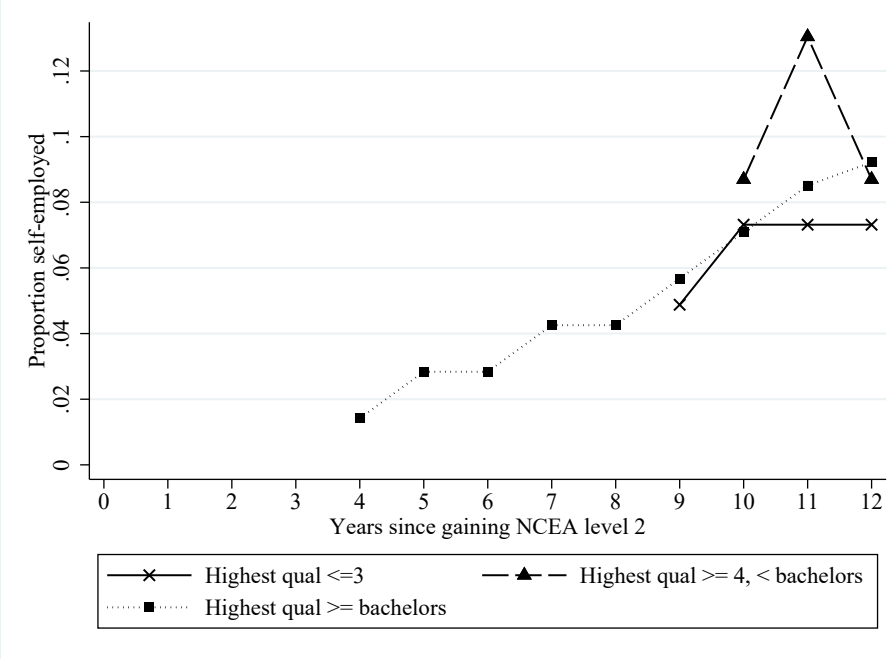
This section first shows how self-employment rates vary over time and by level of highest qualification for students who were in the top 10% academically. It then shows how cumulative and annual savings differ for those who are ever self-employed.

5.1 Self-employment by level of highest qualification

This section shows how the self-employment of students who were in the top 10% academically varies over time for each level of highest qualification. Figure 11 shows the self-employment is similar for men and women among those with at least bachelor's degrees, but possibly higher for men among those without bachelor's degrees. For men and women with bachelor's degrees, self-employment grows steadily from around 5 years after NCEA level 2, the point these students might be expected to be finishing their study, and by year 12 has reached about 9%. The self-employment rates of less qualified men and women are quite variable over time, potentially due to the relatively small samples.

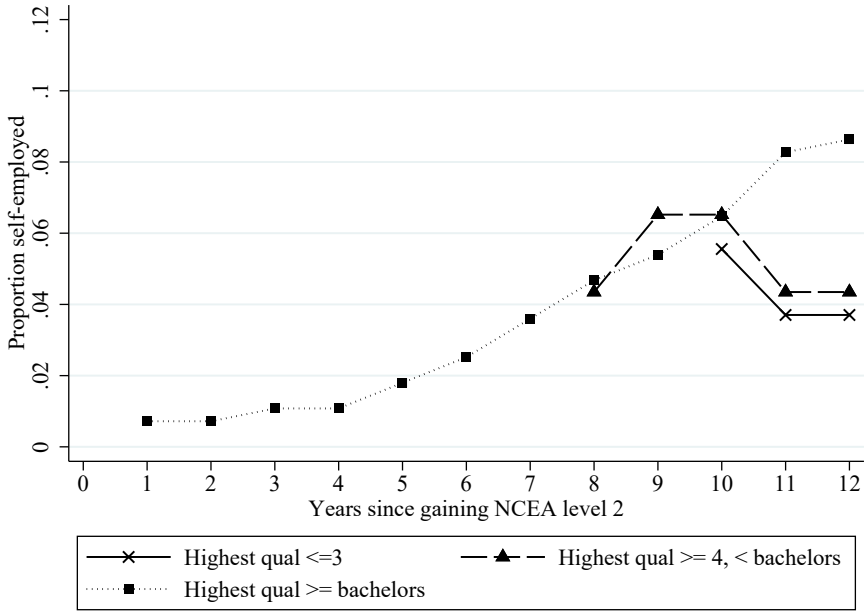
Figure 11: Self-employment over time by highest qualification

Panel A: Men



Continued on following page

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 were in the top 10% academically 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.

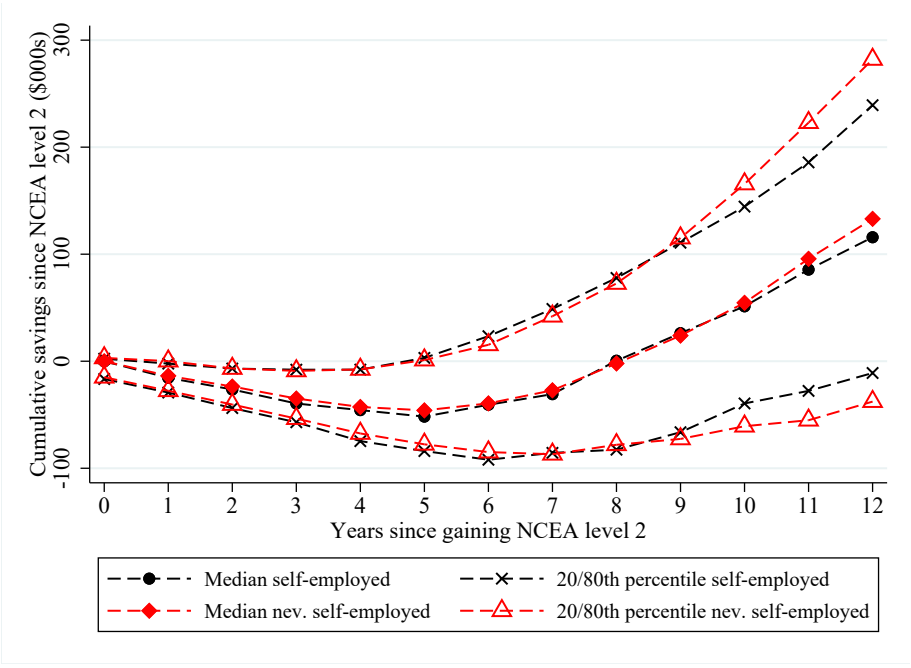
5.2 Cumulative and annual savings by self-employment status

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.

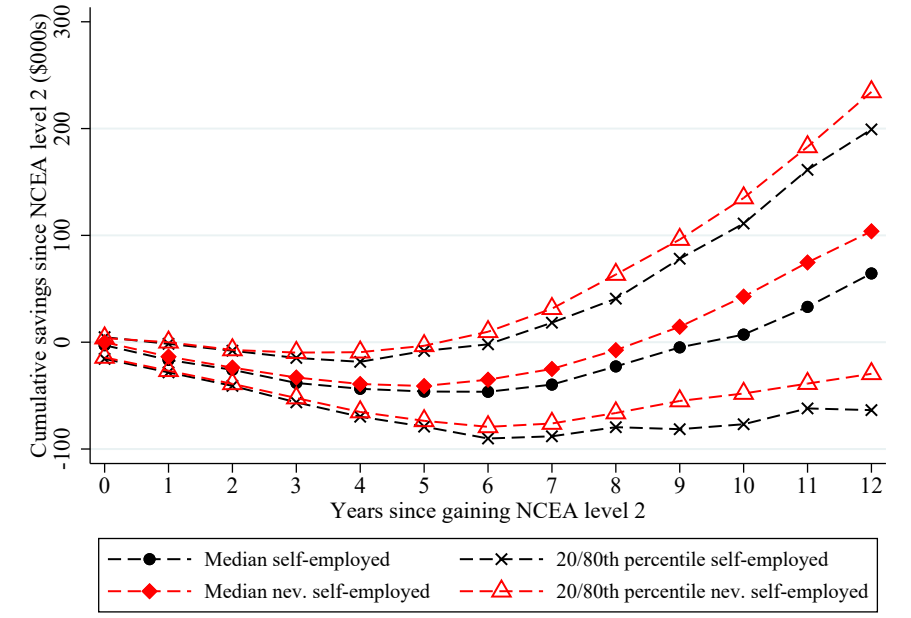
[4] For instance, self-employment may be a way for successful employees to keep a higher proportion of the value they create (positive selection into self-employment), or it may be a last resort for individuals who can't secure employment or who place high value on objectives other than income (negative 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 were in the top 10% academically by whether they were self-employed in any year from the year they gained NCEA level 2 to the 12th year after that.

Figure 12 shows that men who are ever self-employed have fairly similar median cumulative savings to men who are never self-employed, but the distribution of their savings is narrower, particularly from year 10 onwards. This pattern of a lower variance in cumulative

savings beginning when a considerable proportion of men are self-employed is consistent with self-employment providing these men with less variable income than being an employee.

In contrast, women who are ever self-employed have lower cumulative savings throughout the savings distribution, and this is evident as early as year 3. This suggests women who would save less anyway are more likely to become self-employed, and it could also be that women earn less when they become self-employed than they would have if they had remained employees.

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

This section shows how the cumulative and annual savings of students who were in the top 10% academically 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.

Men and even more so women who are top students academically have relatively low fertility in the first 12 years after NCEA level 2. In the regressions that control for a wide range of characteristics including education, having children is not significantly correlated with being a top saver for men, but women who have children are generally less likely to be top cumulative or annual savers. 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.

The overseas experience of men and women in different periods is associated in differing ways with being a top cumulative or annual saver. However, these correlations are sensitive to our assumptions about the overseas activities of those not in New Zealand, and should not be over-interpreted.

The regressions show that men and women who gained more work experience in the five years after NCEA level 2 are much more likely to be top cumulative savers when compared with those with the same educational, fertility, and travel history but less work experience over this period. However, they are not more likely to be top annual savers. Notably, only somewhat over half of men and women in this specialty gain any work experience in this period. The regressions also show that work experience for central government in this period contributes more than other work experience to being a top cumulative saver for both men and women, but does not appear to set either gender on a career trajectory that yields significantly higher annual savings.

Conditional on years of work experience, educational background, and other characteristics, men are more likely to be top cumulative and annual savers if they have work experience in the Professional, Scientific, and Technical Services industry, and are more likely to be top cumulative savers if they have experience in the Public Administration and Safety industry. However, they are less likely to be top annual savers if they have experience in Retail Trade or the Health Care and Social Assistance industry.

Similarly, the regressions show work experience in the Professional, Scientific, and Technical Services industry increases women's probabilities of being top cumulative and annual savers more than experience in other industries. Healthcare and Social Assistance experience is also associated with a higher probability of being a top cumulative saver.

7. Conclusions

In this specialty profile, we focussed on Māori men and women who were in the top 10% academically 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 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 are in the top 10% academically at level 2 pursue tertiary qualifications, including at the postgraduate level (above level 7), and they gain bachelor's or higher degrees in a wide range of fields. On average, bachelor's degrees pay off in terms of savings for both men and women, though the benefit for men takes more years to materialise. Both men and women with level 4 industry training qualifications also have relatively strong outcomes, though few men and even fewer women pursue this route, suggesting it may not generally appeal to these relatively academically-inclined students.

Higher level study on average benefits men's and women's savings, but this is not true of study in all fields. In fact, although most post-school study likely offers non-financial benefits, much of it seems not to improve students' savings outcomes. For instance, study at level 4 and above is common in Society and Culture (the most common field for higher study for both genders, but more common for women), Natural and Physical Sciences, Creative Arts, and Education (which is dominated by women), but in none of these fields offers any clear savings benefit to either gender over leaving education after level 3.

However, qualifications in Management and Commerce or Health at the bachelor's level or above are also common, and these offer stronger savings outcomes in the long term than does leaving education without any qualification above level 3. In addition, Engineering and Related Technology, which is a common field of study for men but not women, offers strong savings whether studied at levels 4 to 6 or at level 7 and above.

Finally, both men and women who gain early work experience in the industry of Professional, Scientific, and Technical Services tend to enjoy subsequent success in the labour market.

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	79.1	79.1	1.00	76.7	88.1	1.96***	618
NCEA cert level 3 within 5 yrs	82.3	81.4	0.95	79.3	93.0	2.90***	618
University Entrance within 1 yr	74.4	78.6	1.21	71.8	86.0	2.08***	618
Level of highest qualification gained within 10 years:							
Level 2	5.5	7.0	1.21	7.4	<4.5	<0.66**	618
Level 3	14.0	14.0	1.00	16.0	7.0	0.46***	618
Level 4	6.7	9.3	1.31	7.9	4.7	0.62	618
Level 5	<5% have characteristic			<5% have characteristic			618
Level 6	<5% have characteristic			<5% have characteristic			618
Level 7	40.2	39.5	0.98	36.8	51.2	1.58***	618
Level 8	20.2	21.4	1.06	19.0	27.9	1.47**	618
Level 9 or 10	8.6	7.0	0.83	8.5	7.1	0.86	618
Industry training credits gained within 10 years:							
Any credits	14.7	27.9	1.83***	17.9	16.3	0.91	618
Any credits at level 4+	6.7	20.9	2.47***	8.6	11.6	1.30	618
50+ credits	8.6	16.7	1.74**	11.0	7.1	0.67	618
50+ credits at level 4+	<5% have characteristic			<5% have characteristic			618
Level of highest industry training qualification gained within 10 years:							
Level 2+	8.6	16.3	1.70***	11.6	7.0	0.63	618
Level 3+	5.5	15.9	2.27***	7.9	4.8	0.64	618
Level 4+	3.7	11.9	2.40***	4.9	4.8	0.98	618
Types of tertiary institute where student enrolled within 10 years (for students who enrolled in any tertiary):							
Industry Training Organisation	23.0	33.3	1.49**	26.7	20.9	0.77*	612
Institute of Technology/Polytech	47.2	50.0	1.09	51.6	32.6	0.53***	612
Private Training Establishment	45.7	45.2	0.99	45.7	44.2	0.95	612
University	80.2	78.6	0.92	75.9	95.2	5.03***	612
Wananga	15.4	7.0	0.47***	15.4	7.0	0.47***	612
Other Tertiary Provider	5.5	7.1	1.24	5.6	7.0	1.21	612
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			618
Secondary urban area	18.4	20.9	1.13	19.5	16.7	0.86	618
Minor urban area	19.6	16.7	0.85	20.7	14.0	0.68	618
Rural centre or rural area	13.4	11.9	0.90	13.5	11.6	0.87	618
Different region to school	84.8	82.9	0.90	84.7	82.9	0.90	597

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	80.4	88.2	1.64***	79.9	91.8	2.42***	1131
NCEA cert level 3 within 5 yrs	81.8	88.3	1.54**	81.2	93.2	2.69***	1131
University Entrance within 1 yr	77.4	88.2	1.91***	76.9	90.7	2.49***	1131
Level of highest qualification gained within 10 years:							
Level 2	5.6	2.6	0.51*	5.9	<2.7	<0.49***	1131
Level 3	9.6	7.9	0.84	10.9	<2.7	<0.27***	1131
Level 4	6.3	2.7	0.46*	6.3	2.7	0.47**	1131
Level 5	<5% have characteristic			<5% have characteristic			1131
Level 6	<5% have characteristic			<5% have characteristic			1131
Level 7	44.9	57.9	1.52***	45.1	58.1	1.53***	1131
Level 8	15.2	21.1	1.36**	14.2	24.7	1.69***	1131
Level 9 or 10	12.3	3.9	0.35***	10.6	9.3	0.89	1131
Industry training credits gained within 10 years:							
Any credits	9.0	13.3	1.41**	9.9	9.6	0.97	1131
Any credits at level 4+	<5% have characteristic			<5% have characteristic			1131
50+ credits	<5% have characteristic			<5% have characteristic			1131
50+ credits at level 4+	<5% have characteristic			<5% have characteristic			1131
Level of highest industry training qualification gained within 10 years:							
Level 2+	5.6	9.1	1.48	6.3	6.7	1.06	1131
Level 3+	<5% have characteristic			<5% have characteristic			1131
Level 4+	<5% have characteristic			<5% have characteristic			1131
Types of tertiary institute where student enrolled within 10 years (for students who enrolled in any tertiary):							
Industry Training Organisation	12.3	18.7	1.46**	13.6	14.9	1.09	1128
Institute of Technology/Polytech	45.8	38.7	0.79*	48.2	29.7	0.53***	1128
Private Training Establishment	49.0	40.0	0.75**	47.8	43.2	0.86	1128
University	82.7	88.0	1.42	81.8	91.8	2.17***	1128
Wananga	22.6	7.9	0.35***	22.5	8.1	0.36***	1128
Other Tertiary Provider	5.6	6.7	1.15	5.6	5.4	0.96	1128
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			1131
Secondary urban area	16.6	11.8	0.73*	17.2	9.3	0.56***	1131
Minor urban area	20.6	15.8	0.77*	21.1	12.2	0.58***	1131
Rural centre or rural area	7.0	9.2	1.26	7.9	5.4	0.71	1131
Different region to school	86.0	83.3	0.85	86.0	83.3	0.85	1092

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	0.026	0.023	0.019	0.017	-0.019	-0.014	-0.014	-0.015
	(0.024)	(0.025)	(0.025)	(0.024)	(0.023)	(0.023)	(0.023)	(0.023)
Percentile score (0-1)	-0.145	-0.139	-0.076	-0.062	0.443*	0.423*	0.424*	0.417*
	(0.227)	(0.231)	(0.230)	(0.232)	(0.230)	(0.230)	(0.231)	(0.230)
Multiple specialties	0.043	0.059	0.057	0.048	0.139***	0.099***	0.099***	0.072*
	(0.038)	(0.041)	(0.040)	(0.043)	(0.032)	(0.035)	(0.035)	(0.038)
School decile	-0.006	-0.005	-0.007	-0.006	0.012*	0.008	0.007	0.007
	(0.007)	(0.007)	(0.007)	(0.007)	(0.007)	(0.007)	(0.007)	(0.007)
School not in main urban area	-0.019	-0.021	-0.012	-0.032	0.019	0.029	0.031	0.033
	(0.042)	(0.043)	(0.043)	(0.044)	(0.042)	(0.041)	(0.041)	(0.042)
Highest qualification gained within 10 years (omitted category: level 2):								
Level 3		-0.038	-0.038	-0.003		0.029	0.052	0.012
		(0.084)	(0.084)	(0.086)		(0.050)	(0.051)	(0.049)
Level 4		0.003	-0.164	0.029		0.093	0.034	0.115*
		(0.097)	(0.100)	(0.098)		(0.063)	(0.069)	(0.067)
Level 5 or 6		-0.097	-0.149*	-0.063		-0.020	-0.022	-0.011
		(0.098)	(0.087)	(0.098)		(0.049)	(0.051)	(0.051)
Level 7		-0.062	-0.060	0.005		0.163***	0.167***	0.126**
		(0.078)	(0.078)	(0.082)		(0.049)	(0.049)	(0.051)
Level 8 to 10		-0.067	-0.067	0.004		0.128**	0.129**	0.081
		(0.080)	(0.080)	(0.085)		(0.054)	(0.054)	(0.059)
Highest industry training qualification gained within 10 years (omitted category: none):								
Level 2			-0.042				-0.080	
			(0.081)				(0.071)	
Level 3			0.065				-0.187***	
			(0.126)				(0.041)	
Level 4			0.378***				0.140	
			(0.108)				(0.095)	
Level 5 or 6			0.374				-0.058	
			(0.262)				(0.045)	
Any Gateway credits completed within 10 years				0.072				0.052
				(0.079)				(0.062)
Enrolled in institute type within 10 years:								
Industry Training Organisation				0.078*				-0.008
				(0.043)				(0.038)
Institute of Technology/Polytech				0.021				-0.044
				(0.036)				(0.036)
Private Training Establishment				-0.017				0.032
				(0.034)				(0.033)
University				-0.029				0.076*
				(0.058)				(0.040)
Wānanga				-0.127***				-0.068
				(0.047)				(0.045)
Other Tertiary Provider				0.058				0.022
				(0.078)				(0.068)
NCEA level 2 year fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
R-squared	0.010	0.013	0.043	0.036	0.045	0.063	0.072	0.075
Observations	618	618	618	618	618	618	618	618

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	-0.012	-0.011	-0.011	-0.010	0.004	0.006	0.007	0.007
	(0.017)	(0.017)	(0.017)	(0.017)	(0.016)	(0.016)	(0.016)	(0.016)
Percentile score (0-1)	0.156	0.223	0.241	0.243	0.610***	0.564***	0.574***	0.566***
	(0.162)	(0.164)	(0.164)	(0.164)	(0.166)	(0.165)	(0.166)	(0.166)
Multiple specialties	0.104***	0.089***	0.087***	0.066**	0.122***	0.082***	0.081***	0.065**
	(0.027)	(0.029)	(0.029)	(0.030)	(0.024)	(0.026)	(0.026)	(0.028)
School decile	0.009*	0.008	0.007	0.006	0.014***	0.010**	0.009**	0.007
	(0.005)	(0.005)	(0.005)	(0.005)	(0.005)	(0.005)	(0.005)	(0.005)
School not in main urban area	0.029	0.029	0.023	0.028	-0.028	-0.031	-0.035	-0.035
	(0.030)	(0.030)	(0.030)	(0.030)	(0.028)	(0.027)	(0.027)	(0.027)
Highest qualification gained within 10 years (omitted category: level 2):								
Level 3		0.039	0.029	0.041		-0.043	-0.045	-0.047
		(0.055)	(0.054)	(0.053)		(0.038)	(0.038)	(0.039)
Level 4		0.014	-0.028	0.024		0.050	0.019	0.051
		(0.058)	(0.054)	(0.055)		(0.049)	(0.050)	(0.049)
Level 5 or 6		0.068	0.061	0.082		0.013	0.004	0.017
		(0.062)	(0.062)	(0.061)		(0.043)	(0.042)	(0.046)
Level 7		0.099**	0.095**	0.121**		0.126***	0.125***	0.131***
		(0.047)	(0.047)	(0.048)		(0.038)	(0.038)	(0.041)
Level 8 to 10		0.028	0.028	0.054		0.114***	0.114***	0.121***
		(0.050)	(0.050)	(0.051)		(0.042)	(0.041)	(0.045)
Highest industry training qualification gained within 10 years (omitted category: none):								
Level 2			-0.007				-0.018	
			(0.077)				(0.070)	
Level 3			0.131				0.026	
			(0.089)				(0.074)	
Level 4			0.249**				0.194*	
			(0.121)				(0.104)	
Level 5 or 6			0.107				0.193	
			(0.282)				(0.278)	
Any Gateway credits completed within 10 years				0.004				-0.051
				(0.047)				(0.036)
Enrolled in institute type within 10 years:								
Industry Training Organisation				0.111***				0.061*
				(0.039)				(0.034)
Institute of Technology/Polytech				-0.006				-0.058**
				(0.026)				(0.024)
Private Training Establishment				-0.050*				0.013
				(0.025)				(0.025)
University				-0.041				-0.038
				(0.037)				(0.033)
Wānanga				-0.127***				-0.089***
				(0.024)				(0.024)
Other Tertiary Provider				0.021				-0.004
				(0.054)				(0.050)
NCEA level 2 year fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
R-squared	0.020	0.027	0.035	0.055	0.054	0.072	0.075	0.089
Observations	1,131	1,131	1,131	1,131	1,131	1,131	1,131	1,131

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	76.1	79.1	1.15	74.2	88.1	2.20***	618
Maths	68.9	79.1	1.54**	66.3	90.7	3.91***	618
Māori	17.8	11.9	0.68*	19.0	7.1	0.39***	618
Humanities	81.0	83.7	1.16	80.4	88.1	1.63**	618
Social Science	36.2	44.2	1.30*	34.4	51.2	1.72***	618
Science	77.2	83.7	1.41*	74.4	93.0	3.70***	618
Passed at least 14 achievement standard credits at level 2 by year of NCEA level 2 in:							
English	63.2	67.4	1.16	59.5	79.1	2.16***	618
Maths	65.0	72.7	1.33*	61.3	88.1	3.67***	618
Māori	16.0	9.3	0.60*	16.6	7.0	0.44***	618
Humanities	68.3	72.7	1.19	65.2	84.1	2.35***	618
Social Science	32.9	42.9	1.40**	31.1	50.0	1.86***	618
Science	71.3	78.6	1.37	68.1	90.7	3.64***	618
Passed at least 14 credits at level 3 within 5 years in:							
English	46.0	46.5	1.02	43.9	55.8	1.46**	618
Maths	63.2	71.4	1.35*	59.5	83.7	2.82***	618
Māori	14.0	9.3	0.68	14.7	4.8	0.34***	618
Humanities	53.7	57.1	1.12	50.3	69.0	1.89***	618
Social Science	37.7	44.2	1.24	36.8	50.0	1.53***	618
Science	69.5	72.7	1.13	66.3	86.0	2.59***	618
Arts & Crafts	19.8	14.0	0.71	19.6	15.9	0.81	618
Computing & IT	7.9	7.0	0.90	8.6	<4.7	<0.58**	618
Business	11.6	16.3	1.35*	11.7	16.7	1.38	618
Agriculture, Forestry, & Fisheries	<5% have characteristic			<5% have characteristic			618
Community & Social Services	<5% have characteristic			<5% have characteristic			618
Education	<5% have characteristic			<5% have characteristic			618
Service Sector	7.4	9.3	1.22	8.0	7.0	0.89	618
Engineering & Technology	8.5	14.0	1.52**	9.8	9.3	0.96	618
Manufacturing, Planning & Constrn	<5% have characteristic			<5% have characteristic			618
Passed at least 14 achievement standard credits at level 3 within 5 years in:							
English	41.5	42.9	1.05	39.0	51.2	1.47**	618
Maths	60.1	67.4	1.29	57.1	81.4	2.67***	618
Māori	11.6	7.0	0.63	12.3	4.7	0.41**	618
Humanities	49.7	52.4	1.09	46.3	65.1	1.85***	618
Social Science	35.4	42.9	1.28	34.4	47.6	1.54***	618
Science	66.3	69.8	1.14	62.3	84.1	2.60***	618
Arts & Crafts	18.4	11.9	0.66*	17.8	11.9	0.68	618
Computing & IT	<5% have characteristic			<5% have characteristic			618
Business	9.8	16.3	1.56**	9.8	16.7	1.58**	618
Agriculture, Forestry, & Fisheries	<5% have characteristic			<5% have characteristic			618
Community & Social Services	<5% have characteristic			<5% have characteristic			618
Education	<5% have characteristic			<5% have characteristic			618
Service Sector	<5% have characteristic			<5% have characteristic			618
Engineering & Technology	6.7	11.6	1.56	7.4	7.0	0.96	618
Manufacturing, Planning & Constrn	<5% have characteristic			<5% have characteristic			618

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	84.4	92.1	1.91***	83.9	94.6	2.85***	1131
Maths	63.9	84.2	2.51***	63.4	87.7	3.33***	1131
Māori	16.9	6.6	0.40***	16.1	9.5	0.60***	1131
Humanities	87.7	93.5	1.80***	87.2	95.9	2.93***	1131
Social Science	47.2	53.3	1.22	46.4	56.2	1.37**	1131
Science	74.2	89.3	2.48***	73.7	91.8	3.30***	1131
Passed at least 14 achievement standard credits at level 2 by year of NCEA level 2 in:							
English	76.1	88.2	2.04***	75.3	91.8	3.06***	1131
Maths	57.9	78.7	2.25***	57.1	81.1	2.65***	1131
Māori	15.0	5.3	0.37***	13.9	9.3	0.69**	1131
Humanities	79.4	92.1	2.57***	78.9	94.6	3.85***	1131
Social Science	44.3	51.3	1.25*	43.7	54.1	1.40***	1131
Science	68.1	84.2	2.14***	67.1	90.4	3.74***	1131
Passed at least 14 credits at level 3 within 5 years in:							
English	56.5	61.8	1.19	54.9	67.6	1.55***	1131
Maths	49.2	71.1	2.13***	48.4	74.3	2.52***	1131
Māori	13.3	3.9	0.32***	12.5	6.7	0.56***	1131
Humanities	62.9	71.1	1.35**	62.0	75.3	1.67***	1131
Social Science	45.5	53.3	1.28**	44.9	56.2	1.44***	1131
Science	59.5	76.0	1.88***	57.8	82.4	2.80***	1131
Arts & Crafts	33.1	27.6	0.81*	33.3	26.0	0.75*	1131
Computing & IT	6.0	6.6	1.09	6.3	5.4	0.88	1131
Business	7.3	22.4	2.50***	7.9	18.9	2.08***	1131
Agriculture, Forestry, & Fisheries	<5% have characteristic			<5% have characteristic			1131
Community & Social Services	<5% have characteristic			<5% have characteristic			1131
Education	<5% have characteristic			<5% have characteristic			1131
Service Sector	9.3	9.3	1.00	10.6	5.4	0.54**	1131
Engineering & Technology	6.0	6.6	1.08	6.3	5.4	0.88	1131
Manufacturing, Planning & Constrn	<5% have characteristic			<5% have characteristic			1131
Passed at least 14 achievement standard credits at level 3 within 5 years in:							
English	52.0	57.3	1.19	49.8	65.8	1.71***	1131
Maths	46.0	68.4	2.12***	45.2	71.6	2.48***	1131
Māori	10.6	3.9	0.40***	9.9	6.7	0.70*	1131
Humanities	59.1	67.1	1.32**	57.9	71.2	1.62***	1131
Social Science	44.2	51.3	1.26*	43.4	54.1	1.41***	1131
Science	56.0	72.4	1.80***	54.1	79.7	2.72***	1131
Arts & Crafts	31.9	27.6	0.85	31.8	26.0	0.80	1131
Computing & IT	<5% have characteristic			<5% have characteristic			1131
Business	5.0	19.7	2.84***	5.6	17.6	2.47***	1131
Agriculture, Forestry, & Fisheries	<5% have characteristic			<5% have characteristic			1131
Community & Social Services	<5% have characteristic			<5% have characteristic			1131
Education	<5% have characteristic			<5% have characteristic			1131
Service Sector	<5% have characteristic			<5% have characteristic			1131
Engineering & Technology	5.6	6.6	1.14	5.9	5.4	0.92	1131
Manufacturing, Planning & Constrn	<5% have characteristic			<5% have characteristic			1131

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
	Non-top savers	Top savers		Non-top savers	Top savers		
Characteristic	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Fields and levels in which student passed at least 0.5 EFTS within 10 years:							
Natural & Physical Sciences at level 2+	65.0	69.0	1.16	60.7	86.0	3.17***	618
Natural & Physical Sciences at level 4+	31.1	27.3	0.86	26.4	42.9	1.77***	618
Natural & Physical Sciences at level 7+	9.8	<4.5	<0.50**	8.0	9.3	1.14	618
Natural & Physical Sciences at level 8+	<5% have characteristic			<5% have characteristic			618
Information Technology at level 2+	7.4	4.8	0.68	7.9	<4.7	<0.62	618
Information Technology at level 4+	5.5	<4.7	<0.87	5.5	<4.7	<0.87	618
Information Technology at level 7+	<5% have characteristic			<5% have characteristic			618
Information Technology at level 8+	<5% have characteristic			<5% have characteristic			618
Engineering & Related Technologies at level 2+	22.7	30.2	1.35*	23.9	23.8	0.99	618
Engineering & Related Technologies at level 4+	17.8	23.8	1.33	17.8	23.8	1.33	618
Engineering & Related Technologies at level 7+	12.9	16.3	1.24	12.8	18.6	1.40*	618
Engineering & Related Technologies at level 8+	6.7	7.0	1.03	5.5	9.3	1.52	618
Architecture & Building at level 2+	7.4	<4.7	<0.67	7.4	<4.7	<0.67	618
Architecture & Building at level 4+	6.7	<4.7	<0.72	6.7	<4.7	<0.72	618
Architecture & Building at level 7+	<5% have characteristic			<5% have characteristic			618
Architecture & Building at level 8+	<5% have characteristic			<5% have characteristic			618
Ag, Environmental & Related Studies at level 2+	7.9	4.8	0.64	8.0	<4.5	<0.61*	618
Ag, Environmental & Related Studies at level 4+	<5% have characteristic			<5% have characteristic			618
Ag, Environmental & Related Studies at level 7+	<5% have characteristic			<5% have characteristic			618
Ag, Environmental & Related Studies at level 8+	<5% have characteristic			<5% have characteristic			618
Health at level 2+	14.7	16.7	1.12	11.7	27.3	2.13***	618
Health at level 4+	14.1	15.9	1.12	11.0	27.3	2.22***	618
Health at level 7+	10.4	11.9	1.13	7.3	23.8	2.61***	618
Health at level 8+	<5% have characteristic			<5% have characteristic			618
Education at level 2+	7.4	<4.7	<0.67	7.4	4.7	0.67	618
Education at level 4+	6.7	<4.5	<0.71	6.1	<4.7	<0.79	618
Education at level 7+	<5% have characteristic			<5% have characteristic			618
Education at level 8+	<5% have characteristic			<5% have characteristic			618
Management & Commerce at level 2+	22.0	39.5	1.90***	22.7	32.6	1.47**	618
Management & Commerce at level 4+	18.4	32.6	1.78***	18.4	31.0	1.69***	618
Management & Commerce at level 7+	10.4	25.6	2.19***	10.4	25.6	2.19***	618
Management & Commerce at level 8+	<5% have characteristic			<5% have characteristic			618
Society & Culture at level 2+	76.1	76.2	1.01	75.5	79.1	1.18	618
Society & Culture at level 4+	45.4	32.6	0.65**	42.7	42.9	1.01	618
Society & Culture at level 7+	23.9	15.9	0.66**	21.5	25.6	1.20	618
Society & Culture at level 8+	6.7	<4.5	<0.71	6.1	<4.7	<0.79	618
Creative Arts at level 2+	28.7	14.0	0.47***	29.3	11.9	0.39***	618
Creative Arts at level 4+	17.8	9.3	0.54**	17.9	7.0	0.41***	618
Creative Arts at level 7+	9.8	<4.7	<0.51**	9.8	<4.7	<0.51**	618
Creative Arts at level 8+	<5% have characteristic			<5% have characteristic			618
Food, Hospitality & Personal Servs at level 2+	<5% have characteristic			<5% have characteristic			618
Food, Hospitality & Personal Servs at level 4+	<5% have characteristic			<5% have characteristic			618
Food, Hospitality & Personal Servs at level 7+	<5% have characteristic			<5% have characteristic			618
Food, Hospitality & Personal Servs at level 8+	<5% have characteristic			<5% have characteristic			618
Mixed Field Programmes at level 2+	<5% have characteristic			<5% have characteristic			618
Mixed Field Programmes at level 4+	<5% have characteristic			<5% have characteristic			618
Mixed Field Programmes at level 7+	<5% have characteristic			<5% have characteristic			618
Mixed Field Programmes at level 8+	<5% have characteristic			<5% have characteristic			618

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			Students
	% of students with characteristic among:		Odds ratio	% of students with characteristic among:		Odds ratio	
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+	54.0	68.4	1.64***	52.5	75.3	2.31***	1131
Natural & Physical Sciences at level 4+	24.2	21.1	0.87	21.8	29.7	1.39***	1131
Natural & Physical Sciences at level 7+	8.3	2.7	0.35***	7.9	6.8	0.87	1131
Natural & Physical Sciences at level 8+	<5% have characteristic			<5% have characteristic			1131
Information Technology at level 2+	<5% have characteristic			<5% have characteristic			1131
Information Technology at level 4+	<5% have characteristic			<5% have characteristic			1131
Information Technology at level 7+	<5% have characteristic			<5% have characteristic			1131
Information Technology at level 8+	<5% have characteristic			<5% have characteristic			1131
Engineering & Related Technologies at level 2+	4.7	9.1	1.70**	5.6	6.7	1.16	1131
Engineering & Related Technologies at level 4+	<5% have characteristic			<5% have characteristic			1131
Engineering & Related Technologies at level 7+	<5% have characteristic			<5% have characteristic			1131
Engineering & Related Technologies at level 8+	<5% have characteristic			<5% have characteristic			1131
Architecture & Building at level 2+	<5% have characteristic			<5% have characteristic			1131
Architecture & Building at level 4+	<5% have characteristic			<5% have characteristic			1131
Architecture & Building at level 7+	<5% have characteristic			<5% have characteristic			1131
Architecture & Building at level 8+	<5% have characteristic			<5% have characteristic			1131
Ag, Environmental & Related Studies at level 2+	<5% have characteristic			<5% have characteristic			1131
Ag, Environmental & Related Studies at level 4+	<5% have characteristic			<5% have characteristic			1131
Ag, Environmental & Related Studies at level 7+	<5% have characteristic			<5% have characteristic			1131
Ag, Environmental & Related Studies at level 8+	<5% have characteristic			<5% have characteristic			1131
Health at level 2+	22.5	22.4	0.99	21.1	26.0	1.24*	1131
Health at level 4+	21.5	22.4	1.04	20.1	26.0	1.30**	1131
Health at level 7+	15.9	18.7	1.16	14.2	24.7	1.69***	1131
Health at level 8+	7.0	6.7	0.96	6.9	6.8	0.99	1131
Education at level 2+	17.3	6.6	0.40***	17.5	4.1	0.24***	1131
Education at level 4+	15.9	6.6	0.43***	16.4	4.1	0.26***	1131
Education at level 7+	12.6	6.6	0.55***	13.2	4.1	0.33***	1131
Education at level 8+	<5% have characteristic			<5% have characteristic			1131
Management & Commerce at level 2+	23.2	42.1	1.97***	24.7	37.0	1.58***	1131
Management & Commerce at level 4+	17.3	36.8	2.17***	18.2	33.8	1.89***	1131
Management & Commerce at level 7+	9.6	28.9	2.61***	10.6	24.7	2.13***	1131
Management & Commerce at level 8+	<5% have characteristic			<5% have characteristic			1131
Society & Culture at level 2+	86.1	88.3	1.17	86.1	90.4	1.41	1131
Society & Culture at level 4+	55.5	50.7	0.86	53.8	56.8	1.10	1131
Society & Culture at level 7+	30.5	25.0	0.80	28.3	34.2	1.25*	1131
Society & Culture at level 8+	9.0	5.3	0.62**	8.2	8.2	1.00	1131
Creative Arts at level 2+	36.9	22.4	0.56***	37.3	20.3	0.49***	1131
Creative Arts at level 4+	23.9	9.2	0.38***	23.7	10.8	0.45***	1131
Creative Arts at level 7+	12.3	3.9	0.35***	11.2	8.2	0.75	1131
Creative Arts at level 8+	<5% have characteristic			<5% have characteristic			1131
Food, Hospitality & Personal Servs at level 2+	<5% have characteristic			<5% have characteristic			1131
Food, Hospitality & Personal Servs at level 4+	<5% have characteristic			<5% have characteristic			1131
Food, Hospitality & Personal Servs at level 7+	<5% have characteristic			<5% have characteristic			1131
Food, Hospitality & Personal Servs at level 8+	<5% have characteristic			<5% have characteristic			1131
Mixed Field Programmes at level 2+	<5% have characteristic			<5% have characteristic			1131
Mixed Field Programmes at level 4+	<5% have characteristic			<5% have characteristic			1131
Mixed Field Programmes at level 7+	<5% have characteristic			<5% have characteristic			1131
Mixed Field Programmes at level 8+	<5% have characteristic			<5% have characteristic			1131

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	11.7	<4.7	<0.43**	11.0	7.0	0.66	618
Information Technology	<5% have characteristic			<5% have characteristic			618
Engineering & Related Technologies	13.4	23.8	1.70***	14.7	20.9	1.39*	618
Architecture & Building	<5% have characteristic			<5% have characteristic			618
Ag, Environmental & Related Studies	<5% have characteristic			<5% have characteristic			618
Health	9.2	11.9	1.25	6.1	23.8	2.89***	618
Education	<5% have characteristic			<5% have characteristic			618
Management & Commerce	13.4	25.6	1.81***	13.5	23.8	1.69***	618
Society & Culture	22.7	11.9	0.52**	21.5	20.9	0.97	618
Creative Arts	9.8	<4.5	<0.50**	9.8	<4.7	<0.51**	618
Food, Hospitality & Personal Services	<5% have characteristic			<5% have characteristic			618
Mixed Field Programmes	18.4	18.6	1.01	21.5	7.1	0.34***	618
Fields of qualifications at level 4+ gained within 10 years:							
Natural & Physical Sciences	12.9	4.7	0.39**	11.7	9.3	0.82	618
Information Technology	<5% have characteristic			<5% have characteristic			618
Engineering & Related Technologies	13.4	25.6	1.81***	14.0	20.9	1.45**	618
Architecture & Building	<5% have characteristic			<5% have characteristic			618
Ag, Environmental & Related Studies	<5% have characteristic			<5% have characteristic			618
Health	9.9	11.9	1.18	7.3	25.6	2.75***	618
Education	<5% have characteristic			<5% have characteristic			618
Management & Commerce	14.7	23.8	1.57**	14.7	25.6	1.68***	618
Society & Culture	26.4	11.9	0.44***	24.5	20.9	0.85	618
Creative Arts	9.9	<4.7	<0.51**	10.4	<4.5	<0.47**	618
Food, Hospitality & Personal Services	<5% have characteristic			<5% have characteristic			618
Mixed Field Programmes	<5% have characteristic			<5% have characteristic			618
Fields of qualifications at bachelor's level+ gained within 10 years:							
Natural & Physical Sciences	12.3	4.7	0.41**	11.0	9.3	0.86	618
Information Technology	<5% have characteristic			<5% have characteristic			618
Engineering & Related Technologies	10.4	16.7	1.51*	10.4	16.7	1.51**	618
Architecture & Building	<5% have characteristic			<5% have characteristic			618
Ag, Environmental & Related Studies	<5% have characteristic			<5% have characteristic			618
Health	8.5	14.0	1.52	5.5	23.8	3.08***	618
Education	<5% have characteristic			<5% have characteristic			618
Management & Commerce	12.8	21.4	1.60***	12.3	23.8	1.82***	618
Society & Culture	19.5	11.6	0.60**	17.7	16.7	0.94	618
Creative Arts	7.4	<4.5	<0.66*	7.4	<4.7	<0.67**	618
Food, Hospitality & Personal Services	<5% have characteristic			<5% have characteristic			618
Mixed Field Programmes	<5% have characteristic			<5% have characteristic			618

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	10.3	3.9	0.42***	9.5	8.1	0.86	1131
Information Technology	<5% have characteristic			<5% have characteristic			1131
Engineering & Related Technologies	<5% have characteristic			<5% have characteristic			1131
Architecture & Building	<5% have characteristic			<5% have characteristic			1131
Ag, Environmental & Related Studies	<5% have characteristic			<5% have characteristic			1131
Health	14.6	19.7	1.33*	13.2	25.7	1.86***	1131
Education	12.6	6.6	0.55***	13.5	2.7	0.22***	1131
Management & Commerce	11.3	34.2	2.76***	12.2	29.7	2.28***	1131
Society & Culture	29.5	21.1	0.69**	27.4	28.8	1.06	1131
Creative Arts	12.6	5.3	0.44***	12.2	8.1	0.69**	1131
Food, Hospitality & Personal Services	<5% have characteristic			<5% have characteristic			1131
Mixed Field Programmes	15.0	11.8	0.80	16.8	4.1	0.26***	1131
Fields of qualifications at level 4+ gained within 10 years:							
Natural & Physical Sciences	13.6	5.3	0.41***	12.2	9.5	0.79	1131
Information Technology	<5% have characteristic			<5% have characteristic			1131
Engineering & Related Technologies	<5% have characteristic			<5% have characteristic			1131
Architecture & Building	<5% have characteristic			<5% have characteristic			1131
Ag, Environmental & Related Studies	<5% have characteristic			<5% have characteristic			1131
Health	16.9	19.7	1.16	15.2	25.7	1.66***	1131
Education	14.3	7.9	0.57***	15.1	4.1	0.29***	1131
Management & Commerce	12.3	35.5	2.70***	12.8	32.4	2.40***	1131
Society & Culture	35.2	24.0	0.64***	33.0	32.4	0.98	1131
Creative Arts	14.6	5.3	0.38***	13.9	8.1	0.60***	1131
Food, Hospitality & Personal Services	<5% have characteristic			<5% have characteristic			1131
Mixed Field Programmes	<5% have characteristic			<5% have characteristic			1131
Fields of qualifications at bachelor's level+ gained within 10 years:							
Natural & Physical Sciences	13.0	4.0	0.33***	11.6	9.5	0.83	1131
Information Technology	<5% have characteristic			<5% have characteristic			1131
Engineering & Related Technologies	<5% have characteristic			<5% have characteristic			1131
Architecture & Building	<5% have characteristic			<5% have characteristic			1131
Ag, Environmental & Related Studies	<5% have characteristic			<5% have characteristic			1131
Health	14.0	18.4	1.29	12.2	24.3	1.88***	1131
Education	5.3	4.0	0.78	5.9	<2.7	<0.50**	1131
Management & Commerce	8.6	32.9	3.13***	9.5	31.1	2.83***	1131
Society & Culture	27.8	21.1	0.74**	25.4	31.1	1.25*	1131
Creative Arts	10.6	2.7	0.28***	9.6	6.7	0.72*	1131
Food, Hospitality & Personal Services	<5% have characteristic			<5% have characteristic			1131
Mixed Field Programmes	<5% have characteristic			<5% have characteristic			1131

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	-0.042	-0.000	-0.030	-0.091	-0.059	-0.080
	(0.065)	(0.066)	(0.066)	(0.071)	(0.072)	(0.073)
Maths	0.113*	0.044	0.049	0.155***	0.062	0.065
	(0.059)	(0.063)	(0.057)	(0.053)	(0.053)	(0.052)
Māori	-0.060	-0.020	0.001	-0.068	-0.020	-0.014
	(0.050)	(0.052)	(0.050)	(0.045)	(0.045)	(0.046)
Humanities	0.052	0.023	0.055	0.114	0.081	0.100
	(0.067)	(0.068)	(0.068)	(0.071)	(0.072)	(0.073)
Social science	0.050	0.072*	0.081**	0.027	0.055	0.063*
	(0.038)	(0.040)	(0.040)	(0.039)	(0.038)	(0.038)
Science	-0.097	-0.067	-0.056	-0.079	-0.086	-0.080
	(0.064)	(0.067)	(0.064)	(0.057)	(0.057)	(0.057)
Arts & crafts	-0.063	-0.045	-0.035	-0.069	-0.032	-0.033
	(0.042)	(0.044)	(0.042)	(0.043)	(0.045)	(0.043)
Business	0.039	-0.024	0.002	-0.022	-0.049	-0.030
	(0.057)	(0.064)	(0.062)	(0.058)	(0.066)	(0.064)
# of other fields	0.027	0.030	0.015	-0.055**	-0.037	-0.044*
	(0.030)	(0.031)	(0.030)	(0.025)	(0.028)	(0.025)
Passed at least 0.5 EFTS at level 4+ within 10 years in:						
Natural & Physical Sciences		-0.013			0.035	
		(0.049)			(0.050)	
Engineering & Related Technologies		0.065			0.089	
		(0.082)			(0.074)	
Health		-0.039			-0.028	
		(0.065)			(0.077)	
Education		-0.154***			0.011	
		(0.045)			(0.063)	
Management & Commerce		0.022			0.028	
		(0.071)			(0.069)	
Society & Culture		-0.103**			-0.035	
		(0.042)			(0.044)	
Creative Arts		-0.027			-0.070	
		(0.062)			(0.048)	
# of other fields		-0.092			-0.011	
		(0.070)			(0.049)	
Passed at least 0.5 EFTS at level 7+ within 10 years in:						
Natural & Physical Sciences		-0.132**			-0.031	
		(0.055)			(0.072)	
Engineering & Related Technologies		-0.033			0.008	
		(0.092)			(0.090)	
Health		0.092			0.327***	
		(0.082)			(0.099)	
Education		0.207**			0.017	
		(0.093)			(0.092)	
Management & Commerce		0.196**			0.191**	
		(0.083)			(0.082)	
Society & Culture		-0.067			0.026	
		(0.053)			(0.054)	
Creative Arts		-0.059			0.044	
		(0.069)			(0.059)	
# of other fields		0.017			0.025	
		(0.090)			(0.071)	

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	(1)	(2)	(3)	(4)	(5)	(6)
Gained qualification at level 4+ within 10 years in:						
Natural & Physical Sciences			-0.311***			-0.203***
			(0.073)			(0.075)
Engineering & Related Technologies			0.302***			0.183**
			(0.105)			(0.090)
Health			0.013			0.035
			(0.100)			(0.108)
Education			0.022			-0.005
			(0.081)			(0.078)
Management & Commerce			-0.149			-0.054
			(0.104)			(0.090)
Society & Culture			-0.105*			-0.039
			(0.056)			(0.053)
Creative Arts			-0.128**			-0.015
			(0.064)			(0.059)
# of other fields			0.053			0.038
			(0.081)			(0.050)
Gained bachelor's degree+ within 10 years in:						
Natural & Physical Sciences			0.194**			0.203**
			(0.084)			(0.089)
Engineering & Related Technologies			-0.228*			-0.011
			(0.121)			(0.111)
Health			0.056			0.383***
			(0.117)			(0.128)
Education			-0.015			-0.031
			(0.191)			(0.082)
Management & Commerce			0.238*			0.226**
			(0.122)			(0.110)
Society & Culture			-0.024			0.070
			(0.065)			(0.065)
Creative Arts			0.042			-0.003
			(0.075)			(0.073)
# of other fields			-0.154*			0.021
			(0.088)			(0.078)
NCEA level 2 year fixed effects	Yes	Yes	Yes	Yes	Yes	Yes
Background characteristics	Yes	Yes	Yes	Yes	Yes	Yes
R-squared	0.029	0.095	0.093	0.082	0.148	0.166
Observations	618	618	618	618	618	618

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	-0.021	-0.019	-0.024	0.062	0.055	0.051
	(0.053)	(0.052)	(0.052)	(0.049)	(0.048)	(0.048)
Maths	0.078*	0.066*	0.071*	0.029	0.006	0.007
	(0.040)	(0.038)	(0.038)	(0.042)	(0.041)	(0.041)
Māori	-0.088***	-0.077**	-0.075**	-0.011	0.008	0.004
	(0.031)	(0.031)	(0.031)	(0.034)	(0.034)	(0.034)
Humanities	0.038	0.042	0.039	-0.023	-0.020	-0.037
	(0.054)	(0.053)	(0.054)	(0.049)	(0.049)	(0.048)
Social science	0.006	0.025	0.020	0.013	0.024	0.009
	(0.027)	(0.027)	(0.027)	(0.026)	(0.027)	(0.026)
Science	0.005	0.029	0.001	0.075*	0.075*	0.054
	(0.040)	(0.040)	(0.039)	(0.041)	(0.042)	(0.040)
Arts & crafts	-0.017	0.009	0.011	-0.040	-0.010	-0.015
	(0.027)	(0.027)	(0.027)	(0.027)	(0.028)	(0.027)
Business	0.207***	0.105**	0.083*	0.147***	0.086*	0.062
	(0.048)	(0.047)	(0.046)	(0.047)	(0.049)	(0.048)
# of other fields	0.026	0.021	0.030	-0.016	-0.005	0.000
	(0.023)	(0.023)	(0.024)	(0.018)	(0.019)	(0.019)
Passed at least 0.5 EFTS at level 4+ within 10 years in:						
Natural & Physical Sciences		-0.074*			0.024	
		(0.040)			(0.040)	
Engineering & Related Technologies		0.112			-0.020	
		(0.105)			(0.080)	
Health		-0.050			-0.087**	
		(0.047)			(0.035)	
Education		-0.119***			-0.094***	
		(0.030)			(0.028)	
Management & Commerce		-0.023			0.040	
		(0.046)			(0.046)	
Society & Culture		-0.072**			-0.051*	
		(0.029)			(0.028)	
Creative Arts		-0.078**			-0.106***	
		(0.033)			(0.027)	
# of other fields		-0.108***			-0.008	
		(0.041)			(0.047)	
Passed at least 0.5 EFTS at level 7+ within 10 years in:						
Natural & Physical Sciences		-0.115***			-0.078	
		(0.044)			(0.053)	
Engineering & Related Technologies		-0.006			0.070	
		(0.140)			(0.119)	
Health		0.024			0.136***	
		(0.057)			(0.047)	
Education		0.039			0.001	
		(0.039)			(0.037)	
Management & Commerce		0.191***			0.089	
		(0.059)			(0.058)	
Society & Culture		-0.031			0.052*	
		(0.030)			(0.031)	
Creative Arts		-0.101**			0.062	
		(0.041)			(0.042)	
# of other fields		-0.003			-0.118*	
		(0.064)			(0.065)	

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	(1)	(2)	(3)	(4)	(5)	(6)
Gained qualification at level 4+ within 10 years in:						
Natural & Physical Sciences			0.029			-0.197***
			(0.183)			(0.065)
Engineering & Related Technologies			0.180			-0.019
			(0.180)			(0.127)
Health			0.008			0.009
			(0.067)			(0.063)
Education			-0.088***			-0.102***
			(0.033)			(0.031)
Management & Commerce			-0.028			0.038
			(0.065)			(0.064)
Society & Culture			-0.083**			-0.076**
			(0.039)			(0.032)
Creative Arts			-0.026			-0.009
			(0.054)			(0.049)
# of other fields			-0.026			-0.027
			(0.037)			(0.032)
Gained bachelor's degree+ within 10 years in:						
Natural & Physical Sciences			-0.187			0.158**
			(0.184)			(0.072)
Engineering & Related Technologies			-0.002			0.164
			(0.210)			(0.161)
Health			-0.007			0.138*
			(0.078)			(0.077)
Education			0.103*			0.074
			(0.059)			(0.047)
Management & Commerce			0.243***			0.195**
			(0.079)			(0.077)
Society & Culture			-0.005			0.125***
			(0.044)			(0.040)
Creative Arts			-0.125**			0.003
			(0.062)			(0.061)
# of other fields			-0.065			-0.036
			(0.060)			(0.058)
NCEA level 2 year fixed effects	Yes	Yes	Yes	Yes	Yes	Yes
Background characteristics	Yes	Yes	Yes	Yes	Yes	Yes
R-squared	0.069	0.141	0.149	0.092	0.131	0.146
Observations	1,131	1,131	1,131	1,131	1,131	1,131

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	9.2	11.9	1.25	11.6	<4.7	<0.43***	618
Years 6 to 10 after NCEA level 2	14.7	16.3	1.10	17.9	4.7	0.27***	618
Years 11 to 12 after NCEA level 2	13.5	11.9	0.89	14.7	9.3	0.65*	618
Years of early work experience:							
Any work experience in year of NCEA level 2 or earlier	8.5	15.9	1.68**	10.4	7.0	0.70	618
Any work experience in years 1 to 5 after NCEA level 2	62.6	84.1	2.59***	69.5	59.5	0.71**	618
Three+ years of work experience in years 1 to 5	28.2	53.5	2.28***	34.8	27.9	0.77	618
Sectors of work experience in years 1 to 5 after gaining NCEA level 2:							
Central government in at least one year	12.9	24.3	1.69**	14.3	20.8	1.44*	417
Central government in at least 3 years	10.6	8.7	0.86	10.5	<15.4	<1.41	204
Other government in at least one year	6.8	8.1	1.15	6.2	8.0	1.25	417
Other government in at least 3 years	<12 have characteristic			<12 have characteristic			204
Non-profit organisation in at least one year	12.7	13.5	1.05	12.4	12.0	0.97	417
Non-profit organisation in at least 3 years	<12 have characteristic			<12 have characteristic			204
Firm size of work experience in years 1 to 5 after gaining NCEA level 2:							
Small employer (<10 employees) in at least one year	24.8	19.4	0.79	24.8	20.0	0.80	417
Small employer (<10 employees) in at least 3 years	13.0	8.7	0.73	10.5	<16.7	<1.52	204
Medium employer (10-99 employees) in at least one year	45.1	36.1	0.76	43.9	44.0	1.00	417
Medium employer (10-99 employees) in at least 3 years	26.1	13.6	0.56*	22.8	25.0	1.10	204
Large employer (100+ employees) in at least one year	55.9	75.0	1.93***	60.2	65.4	1.20	417
Large employer (100+ employees) in at least 3 years	37.0	59.1	1.83***	42.9	41.7	0.96	204
Industries of work experience in years 1 to 5 after gaining NCEA level 2:							
Agriculture, Forestry, Fishing in at least one year	5.0	8.1	1.43	6.2	<7.7	<1.20	417
Agriculture, Forestry, Fishing in at least 3 years	<12 have characteristic			<12 have characteristic			204
Manufacturing in at least one year	13.7	13.5	0.99	14.2	12.0	0.85	417
Manufacturing in at least 3 years	6.5	8.7	1.22	8.8	<14.3	<1.52	204
Construction in at least one year	6.9	8.3	1.16	8.0	<7.7	<0.97	417
Construction in at least 3 years	6.5	<8.7	<1.22	5.4	<14.3	<2.17	204
Wholesale Trade in at least one year	5.0	8.1	1.43	6.2	<7.7	<1.20	417
Wholesale Trade in at least 3 years	<12 have characteristic			<12 have characteristic			204
Retail Trade in at least one year	18.8	18.9	1.01	21.1	12.0	0.57*	417
Retail Trade in at least 3 years	15.6	9.1	0.64	15.8	<16.7	<1.05	204
Accommodation & Food Services in at least one year	11.8	13.5	1.12	11.5	12.0	1.04	417
Accommodation & Food Services in at least 3 years	<12 have characteristic			<12 have characteristic			204
Transport, Post, Warehousing in at least one year	5.0	<5.4	<1.07	6.2	<7.7	<1.20	417
Transport, Post, Warehousing in at least 3 years	<12 have characteristic			<12 have characteristic			204
Financial & Insurance Services in at least one year	<5% have characteristic			<5% have characteristic			417
Financial & Insurance Services in at least 3 years	<12 have characteristic			<12 have characteristic			204
Professional, Scientific, Technical Services in at least 1 year	11.8	25.0	1.86***	12.4	29.2	2.27***	417
Professional, Scientific, Technical Services in at least 3 years	<12 have characteristic			<12 have characteristic			204
Administrative & Support Services in at least one year	8.8	<5.4	<0.66**	8.0	<7.7	<0.97*	417
Administrative & Support Services in at least 3 years	<12 have characteristic			<12 have characteristic			204
Public Administration & Safety in at least one year	8.7	16.2	1.61*	8.8	16.0	1.69	417
Public Administration & Safety in at least 3 years	4.4	9.1	1.57	7.1	<15.4	<1.91	204
Education & Training in at least one year	9.8	13.5	1.29	8.8	16.0	1.69	417
Education & Training in at least 3 years	<12 have characteristic			<12 have characteristic			204
Health Care & Social Assistance in at least one year	<5% have characteristic			<5% have characteristic			417
Health Care & Social Assistance in at least 3 years	<12 have characteristic			<12 have characteristic			204
Arts & Recreation Services in at least one year	6.9	5.6	0.84	6.2	8.0	1.25	417
Arts & Recreation Services in at least 3 years	<12 have characteristic			<12 have characteristic			204
Other industry in at least one year	9.8	13.5	1.29	10.6	12.0	1.12	417
Other industry in at least 3 years	6.5	<8.3	<1.18	5.3	<15.4	<2.36	204

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	14.0	<2.6	<0.20***	13.9	<2.7	<0.21***	1131
Years 6 to 10 after NCEA level 2	24.6	6.7	0.27***	25.4	2.7	0.10***	1131
Years 11 to 12 after NCEA level 2	17.2	11.8	0.70**	18.8	5.4	0.30***	1131
Years of early work experience:							
Any work experience in year of NCEA level 2 or earlier	8.0	17.1	1.89***	9.9	9.5	0.96	1131
Any work experience in years 1 to 5 after NCEA level 2	69.4	88.0	2.69***	73.6	71.2	0.91	1131
Three+ years of work experience in years 1 to 5	28.8	46.7	1.83***	32.7	29.7	0.90	1131
Sectors of work experience in years 1 to 5 after gaining NCEA level 2:							
Central government in at least one year	15.3	23.9	1.49***	17.4	17.3	0.99	825
Central government in at least 3 yrs	3.5	13.5	2.25***	7.0	<8.7	<1.21	366
Other government in at least one year	<5% have characteristic			<5% have characteristic			825
Other government in at least 3 yrs	<5% have characteristic			<5% have characteristic			366
Non-profit organisation in at least one year	12.0	10.4	0.89	11.2	13.2	1.16	825
Non-profit organisation in at least 3 yrs	7.0	<5.4	<0.82	7.0	<8.3	<1.16	366
Firm size of work experience in years 1 to 5 after gaining NCEA level 2:							
Small employer (<10 employees) in at least one year	24.9	16.4	0.66***	24.2	13.5	0.55**	825
Small employer (<10 employees) in at least 3 yrs	10.3	<5.4	<0.59**	9.0	<8.3	<0.93	366
Medium employer (10-99 employees) in at least 1 yr	45.9	43.9	0.94	46.2	42.3	0.88	825
Medium employer (10-99 employees) in at least 3 yrs	26.7	25.0	0.94	26.3	22.7	0.85	366
Large employer (100+ employees) in at least one year	56.9	71.2	1.62***	58.3	69.8	1.51**	825
Large employer (100+ employees) in at least 3 yrs	33.3	51.4	1.69***	37.0	47.8	1.43	366
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			825
Agriculture, Forestry, Fishing in at least 3 yrs	<5% have characteristic			<5% have characteristic			366
Manufacturing in at least one year	8.2	4.5	0.60	8.1	3.8	0.51	825
Manufacturing in at least 3 yrs	<5% have characteristic			<5% have characteristic			366
Construction in at least one year	<5% have characteristic			<5% have characteristic			825
Construction in at least 3 yrs	<5% have characteristic			<5% have characteristic			366
Wholesale Trade in at least one year	<5% have characteristic			<5% have characteristic			825
Wholesale Trade in at least 3 yrs	<5% have characteristic			<5% have characteristic			366
Retail Trade in at least one year	29.2	31.3	1.08	29.1	31.4	1.09	825
Retail Trade in at least 3 yrs	15.1	14.3	0.95	14.1	22.7	1.58	366
Accommodation & Food Services in at least one year	20.6	13.6	0.68**	19.7	17.0	0.86	825
Accommodation & Food Services in at least 3 yrs	11.6	13.9	1.15	12.0	13.6	1.13	366
Transport, Post, Warehousing in at least one year	<5% have characteristic			<5% have characteristic			825
Transport, Post, Warehousing in at least 3 yrs	<5% have characteristic			<5% have characteristic			366
Financial & Insurance Services in at least one year	5.3	10.4	1.67**	5.4	9.6	1.61*	825
Financial & Insurance Services in at least 3 yrs	<5% have characteristic			<5% have characteristic			366
Professional, Scientific, Technical Services in at least 1 yr	9.1	25.4	2.27***	10.3	24.5	2.17***	825
Professional, Scientific, Technical Services in at least 3 yrs	3.5	8.6	1.80*	6.0	<8.7	<1.37	366
Administrative & Support Services in at least one year	6.7	6.0	0.91	6.7	5.7	0.86	825
Administrative & Support Services in at least 3 yrs	<5% have characteristic			<5% have characteristic			366
Public Administration & Safety in at least one year	7.7	10.4	1.28	8.1	7.7	0.96	825
Public Administration & Safety in at least 3 yrs	<5% have characteristic			<5% have characteristic			366
Education & Training in at least one year	13.9	7.6	0.58*	13.0	9.6	0.75	825
Education & Training in at least 3 yrs	<5% have characteristic			<5% have characteristic			366
Health Care & Social Assistance in at least one year	10.5	15.2	1.36**	11.7	13.2	1.12	825
Health Care & Social Assistance in at least 3 yrs	<5% have characteristic			<5% have characteristic			366
Arts & Recreation Services in at least one year	<5% have characteristic			<5% have characteristic			825
Arts & Recreation Services in at least 3 yrs	<5% have characteristic			<5% have characteristic			366
Other industry in at least one year	11.0	10.6	0.97	10.8	13.2	1.20	825
Other industry in at least 3 yrs	5.8	<5.6	<0.97	5.1	<8.3	<1.51	366

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	0.035	0.048	0.067	-0.034	-0.025	-0.017
	(0.066)	(0.063)	(0.063)	(0.044)	(0.045)	(0.044)
Years 6 to 10	0.065	0.030	0.025	-0.028	-0.029	-0.028
	(0.057)	(0.055)	(0.053)	(0.041)	(0.042)	(0.040)
Years 11 and 12	-0.024	-0.021	-0.029	-0.007	-0.003	-0.008
	(0.048)	(0.047)	(0.048)	(0.042)	(0.043)	(0.042)
Overseas at least 6 months in year relative to NCEA level 2:						
Any year 3 to 5	-0.190***	-0.157**	-0.126*	-0.150**	-0.151**	-0.116*
	(0.073)	(0.067)	(0.067)	(0.069)	(0.070)	(0.069)
Any year 6 to 10	0.173***	0.175***	0.169***	0.070	0.077*	0.063
	(0.047)	(0.043)	(0.042)	(0.046)	(0.046)	(0.045)
Year 11 or 12	0.071	0.053	0.052	0.215***	0.215***	0.211***
	(0.052)	(0.048)	(0.047)	(0.055)	(0.056)	(0.055)
Years of work experience in years 1 to 5 after NCEA level 1 (omitted category: 0):						
1		0.003	-0.026		-0.058	-0.085*
		(0.052)	(0.042)		(0.054)	(0.044)
2		0.118*	0.104*		0.016	-0.010
		(0.069)	(0.063)		(0.065)	(0.061)
3		0.130*	0.141**		-0.020	-0.026
		(0.078)	(0.068)		(0.073)	(0.060)
4		0.194**	0.199***		0.018	0.023
		(0.080)	(0.070)		(0.075)	(0.067)
5		0.317***	0.312***		0.057	0.042
		(0.081)	(0.074)		(0.067)	(0.062)
Any work experience in years 1 to 5 in:						
Central government		0.133**			0.052	
		(0.065)			(0.063)	
Medium-sized firm (10-99 employees)		-0.020			0.006	
		(0.048)			(0.044)	
Large firm (100+ empployees)		0.059			-0.033	
		(0.050)			(0.045)	
Manufacturing			-0.003			0.002
			(0.061)			(0.053)
Retail Trade			0.004			-0.098**
			(0.058)			(0.048)
Accommodation & Food Services			0.001			0.011
			(0.066)			(0.060)
Professional, Scientific, and Technical Services			0.231***			0.124**
			(0.066)			(0.063)
Public Administration & Safety			0.176**			0.086
			(0.082)			(0.074)
Education & Training			0.139*			0.096
			(0.071)			(0.074)
Health Care & Social Assistance			-0.128			-0.200***
			(0.092)			(0.068)
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	0.232	0.253	0.213	0.221	0.244
Observations	618	618	618	618	618	618

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	-0.113***	-0.036	-0.046	-0.025	-0.014	-0.012
	(0.027)	(0.029)	(0.029)	(0.025)	(0.027)	(0.027)
Years 6 to 10	-0.086***	-0.104***	-0.101***	-0.079***	-0.079***	-0.085***
	(0.025)	(0.024)	(0.025)	(0.021)	(0.021)	(0.021)
Years 11 and 12	-0.008	-0.007	-0.007	-0.085***	-0.084***	-0.085***
	(0.029)	(0.027)	(0.027)	(0.023)	(0.024)	(0.024)
Overseas at least 6 months in year relative to NCEA level 2:						
Any year 3 to 5	-0.081*	-0.042	-0.039	-0.004	0.003	0.004
	(0.046)	(0.044)	(0.044)	(0.050)	(0.050)	(0.050)
Any year 6 to 10	0.027	0.016	0.021	-0.032	-0.033	-0.034
	(0.032)	(0.030)	(0.030)	(0.030)	(0.030)	(0.030)
Year 11 or 12	0.210***	0.209***	0.210***	0.337***	0.334***	0.334***
	(0.041)	(0.039)	(0.039)	(0.042)	(0.042)	(0.042)
Years of work experience in years 1 to 5 after NCEA level 1 (omitted category: 0):						
1		0.056	0.057*		-0.026	-0.024
		(0.036)	(0.033)		(0.036)	(0.034)
2		0.132***	0.130***		-0.016	-0.011
		(0.041)	(0.039)		(0.040)	(0.039)
3		0.122***	0.123***		-0.023	-0.020
		(0.045)	(0.041)		(0.045)	(0.042)
4		0.225***	0.223***		-0.008	0.000
		(0.056)	(0.052)		(0.048)	(0.046)
5		0.308***	0.288***		0.031	0.033
		(0.061)	(0.060)		(0.055)	(0.057)
Any work experience in years 1 to 5 in:						
Central government		0.111***			-0.029	
		(0.040)			(0.035)	
Medium-sized firm (10-99 employees)		-0.027			0.013	
		(0.032)			(0.028)	
Large firm (100+ empployees)		0.021			0.041	
		(0.032)			(0.029)	
Manufacturing			-0.084*			-0.065
			(0.044)			(0.041)
Retail Trade			0.018			0.030
			(0.034)			(0.031)
Accommodation & Food Services			-0.039			0.009
			(0.035)			(0.032)
Professional, Scientific, and Technical Services			0.122**			0.104**
			(0.050)			(0.048)
Public Administration & Safety			0.058			-0.001
			(0.055)			(0.050)
Education & Training			-0.012			0.027
			(0.042)			(0.039)
Health Care & Social Assistance			0.100**			-0.001
			(0.047)			(0.042)
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	0.223	0.282	0.287	0.258	0.261	0.267
Observations	1,131	1,131	1,131	1,131	1,131	1,131

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.