Building on strengths: Engineering and Technology

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

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Abstract

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

We find these men largely pursue practical training and gain level 4 to 6 industry training qualifications, many in Engineering and Related Technologies. Such men perform very well in the labour market relative to other men in the specialty, and substantially better than men who pursue more academic qualifications at bachelor's level or above, who generally appear to benefit little. The 28% of men with any work experience who ever work in the Construction industry also tend to do well.

In contrast, women tend to pursue education in more academic subjects and gain bachelor's degrees in a range of fields. Such women do better on average than women with lower-level qualifications. Only a few women gain industry training qualifications at level 4 to 6, or study Engineering and Related Technologies at this level. Those who do have very strong outcomes compared with their peers, much stronger than those with higher qualifications. Women who get work experience in the Professional, Scientific, and Technical Services industry also tend to have strong labour market outcomes.

A pertinent question is why so few women follow the practical route to industry training or enter the field of Engineering and Related Technologies. We discuss possible reasons for this in the main report.

JEL codes

I20, I30, I23, I26, J15, J24

Keywords

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

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Tables and Figures

1. Introduction

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

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

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

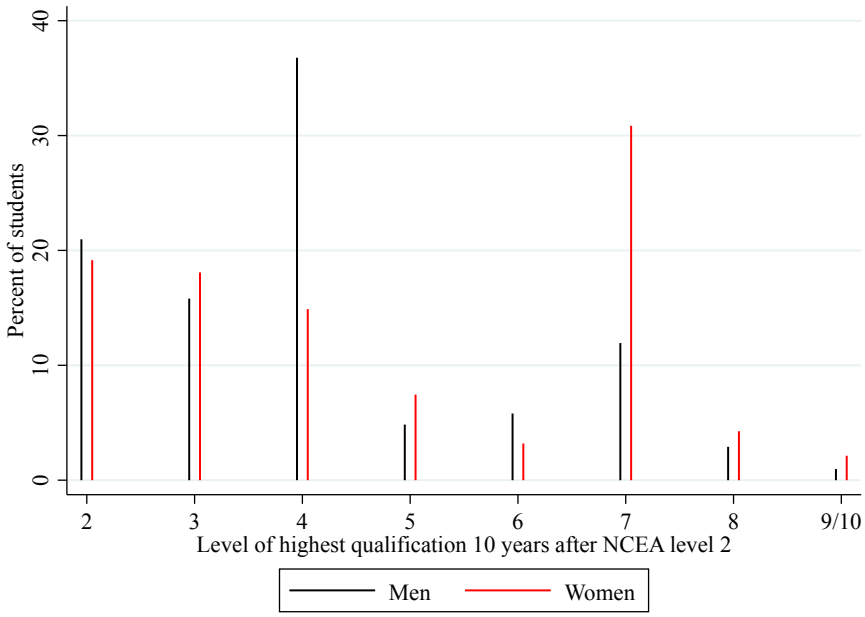
2. Overview of the students who specialised in Engineering and Technology

Māori students who specialised in Engineering and Technology are defined as students who showed strong results in NCEA level 2 standards in subjects such as electronics, roading

[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.

technology, and the motor industry.[2] The sample is limited to those who achieved NCEA level 2 between 2004 and 2007 when aged 16 to 19, and who were not in the top 10% of their year academically. A total of 1,212 students specialised in Engineering and Technology, 23% of whom are female, and 29% of whom gained NCEA level 2 at a tertiary institute. Despite their average level 2 grades, after 12 years students in this specialty have the highest cumulative savings of any specialty.

Figure 1: Distribution of level of highest qualification



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

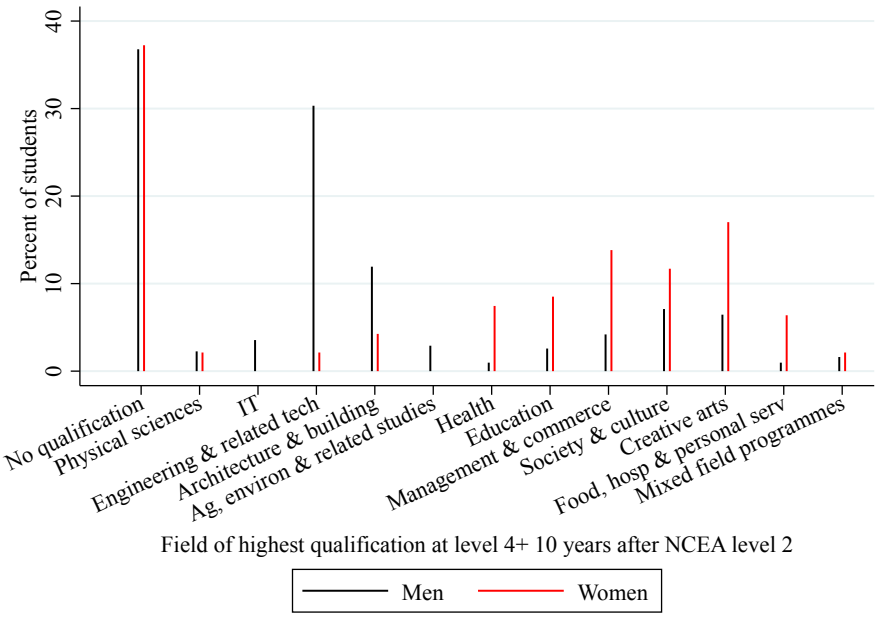
Figure 1 shows the highest level of qualification attained within 10 years of gaining NCEA level 2 by men and women who specialised in Engineering and Technology. On average, the women in the specialty attain higher qualifications than the men. The most common highest qualification level for men is level 4, which is attained by 37% of men. For women, it is level 7 (which includes bachelor's degrees and other qualifications at a similar level), which is attained

[2] The full list of subjects included in the specialty Engineering and Technology is: design; aeronautical engineering; electrical engineering; electronics; mechanical engineering; telecommunications; roading technology; motor industry; industrial measurement and control; electronics technology; highway construction and maintenance; civil plant operation and management; civil works and services; pavement surfacing; electricity supply; petrochemical industry; extractive industries; technology; gas industry; civil engineering; blaster coating; water industry; electronic engineering; hot dip galvanizing; drilling industry; metalliferous mining; explosive atmospheres; infrastructure civil engineering; and infrastructure works. Not all of these subjects are necessarily available to study at level 2. Many of the level 2 standards that contribute to this specialty are practical and could be gained through apprenticeships or study at tertiary institutes such as polytechnics. Design credits are common, as are credits in various automotive and mechanic's skills, skills such as welding, materials technology, electronics, and hand and machine tool use and safety.

by over 30% of women. Level 2 and 3 highest qualifications are also relatively common among both genders, and level 8 and above qualifications are fairly rare.

Figure 2 shows the distribution across fields of study of the highest qualifications of men and women who specialised in Engineering and Technology at level 2. Among those who gain qualifications at level 4 or above, the most common field of study for men is Engineering and Related Technologies (30%), followed by Architecture and Building (12%). The most common field for women is Creative Arts (17%), followed by Management and Commerce (14%), and Society and Culture (12%). Notably, the majority of men who gain higher qualifications gain them in fields closely related to Engineering and Technology, whereas the majority of women do not.

Figure 2: Distribution of field of highest qualification

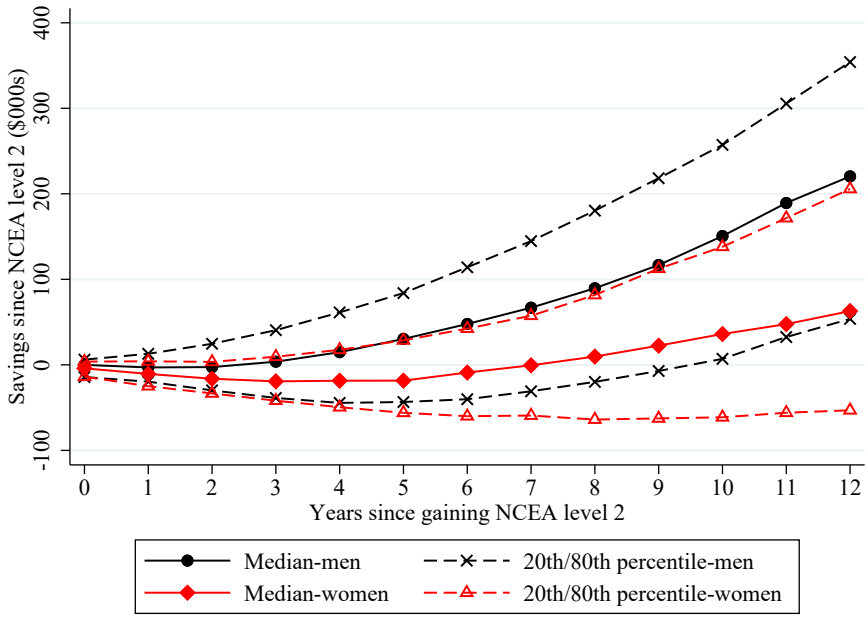


Notes: This figure shows the percentage of students whose highest qualification (at level 4 or above) is in each field among those who specialised in Engineering and Technology. Students may be included in more than one field if they have multiple highest qualifications at the same level. Those whose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

Figure 3 shows the evolution over time of the distribution of cumulative savings for men and women who specialised in Engineering and Technology. Median cumulative savings for women are negative for the first six years, indicating any earnings the median woman has over these years are insufficient to cover her estimated living costs and tertiary fees. However, men's median cumulative savings barely dip below zero before starting to rise at the same rate as the

80th percentile of women's median savings. By 12 years after NCEA level 2, median women's savings are still below $65,000, whereas men's are around $220,000. Throughout the savings distribution, men do substantially better than women.

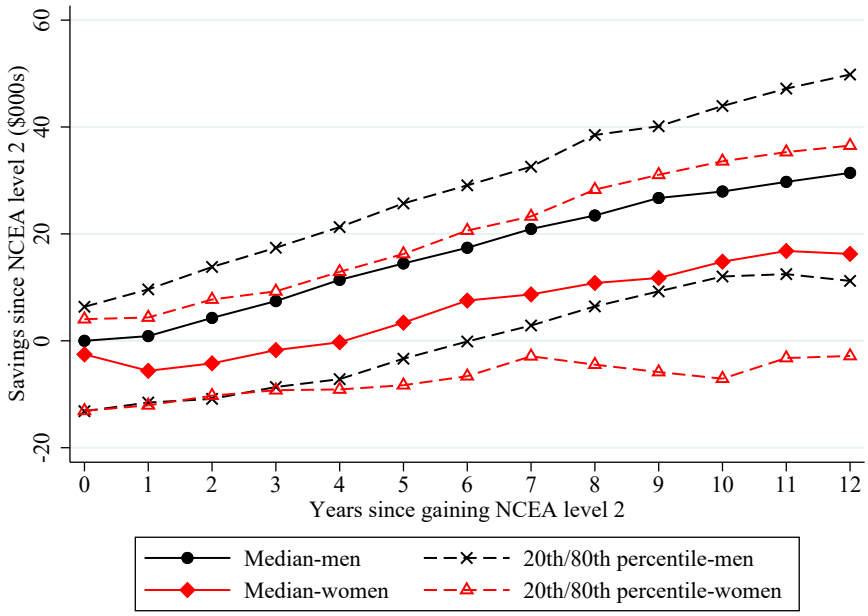
Figure 3: Cumulative savings over time by gender



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

Figure 4 similarly shows how the distribution of annual savings changes over time for men and women who specialised in Engineering and Technology. It shows the median man's annual savings is higher than that of the median woman's from year 1, and also grows slightly faster. The same is true at the 80th percentile. At the 20th percentile, men's and women's annual savings don't diverge until about year 4, but after this point men's increasingly pull ahead of women's.

Figure 4: Annual savings over time by gender



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

3. How do savings vary with level of qualifications?

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

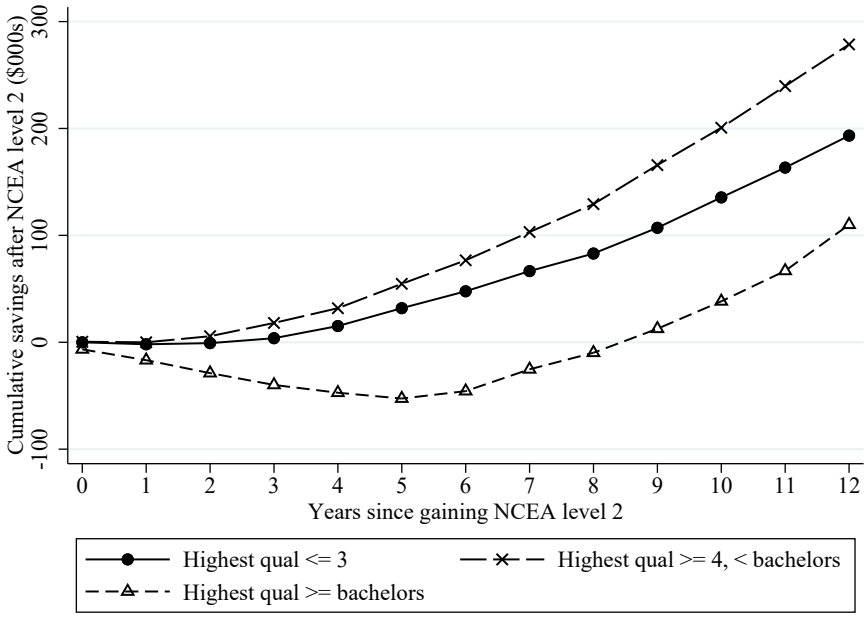
3.1 Cumulative and annual savings by level of highest qualification

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 lower annual savings each year than men with intermediate qualifications (at least level 4 but below bachelor's level). They thus always have lower cumulative savings; by 12 years after NCEA level 2, the difference is over $85,000. Men with high qualifications (bachelor's level or higher) have low annual savings for the first 5 years as they study, after which they enter the labour force and their annual savings grow rapidly. In year 8 their annual savings catch up with those of low-qualified men, and in year 10 with the savings of intermediate-qualified men. However, by this time their cumulative savings are over $160,000 lower. In subsequent years, their annual savings remain similar to those of intermediate-qualified men, and their cumulative savings gain no ground. Although their

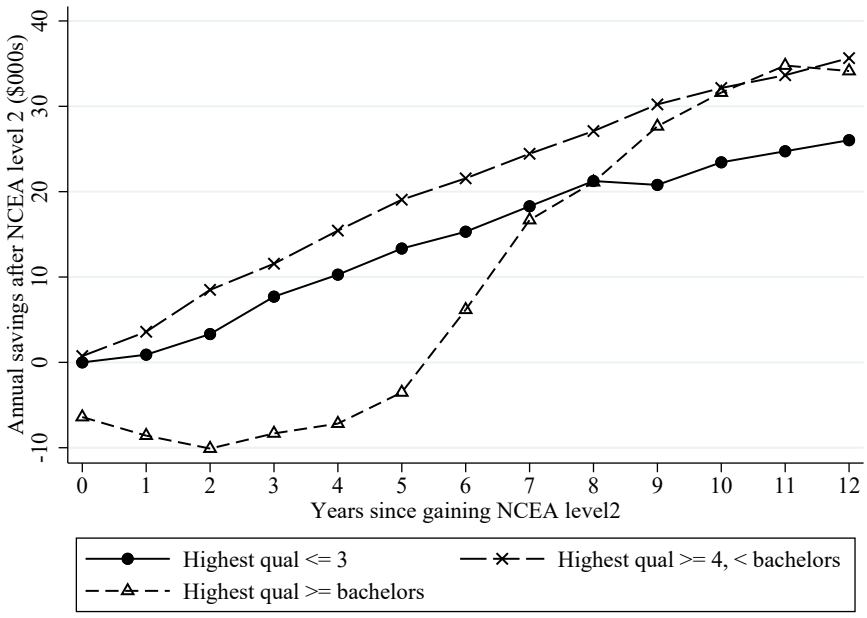
cumulative savings look set to overtake those of low-qualified men at some point after 12 years, there is no reason to believe they will ever catch up with those of intermediate-qualified men.

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

Panel A: Cumulative savings



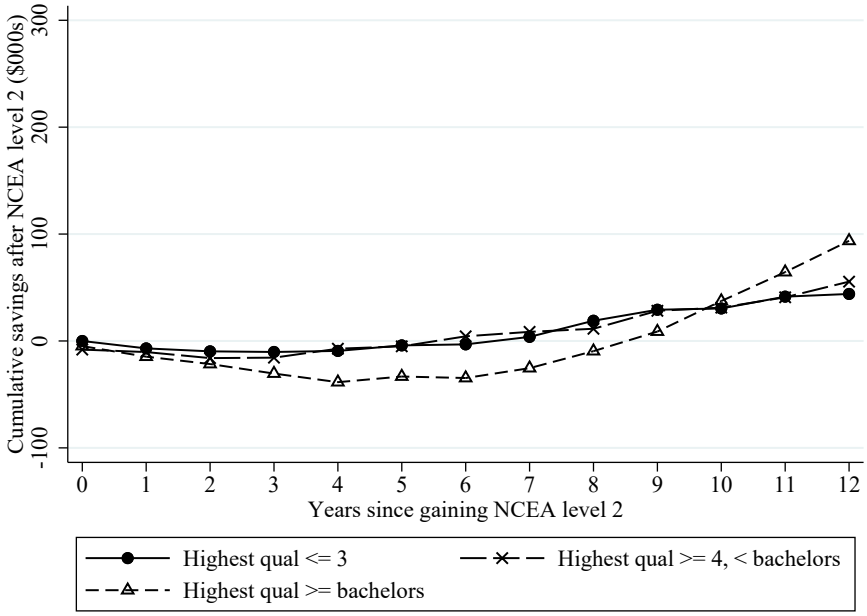
Panel B: Annual savings



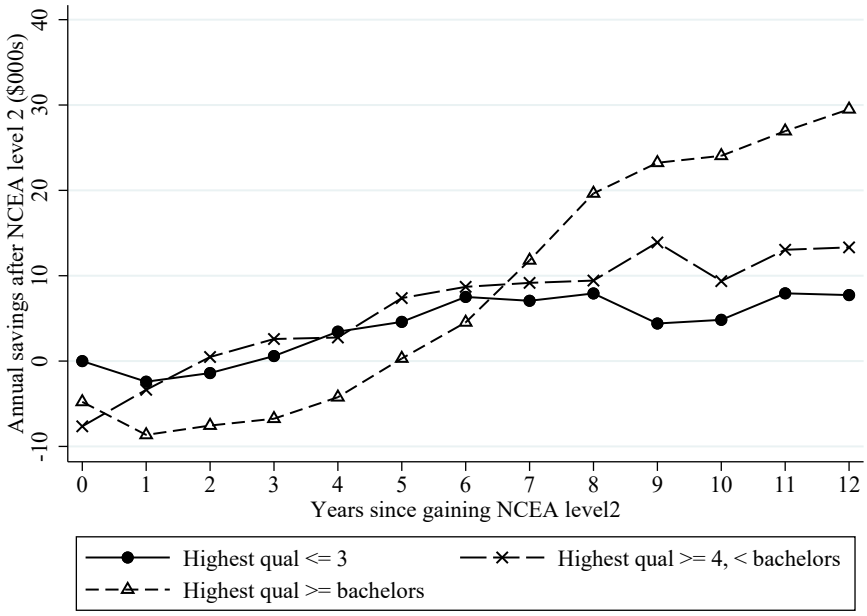
Notes: This figure shows changes over time in the median of cumulative savings since gaining NCEA level 2 (Panel A) and median of annual savings (Panel B) for men who specialised in Engineering and Technology and achieved different levels of highest qualification. Qualifications are included if they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

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

Panel A: Cumulative savings



Panel B: Annual savings



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

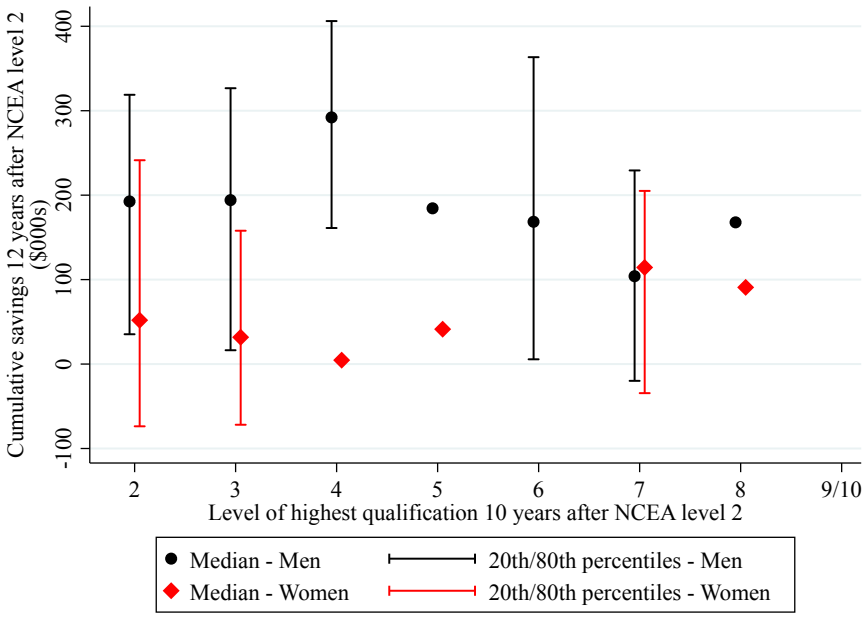
Figure 6 reveals quite a different story for women to the story for men. The median cumulative savings of low-qualified and intermediate-qualified women are similar for the first 12 years after NCEA level 2. High-qualified women have lower annual savings for 6 years and lower

cumulative savings for 9 years, but eventually they are both saving more each year and have higher accumulated wealth. By 12 years, their cumulative savings are around $40,000 ahead of those of less qualified women.

Taken together, these findings show men who specialised in Engineering and Technology tend to do better in the labour market if they leave education without gaining a bachelor's degree. Bachelor's graduates have similar annual earnings after 12 years to those with level 4 to 6 qualifications, but the high opportunity cost of their study has set their cumulative savings well behind. Women with a bachelor's degree do substantially better than women without.

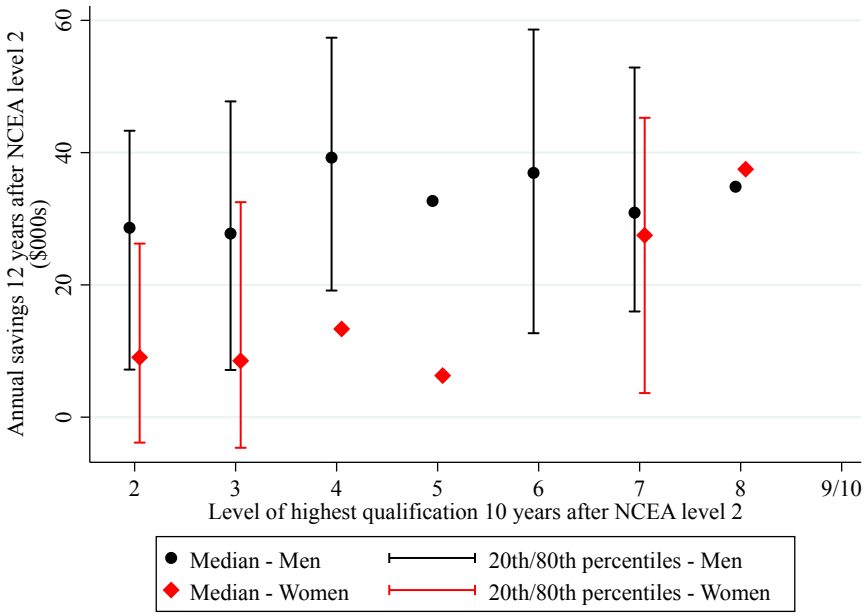
Figures 7 and 8 explore the distribution of cumulative and annual savings after 12 years for men and women with this specialty by disaggregated level of highest qualification. They show men with level 4 qualifications have the highest median cumulative and annual savings. Men with level 6 qualifications have similar annual savings, but much lower cumulative savings. Women with level 8 qualifications have the highest annual savings, but those with level 7 have the highest cumulative savings. In the long term, those with level 8 are likely to do best. Women with qualifications below level 7 have very low cumulative and annual savings.

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



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

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



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

3.2 Qualification levels of top cumulative and annual savers

In this section we categorise men and women who specialised in Engineering and Technology by whether they are top cumulative savers or top annual savers, and show the level of qualifications and types of education providers attended that are associated with being a top saver. A student is considered a top cumulative (or annual) saver if their cumulative (annual) savings 12 years after NCEA level 2 are in the top 20% of cumulative (annual) savings for Māori students of their gender who specialised in Engineering and Technology. 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.

After level 2 NCEA, men and women who specialised in Engineering and Technology take very different pathways through study. Forty-six percent of women achieve level 3 NCEA within a year, compared with only 25% of men. Even within 5 years, only 36% of men have this qualification. The bivariate analysis shows women who gain level 3 NCEA, regardless of timing, are more likely than women who don't to be top annual savers and insignificantly more likely to be top cumulative savers. In contrast, men who gain this qualification within a year are less likely to be top cumulative savers (and not significantly more likely to be top annual savers). However,

men who gain it within 5 years on average seem to benefit by being more likely to be top annual savers.

Level of highest qualification is strongly related to savings for men both in the bivariate analysis and in regressions that control for students' backgrounds. In the regressions, men with level 4 qualifications are more likely than men with the same background but any other level of qualification to be top cumulative savers, and equally most likely to be top annual savers. The few men with level 8 qualifications are as likely to be top annual savers as those with level 4, but are much less likely to be top cumulative savers. Men with level 5 or 6 qualifications also do very well, though are somewhat less likely than those with level 4 to be top cumulative savers.

However, the regressions (columns 3 and 7 of Appendix Table 3) show the benefits of level 4 to 6 qualifications are driven entirely by the 31% of men who have industry training qualifications at this level, and industry training qualifications at level 5 or 6 are even better than ones at level 4. Compared with similar men whose highest qualifications are at level 2 and are not industry training qualifications, men with level 4 industry training qualifications are 25 percentage points more likely to be top cumulative savers and 16 percentage points more likely to be top annual savers.[3] For those with industry training qualifications at level 5 or 6, these numbers increase to 56 percentage points and 41 percentage points.

For women, once we control for student background in the regressions, level of highest qualification does not predict being a top cumulative saver, though the 32% of women with level 7 qualifications are more likely than women with lower qualifications to be top *annual* savers, and the small group with level 8 or higher qualifications are even more likely to be top annual savers (and insignificantly less likely to be top cumulative savers). Industry training is much less common for women than for men, with only 8% of women gaining any industry training credits at level 4 or above. At levels 4 and above such qualifications are at least as beneficial for women's chances of being top savers as for men's, possibly more.

In terms of the types of tertiary institute attended, the regressions show men who attend industry training organisations or private training establishments are more likely to be top cumulative and annual savers, conditional on their backgrounds and level of highest qualification. Men who attend wānanga are less likely to be top cumulative and annual savers. Women who attend industry training organisations, institutes of technology, or polytechnics are more likely to be top annual savers than similar women who don't attend such institutes. In the bivariate analysis, women who attend universities are more likely to be top annual savers, but

[3] This comparison comes from adding the coefficients on a level 4 highest qualification and a level 4 highest industry training qualification.

this is largely explained by their backgrounds and levels of highest qualification. The bivariate analysis also shows attending a school or tertiary institute outside the main urban areas is generally associated with higher probabilities of being top savers for men, though not obviously for women.

In addition to controlling for students' pathways through education, the regressions in Appendix Tables 3 and 4, described at the start of this section, control for various student background characteristics (the first five controls presented at the top of the table). They show men are more likely to be top annual savers if they attend a higher decile school or a school outside the main urban areas. Women with multiple specialties are weakly more likely to be top annual savers.

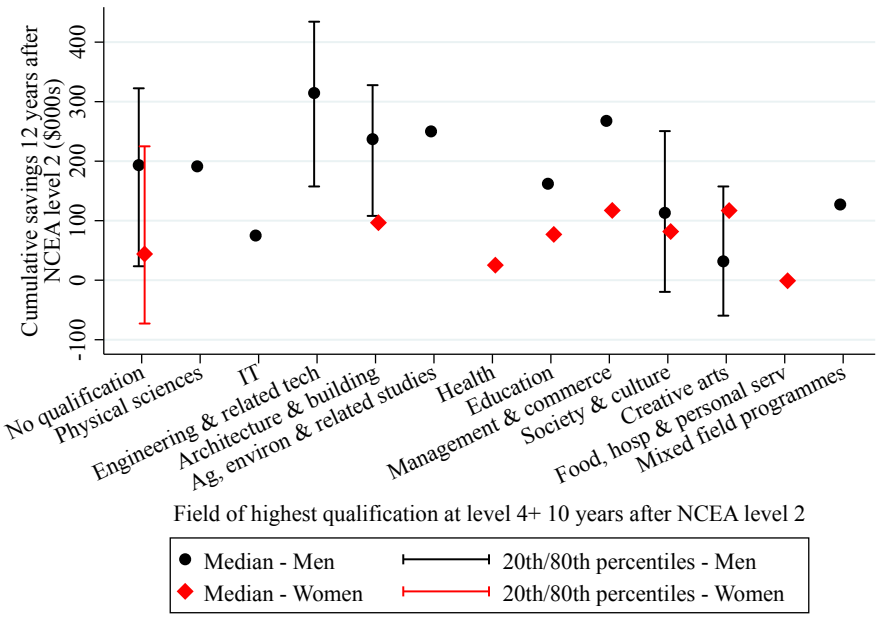
4. How do savings vary with fields of study in higher education?

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

4.1 Cumulative and annual savings by fields of study

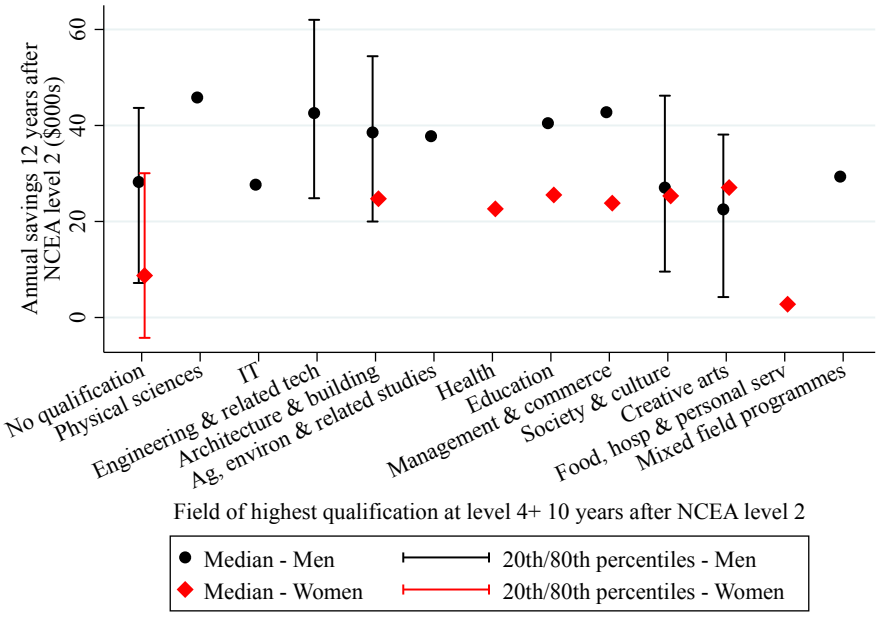
Figure 9 shows how the cumulative savings after 12 years differ for men and women whose highest qualifications at level 4 or above are in different fields. Figure 10 shows the same but for annual rather than cumulative savings. As Figure 2 showed, the highest proportion of men and women have no qualification at level 4 or above. Such men have relatively high cumulative savings, around $195,000 at the median, compared with around $45,000 for women. Their annual savings are relatively low, below $30,000, compared with under $10,000 for women.

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



Notes: This figure shows the median and 20th and 80th percentiles of cumulative savings 12 years after NCEA level 2 of men and women who specialised in Engineering and Technology 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.

The most common field of qualifications at level 4 or above for men is Engineering and Related Technologies (30%), the natural extension of Engineering Technology at level 2. It offers men the highest cumulative savings of any field (around $315,000), and annual savings only slightly below the leader ($43,000 compared with $46,000 in Physical Sciences, an uncommon field). Very few women gain such qualifications. The second most common field for men, Architecture and Building, offers relatively high cumulative and annual savings. The other two fields that are somewhat common for men at this level, Society and Culture and Creative Arts, offer lower cumulative and annual savings than no qualifications at this level.

Creative Arts is the most common field in which women who specialised in Engineering and Technology gain qualifications at this level, but because few women specialise in Engineering and Technology at level 2 the number who gain a Creative Arts qualification is still small. Nonetheless, this field offers women the highest cumulative savings and annual savings of any field in which at least 10 women gain a level 4 or higher qualification. Of the two next most common fields for women, Management and Commerce and Society and Culture, Management and Commerce offers higher cumulative savings but Society and Culture offers higher annual savings. The field associated with the weakest labour market outcomes for women is Personal Services (which includes subfields such as hospitality, cookery, and hairdressing), which offers the lowest cumulative and annual savings, both below those offered by not having any qualifications at this level.

4.2 Fields of higher study of top cumulative and annual savers

In this section we again categorise men and women who specialised in Engineering and Technology 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 the bivariate analysis, the only subject in which passing at least 14 credits at level 2 for men is significantly associated at the 5% level with being a top saver is Science. Just under half of men pass these credits, and they are 42% more likely to be top annual savers than men who do not. *Achievement* standard credits in Science and Humanities are both associated with a higher probability of being a top annual saver. For women, level 2 credits in English, Humanities, and Social Science are positively associated with being a top annual saver, and credits in Maths and Science are insignificantly associated with being a top annual saver. Credits in Māori are not associated with women being any type of top saver.

For men, passing at least 14 credits at level 3 in Engineering and Technology (45% of men) or Service Sector courses (16% of men) within 5 years is strongly positively associated with being a top cumulative and annual saver in the bivariate analysis. This remains the case in the regressions, which control for student background. The regressions also show men with English credits at level 3 are less likely to be top annual savers than men with the same background without these credits. Those with credits in Humanities are more likely to be top annual savers when compared with similar students who studied the same fields at higher levels.

For women, credits in most fields at level 3 (with the exceptions of Māori, Arts and Crafts, and possibly Business) are associated with a considerably higher probability of being a top annual saver in the bivariate analysis, though this association is not always statistically significant. Engineering and Technology credits are also positively associated with being a top *cumulative* saver. However, in the regressions the only (weakly) significant relationship is that women with Manufacturing, Planning, and Construction credits are less likely to be top annual

savers than similar women without them. The main reason for the low statistical significance in the regressions is the small sample of women, which gives low statistical power.

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.

Thirty-three percent of men pass at least 0.5 EFTS of courses at level 4 and above in Engineering and Related Technologies, and 30% gain a qualification in this field at this level. The bivariate analysis shows those who gain such a qualification are 3.2 times as likely as other men to be top cumulative savers, and 2.1 times as likely to be top annual savers. Most of these qualifications are at levels 4 to 6: less than 5% of men gain a qualification in Engineering and Related Technologies at the bachelor's level or above. Strong outcomes for men who study Engineering and Related Technologies also appear in the regressions, which control for student backgrounds and lower-level fields of study. Men who study and gain qualifications in this field

at levels 4 to 6 are more likely to be top cumulative and annual savers than men with the same background and level 3 fields of study, but who leave education after level 3. Men who study Engineering and Related Technologies at bachelor's level or above are even more likely than those who study it at levels 4 to 6 to be top annual savers. However, they are only as likely to be top *cumulative* savers as students with similar backgrounds and school study but who leave education after level 3. The regressions also show men who study or gain qualifications at level 4 or above in most other fields are not more likely than similar education-leavers to be top cumulative or annual savers, and in some cases are less likely.

The relatively small sample of women limits our ability to say a lot about the fields of higher study that lead to strong labour market outcomes for them. However, it seems from the regressions that women who study or gain qualifications in Engineering and Related Technologies are more likely than similar education-leavers to be top savers, especially if they gain a qualification at level 4 and above. Women who study Management and Commerce at level 7 or above seem more likely than similar education-leavers to be top savers, but the number of students who take it is too small for this difference to be significant at the 5% level, so we cannot say with any certainty. The bivariate analysis shows Health, particularly at level 7 or above, may be positively associated with being a top annual saver. In the regressions, women who study Architecture and Building or Creative Arts, particularly below level 7, are less likely to be top savers.

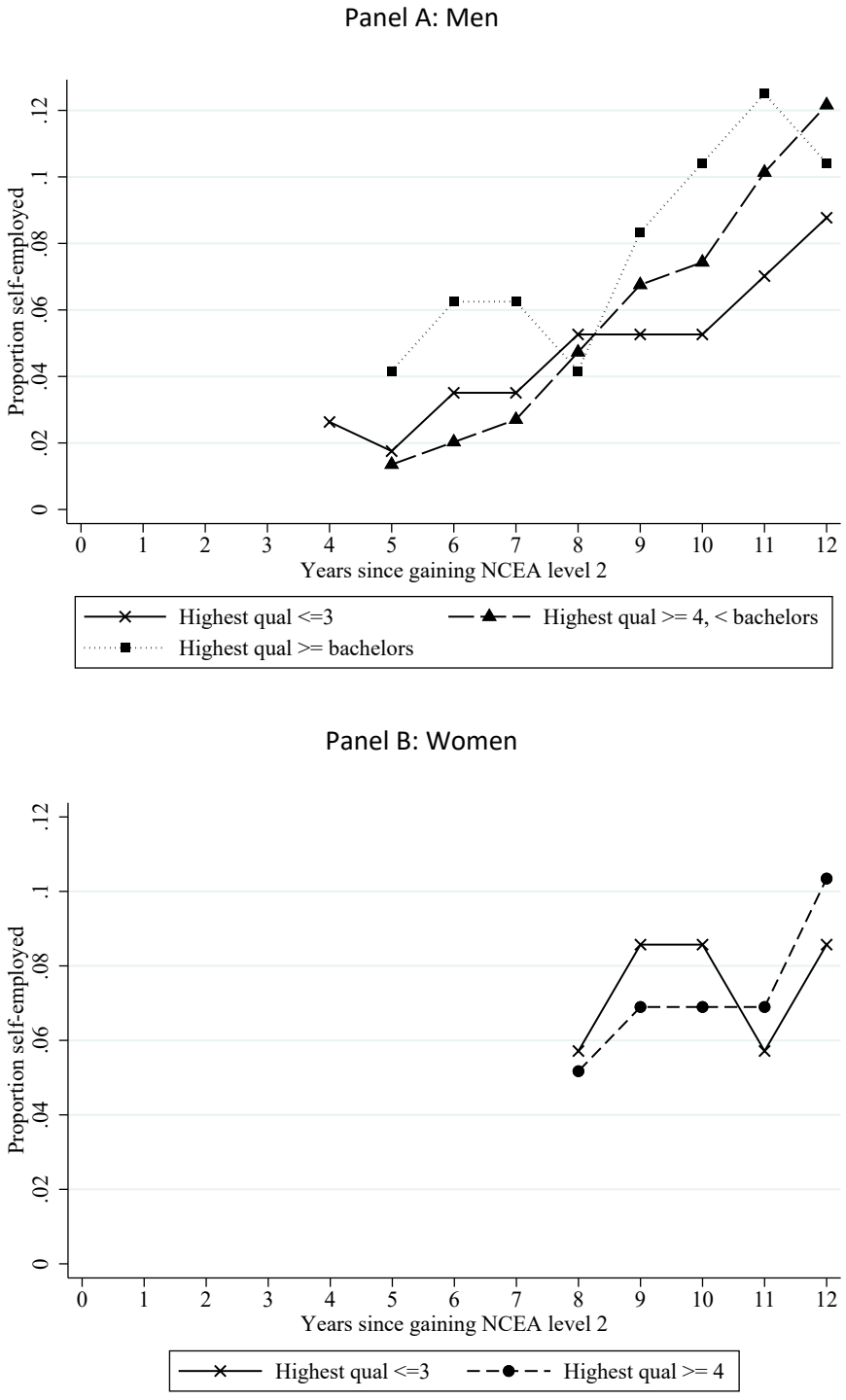
5. How do savings vary with self-employment?

This section first shows how self-employment rates vary over time and by level of highest qualification for students who specialised in Engineering and Technology. 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 the self-employment of students who specialised in Engineering and Technology is substantial for men and women, and for men tends to increase with the level of highest qualification. The number of women in the specialty is too low to draw such conclusions. For men, self-employment grows steadily over time from around 5 years after NCEA level 2. After 12 years, the self-employment rate is 9% to 12% and still growing.

Figure 11: Self-employment over time by highest qualification



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

5.2 Cumulative and annual savings by self-employment status

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

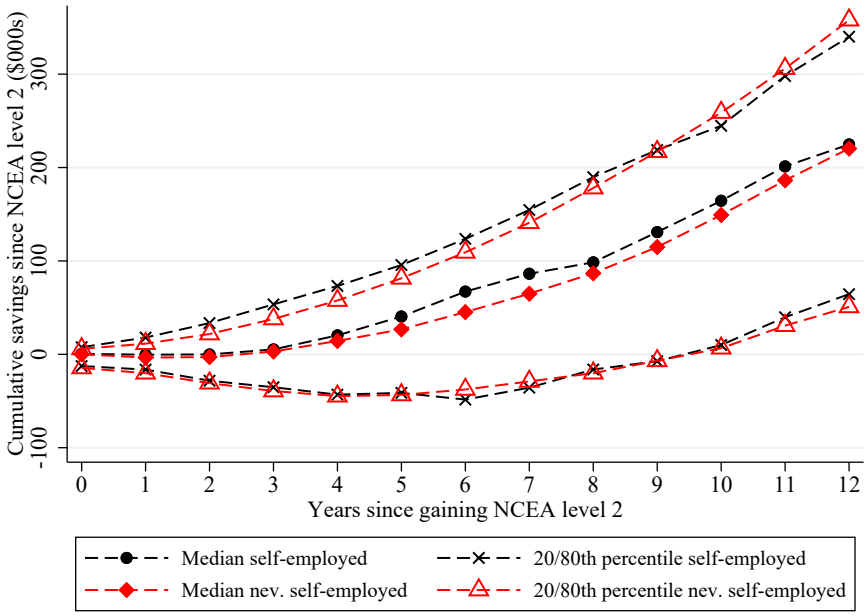
Figure 12 shows that men who are ever self-employed have higher median cumulative savings than those who are never self-employed. The 80th percentile of their cumulative savings is also higher for the first 8 years after NCEA level 2, then it drops below that of those who are never self-employed. Women who are ever self-employed have lower median income than those who aren't every year from year 3, and the gap grows over time.

One way to partially distinguish the reasons for the difference in savings between the two groups is to compare the timing of the emergence of the difference with the timing of self-employment. This suggests men who become self-employed tend to be those who are doing well in the labour market beforehand, but becoming self-employed may involve them giving up some annual savings. Women who become self-employed seem to be those who had lower savings even before becoming self-employed, and self-employment doesn't boost their savings.

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

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

Panel A: Men



Panel B: Women

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

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

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

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

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

In regressions that control for background and education, men who have children 6 to 10 years after NCEA level 2 have an increased probability of being top cumulative savers. This is consistent with men who are doing better in the labour market being more likely to have children at this stage, or men who have children at this stage increasing their work, potentially to compensate for their partner earning less. This positive correlation is not evident for children

born earlier or later. In contrast, for women, children tend to decrease the likelihood of being a top annual or cumulative saver when compared with women with the same educational and overseas history but no children. The likelihood of being a top annual saver is particularly low if the child is born in year 11 or 12 after NCEA level 2. Children born before the woman's career was well underway appear less disruptive to savings.

The regressions show men and women with overseas experience in year 11 or 12 are more likely to be top annual savers than are men and women with similar educational and other backgrounds, but who do not go overseas at this point. This is partly because we impute overseas earnings and assume overseas wages are higher than New Zealand wages.

Men with work experience in all of the first five years after NCEA level 2 are more likely to be top cumulative savers, and such women are more likely to be both top cumulative savers and top annual savers, than are similar men and women with less work experience over this period. At lower levels of work experience, the number of years worked is at best weakly related to savings. The regressions also show central government experience contributes less strongly than other work experience to being a top annual saver for men, and for women contributes insignificantly more to being a top cumulative and annual saver.

The most common industries in which men gain early work experience are Manufacturing (26% of men with any work experience) and Construction (28%). In the bivariate analysis, Manufacturing experience is associated with insignificantly low cumulative and annual savings, and Construction is associated with high cumulative and annual savings. In the regressions, which control for students' backgrounds, education, and years of work experience, Construction is the industry associated with one of the highest probabilities of being top cumulative and top annual savers, but Manufacturing experience is associated with a comparatively low probability of being a top cumulative saver. Women are most likely to get early work experience in Retail Trade or Accommodation and Food Services, neither of which is associated with high savings in the regressions. The industry most associated in the regressions with being a top saver for women is the Professional, Scientific, and Technical Services industry.

7. Conclusions

In this specialty profile, we focussed on Māori men and women who specialised in Engineering and Technology 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.

Men and women who specialised in Engineering and Technology take very different subsequent pathways. Thirty-seven percent of men and only 15% of women gain highest qualifications at level 4, whereas 31% of women and only 12% of men gain highest qualifications at level 7. A high proportion of men study Engineering and Related Technologies, whereas women tend to study a range of more academic subjects. Thirty percent of men gain a qualification in Engineering and Related Technologies at level 4 or above, whereas less than 3% of women do.

The pathway that leads men with this specialty to successful labour market outcomes is clear. Industry training qualifications at level 5 or 6 offer the highest cumulative and annual savings of any type and level of qualification, followed by industry training qualifications at level 4. Men who gain bachelor's degrees or higher qualifications don't do nearly as well on average. They pay a high opportunity cost of their time in education and don't end up with higher annual savings. However, they may gain non-financial benefits, such an enjoying the more academic study or the types of jobs it can lead to. In terms of field of study, men who gain qualifications in Engineering and Related Technologies have the strongest outcomes on balance. Most such men have qualifications at levels 4 to 6; the few who have higher qualifications have (insignificantly) higher annual savings, but much lower cumulative savings. In the long term the higher level of qualifications could pay off, but this is not certain.

Because Engineering and Technology is a very male-dominated specialty even at level 2, the sample of women we have to study is small. From this small sample, a tiny proportion follow the route that is lucrative for men, of industry training qualifications at level 4 to 6, likely in Engineering and Related Technologies. The few women who take this path, like the men, have very strong cumulative and annual savings. The women who gain bachelor's degrees or higher qualifications have high annual savings (though still lower than those of women with level 4 or higher industry training qualifications), but low cumulative savings. This is especially true for those with qualifications at level 8 or above. On average, women with at least bachelor's degrees have higher cumulative and annual savings 12 years after NCEA level 2 than do women with level 4 to 6 qualifications, but most level 4 to 6 qualifications are not industry training qualifications. The small sample of women makes it difficult to say too much about the other fields of study with which women do well, but Management and Commerce and Health at levels 7 and above appear to offer strong outcomes.

The 28% of men with any early work experience who ever work in the Construction industry tend to do well, as do women who get experience in the Professional, Scientific, and Technical Services industry.

The high proportion of men in this specialty who pursue industry training or Engineering and Related Technologies suggests these are feasible paths for students with the interests and aptitudes that tend to go with the specialty. Furthermore, they are very financially rewarding. It is therefore relevant to ask why so few women in the specialty follow them. As discussed in the main report, this seems to come from a lack of encouragement into this pathway at school, internalised gender norms, and in some cases work environments and cultures that are not optimal for women to thrive in.

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	26.0	18.8	0.71**	23.2	28.6	1.25	930
NCEA cert level 3 within 5 yrs	35.6	35.9	1.01	33.7	42.2	1.33**	930
University Entrance within 1 yr	21.1	11.1	0.53***	19.4	18.8	0.97	930
Level of highest qualification gained within 10 years:							
Level 2	23.1	14.1	0.61***	23.5	11.1	0.47***	930
Level 3	16.6	11.1	0.68	16.9	10.9	0.66*	930
Level 4	31.6	57.8	2.34***	34.0	46.9	1.52***	930
Level 5	<5% have characteristic			<5% have characteristic			930
Level 6	5.3	7.8	1.37	5.3	7.8	1.37	930
Level 7	14.2	3.2	0.24***	12.6	11.1	0.89	930
Level 8	<5% have characteristic			<5% have characteristic			930
Level 9 or 10	<5% have characteristic			<5% have characteristic			930
Industry training credits gained within 10 years:							
Any credits	50.4	81.0	3.25***	54.5	65.1	1.43**	930
Any credits at level 4+	34.0	74.6	4.01***	38.5	57.8	1.86***	930
50+ credits	37.7	73.0	3.33***	41.3	57.8	1.70***	930
50+ credits at level 4+	24.7	57.8	2.98***	27.5	46.0	1.87***	930
Level of highest industry training qualification gained within 10 years:							
Level 2+	36.6	73.0	3.44***	40.7	55.6	1.61***	930
Level 3+	30.9	68.3	3.43***	34.6	54.0	1.87***	930
Level 4+	23.6	59.7	3.32***	26.7	47.6	2.03***	930
Types of tertiary institute where student enrolled within 10 years (for students who enrolled in any tertiary):							
Industry Training Organisation	56.7	85.7	3.58***	61.0	69.4	1.35**	924
Institute of Technology/Polytech	84.1	90.5	1.63**	85.0	85.9	1.06	924
Private Training Establishment	67.9	83.9	2.11***	69.1	79.4	1.56**	924
University	28.6	14.3	0.48***	25.6	27.0	1.06	924
Wananga	8.5	4.8	0.59*	8.2	4.8	0.62	924
Other Tertiary Provider	8.6	14.3	1.54**	9.0	11.3	1.22	924
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			930
Secondary urban area	26.3	37.5	1.50***	27.2	33.3	1.26*	930
Minor urban area	24.7	28.6	1.17	24.4	30.2	1.26*	930
Rural centre or rural area	14.2	21.9	1.50**	15.0	18.8	1.23	930
Different region to school	88.6	94.8	2.07**	89.5	91.5	1.21	861

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	45.3	50.0	1.16	41.3	63.2	2.03**	279
NCEA cert level 3 within 5 yrs	46.7	52.6	1.21	44.6	63.2	1.83***	279
University Entrance within 1 yr	36.0	38.9	1.10	33.8	47.4	1.56*	279
Level of highest qualification gained within 10 years:							
Level 2	18.7	26.3	1.41	21.3	<10.5	<0.50**	279
Level 3	18.9	15.8	0.84	20.0	10.5	0.53	279
Level 4	15.8	11.1	0.71	14.7	15.8	1.07	279
Level 5	7.9	<10.5	<1.28	6.8	<10.5	<1.45	279
Level 6	<5% have characteristic			<5% have characteristic			279
Level 7	30.7	36.8	1.24	28.0	44.4	1.77**	279
Level 8	<5% have characteristic			<5% have characteristic			279
Level 9 or 10	<5% have characteristic			<5% have characteristic			279
Industry training credits gained within 10 years:							
Any credits	18.7	22.2	1.19	18.7	26.3	1.41	279
Any credits at level 4+	6.7	16.7	2.13***	6.7	15.8	2.02***	279
50+ credits	9.5	15.8	1.56	9.5	15.8	1.56	279
50+ credits at level 4+	<5% have characteristic			<5% have characteristic			279
Level of highest industry training qualification gained within 10 years:							
Level 2+	12.0	16.7	1.35	12.0	21.1	1.66	279
Level 3+	6.7	15.8	2.02*	6.7	15.8	2.02*	279
Level 4+	<5% have characteristic			<5% have characteristic			279
Types of tertiary institute where student enrolled within 10 years (for students who enrolled in any tertiary):							
Industry Training Organisation	21.9	27.8	1.28	21.9	27.8	1.28	276
Institute of Technology/Polytech	68.0	68.4	1.02	67.1	73.7	1.29	276
Private Training Establishment	60.8	50.0	0.70	60.3	50.0	0.72	276
University	45.9	50.0	1.14	43.8	63.2	1.87**	276
Wananga	20.3	11.1	0.55	19.2	10.5	0.56	276
Other Tertiary Provider	6.8	<10.5	<1.43	6.9	<10.0	<1.35	276
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			279
Secondary urban area	18.9	<11.1	<0.59*	18.9	11.1	0.59	279
Minor urban area	23.0	27.8	1.22	23.0	26.3	1.15	279
Rural centre or rural area	6.7	<10.5	<1.46	8.0	<10.0	<1.21	279
Different region to school	86.8	81.3	0.72	85.1	>88.9	>1.32	252

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	0.008	0.012	0.017	0.014	-0.006	-0.002	0.000	-0.003
	(0.019)	(0.019)	(0.018)	(0.019)	(0.020)	(0.020)	(0.020)	(0.020)
Percentile score (0-1)	-0.140	-0.001	0.022	0.081	0.107	0.052	0.042	0.069
	(0.143)	(0.150)	(0.144)	(0.151)	(0.145)	(0.154)	(0.153)	(0.159)
Multiple specialties	-0.001	0.005	0.007	0.005	0.005	0.007	0.007	0.007
	(0.030)	(0.029)	(0.028)	(0.028)	(0.030)	(0.030)	(0.029)	(0.030)
School decile	0.008	0.006	0.007	0.006	0.013**	0.012**	0.012**	0.011*
	(0.005)	(0.005)	(0.005)	(0.005)	(0.005)	(0.005)	(0.005)	(0.006)
School not in main urban area	0.053*	0.029	0.009	0.019	0.083***	0.065**	0.053*	0.060*
	(0.030)	(0.030)	(0.029)	(0.030)	(0.031)	(0.031)	(0.031)	(0.032)
Highest qualification gained within 10 years (omitted category: level 2):								
Level 3		0.021	-0.019	0.017		0.013	0.015	0.008
		(0.040)	(0.040)	(0.040)		(0.038)	(0.041)	(0.039)
Level 4		0.174***	-0.025	0.130***		0.123***	0.013	0.110***
		(0.036)	(0.044)	(0.036)		(0.035)	(0.046)	(0.035)
Level 5 or 6		0.092*	-0.002	0.099*		0.117**	0.067	0.116**
		(0.052)	(0.047)	(0.051)		(0.053)	(0.051)	(0.053)
Level 7		-0.092**	-0.111***	-0.029		0.029	0.019	0.030
		(0.036)	(0.036)	(0.043)		(0.046)	(0.047)	(0.050)
Level 8 to 10		-0.061	-0.063	0.004		0.125	0.128	0.116
		(0.061)	(0.061)	(0.064)		(0.087)	(0.087)	(0.089)
Highest industry training qualification gained within 10 years (omitted category: none):								
Level 2			0.038				-0.029	
			(0.054)				(0.047)	
Level 3			0.134**				-0.002	
			(0.056)				(0.051)	
Level 4			0.275***				0.149***	
			(0.043)				(0.045)	
Level 5 or 6			0.557***				0.347**	
			(0.170)				(0.172)	
Any Gateway credits completed within 10 years				-0.005				-0.008
				(0.035)				(0.034)
Enrolled in institute type within 10 years:								
Industry Training Organisation				0.123***				0.025
				(0.027)				(0.029)
Institute of Technology/Polytech				0.021				0.014
				(0.034)				(0.038)
Private Training Establishment				0.084***				0.073**
				(0.027)				(0.028)
University				-0.032				0.027
				(0.036)				(0.038)
Wānanga				-0.094**				-0.075*
				(0.043)				(0.044)
Other Tertiary Provider				0.046				0.029
				(0.047)				(0.047)
NCEA level 2 year fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
R-squared	0.011	0.066	0.122	0.103	0.020	0.038	0.057	0.049
Observations	930	930	930	930	930	930	930	930

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	-0.035	-0.033	-0.040	-0.027	-0.026	-0.029	-0.041	-0.016
	(0.035)	(0.035)	(0.035)	(0.037)	(0.035)	(0.034)	(0.034)	(0.035)
Percentile score (0-1)	-0.240	-0.217	-0.220	-0.299	0.049	-0.166	-0.168	-0.091
	(0.256)	(0.270)	(0.272)	(0.288)	(0.270)	(0.289)	(0.289)	(0.311)
Multiple specialties	0.040	0.051	0.042	0.060	0.100*	0.101*	0.098*	0.101*
	(0.053)	(0.053)	(0.054)	(0.054)	(0.053)	(0.053)	(0.054)	(0.053)
School decile	0.009	0.010	0.005	0.007	0.009	0.009	0.005	0.007
	(0.009)	(0.009)	(0.009)	(0.010)	(0.010)	(0.010)	(0.010)	(0.010)
School not in main urban area	-0.009	-0.007	-0.007	0.007	-0.012	-0.012	-0.014	-0.008
	(0.054)	(0.055)	(0.054)	(0.054)	(0.055)	(0.055)	(0.054)	(0.053)
Highest qualification gained within 10 years (omitted category: level 2):								
Level 3		-0.118	-0.124	-0.117		0.007	0.014	-0.006
		(0.079)	(0.081)	(0.086)		(0.064)	(0.066)	(0.072)
Level 4		-0.091	-0.155*	-0.080		0.088	0.032	0.065
		(0.086)	(0.086)	(0.089)		(0.075)	(0.076)	(0.079)
Level 5 or 6		-0.083	-0.102	-0.045		0.027	0.020	0.054
		(0.100)	(0.101)	(0.104)		(0.086)	(0.084)	(0.089)
Level 7		-0.056	-0.074	-0.065		0.147**	0.141**	0.147**
		(0.080)	(0.080)	(0.085)		(0.067)	(0.067)	(0.074)
Level 8 to 10		-0.119	-0.125	-0.145		0.318**	0.331**	0.303**
		(0.108)	(0.112)	(0.117)		(0.131)	(0.134)	(0.134)
Highest industry training qualification gained within 10 years (omitted category: none):								
Level 2			-0.070				0.078	
			(0.101)				(0.112)	
Level 3			0.001				0.001	
			(0.109)				(0.113)	
Level 4			0.436**				0.404**	
			(0.196)				(0.204)	
Level 5 or 6			0.520*				0.501	
			(0.303)				(0.329)	
Any Gateway credits completed within 10 years				-0.047				0.014
				(0.068)				(0.074)
Enrolled in institute type within 10 years:								
Industry Training Organisation				0.046				0.121*
				(0.067)				(0.067)
Institute of Technology/Polytech				0.046				0.117**
				(0.056)				(0.055)
Private Training Establishment				-0.051				-0.021
				(0.053)				(0.054)
University				0.057				0.069
				(0.062)				(0.057)
Wānanga				-0.076				-0.071
				(0.055)				(0.058)
Other Tertiary Provider				-0.097				-0.094
				(0.082)				(0.078)
NCEA level 2 year fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
R-squared	0.034	0.044	0.088	0.068	0.033	0.076	0.114	0.120
Observations	279	279	279	279	279	279	279	279

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	34.4	38.1	1.13	34.0	39.7	1.21	930
Maths	28.5	27.0	0.94	27.2	31.7	1.19	930
Māori	<5% have characteristic			<5% have characteristic			930
Humanities	61.0	61.9	1.03	59.3	66.7	1.29*	930
Social Science	9.7	9.5	0.99	8.9	11.1	1.21	930
Science	45.7	52.4	1.24	44.5	55.6	1.42***	930
Passed at least 14 achievement standard credits at level 2 by year of NCEA level 2 in:							
English	15.4	14.3	0.93	14.5	19.0	1.29*	930
Maths	19.8	18.8	0.95	18.6	21.9	1.17	930
Māori	<5% have characteristic			<5% have characteristic			930
Humanities	36.2	34.4	0.94	33.7	43.8	1.39***	930
Social Science	7.7	8.1	1.04	7.3	11.1	1.42	930
Science	34.6	39.7	1.19	33.2	45.3	1.49***	930
Passed at least 14 credits at level 3 within 5 years in:							
English	11.7	6.3	0.57**	11.3	9.4	0.84	930
Maths	17.0	14.1	0.83	15.8	18.8	1.18	930
Māori	<5% have characteristic			<5% have characteristic			930
Humanities	19.0	17.2	0.91	17.9	20.3	1.13	930
Social Science	7.7	6.3	0.85	6.5	11.1	1.56***	930
Science	21.1	15.6	0.74*	19.4	21.9	1.12	930
Arts & Crafts	10.9	6.3	0.60**	9.7	10.9	1.11	930
Computing & IT	8.5	<3.1	<0.40***	6.9	7.9	1.12	930
Business	<5% have characteristic			<5% have characteristic			930
Agriculture, Forestry, & Fisheries	7.3	9.4	1.23	8.1	4.8	0.62	930
Community & Social Services	<5% have characteristic			<5% have characteristic			930
Education	<5% have characteristic			<5% have characteristic			930
Service Sector	13.0	30.2	2.19***	14.6	25.0	1.66***	930
Engineering & Technology	39.0	66.7	2.48***	40.9	58.7	1.77***	930
Manufacturing, Planning & Constrn	15.8	12.7	0.81	14.6	16.1	1.10	930
Passed at least 14 achievement standard credits at level 3 within 5 years in:							
English	5.7	<3.1	<0.59**	5.3	4.8	0.92	930
Maths	13.0	10.9	0.85	11.7	17.2	1.41	930
Māori	<5% have characteristic			<5% have characteristic			930
Humanities	13.8	10.9	0.81	12.6	14.3	1.13	930
Social Science	7.3	6.3	0.88	6.1	11.1	1.64**	930
Science	17.4	14.1	0.82	15.4	21.9	1.39*	930
Arts & Crafts	9.8	4.8	0.52**	8.5	10.9	1.24	930
Computing & IT	<5% have characteristic			<5% have characteristic			930
Business	<5% have characteristic			<5% have characteristic			930
Agriculture, Forestry, & Fisheries	<5% have characteristic			<5% have characteristic			930
Community & Social Services	<5% have characteristic			<5% have characteristic			930
Education	<5% have characteristic			<5% have characteristic			930
Service Sector	<5% have characteristic			<5% have characteristic			930
Engineering & Technology	11.7	9.5	0.83	10.9	14.1	1.25	930
Manufacturing, Planning & Constrn	<5% have characteristic			<5% have characteristic			930

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	52.7	52.6	1.00	49.3	68.4	1.91**	279
Maths	25.3	26.3	1.04	24.3	36.8	1.59	279
Māori	9.3	<10.5	<1.11	9.5	<10.0	<1.05	279
Humanities	62.7	72.2	1.43	60.8	77.8	1.96**	279
Social Science	16.0	26.3	1.62	16.0	27.8	1.72**	279
Science	54.7	57.9	1.11	52.0	63.2	1.45*	279
Passed at least 14 achievement standard credits at level 2 by year of NCEA level 2 in:							
English	32.0	31.6	0.98	30.7	36.8	1.24	279
Maths	18.7	16.7	0.89	16.2	26.3	1.60	279
Māori	9.2	<10.5	<1.12	9.3	<10.0	<1.06	279
Humanities	45.3	47.4	1.07	42.7	55.0	1.48*	279
Social Science	12.0	26.3	2.04**	12.0	26.3	2.04**	279
Science	32.0	38.9	1.27	29.7	50.0	1.97***	279
Passed at least 14 credits at level 3 within 5 years in:							
English	21.3	31.6	1.51	18.9	36.8	2.00**	279
Maths	14.7	15.8	1.07	12.2	26.3	2.02*	279
Māori	9.5	<10.0	<1.05*	9.5	<10.0	<1.05M	279
Humanities	25.7	36.8	1.50*	24.3	44.4	2.03***	279
Social Science	13.3	22.2	1.61	12.0	26.3	2.04**	279
Science	22.4	26.3	1.19	20.0	36.8	1.91**	279
Arts & Crafts	25.3	26.3	1.04	24.3	27.8	1.15	279
Computing & IT	17.3	10.5	0.62	14.7	22.2	1.49	279
Business	6.7	<10.5	<1.46	6.7	<10.5	<1.46	279
Agriculture, Forestry, & Fisheries	<5% have characteristic			<5% have characteristic			279
Community & Social Services	<5% have characteristic			<5% have characteristic			279
Education	<5% have characteristic			<5% have characteristic			279
Service Sector	24.0	31.6	1.35	24.3	30.0	1.25	279
Engineering & Technology	32.0	50.0	1.82**	32.0	50.0	1.82**	279
Manufacturing, Planning & Constrn	<5% have characteristic			<5% have characteristic			279
Passed at least 14 achievement standard credits at level 3 within 5 years in:							
English	14.7	15.8	1.07	13.3	22.2	1.61	279
Maths	11.8	15.8	1.30	9.3	21.1	2.01**	279
Māori	6.7	<10.0	<1.40	6.7	<10.0	<1.40M	279
Humanities	20.0	31.6	1.60	18.9	31.6	1.68**	279
Social Science	11.8	22.2	1.78*	9.3	26.3	2.44***	279
Science	13.5	27.8	1.97**	13.3	30.0	2.12***	279
Arts & Crafts	24.0	27.8	1.17	23.0	27.8	1.22	279
Computing & IT	<5% have characteristic			<5% have characteristic			279
Business	<5% have characteristic			<5% have characteristic			279
Agriculture, Forestry, & Fisheries	<5% have characteristic			<5% have characteristic			279
Community & Social Services	<5% have characteristic			<5% have characteristic			279
Education	<5% have characteristic			<5% have characteristic			279
Service Sector	<5% have characteristic			<5% have characteristic			279
Engineering & Technology	21.6	36.8	1.78**	21.3	38.9	1.94***	279
Manufacturing, Planning & Constrn	<5% have characteristic			<5% have characteristic			279

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+	17.1	11.1	0.66**	15.0	20.3	1.33*	930
Natural & Physical Sciences at level 4+	<5% have characteristic			<5% have characteristic			930
Natural & Physical Sciences at level 7+	<5% have characteristic			<5% have characteristic			930
Natural & Physical Sciences at level 8+	<5% have characteristic			<5% have characteristic			930
Information Technology at level 2+	11.0	<3.1	<0.31***	9.7	7.8	0.83	930
Information Technology at level 4+	8.5	<3.1	<0.40***	6.9	6.3	0.92	930
Information Technology at level 7+	<5% have characteristic			<5% have characteristic			930
Information Technology at level 8+	<5% have characteristic			<5% have characteristic			930
Engineering & Related Technologies at level 2+	54.3	78.1	2.47***	55.7	73.0	1.86***	930
Engineering & Related Technologies at level 4+	27.1	58.7	2.82***	28.2	54.0	2.33***	930
Engineering & Related Technologies at level 7+	<5% have characteristic			<5% have characteristic			930
Engineering & Related Technologies at level 8+	<5% have characteristic			<5% have characteristic			930
Architecture & Building at level 2+	19.8	8.1	0.41***	18.2	14.3	0.79	930
Architecture & Building at level 4+	15.8	9.4	0.61**	14.2	14.1	0.99	930
Architecture & Building at level 7+	<5% have characteristic			<5% have characteristic			930
Architecture & Building at level 8+	<5% have characteristic			<5% have characteristic			930
Ag, Environmental & Related Studies at level 2+	14.2	10.9	0.78	15.0	8.1	0.56**	930
Ag, Environmental & Related Studies at level 4+	<5% have characteristic			<5% have characteristic			930
Ag, Environmental & Related Studies at level 7+	<5% have characteristic			<5% have characteristic			930
Ag, Environmental & Related Studies at level 8+	<5% have characteristic			<5% have characteristic			930
Health at level 2+	<5% have characteristic			<5% have characteristic			930
Health at level 4+	<5% have characteristic			<5% have characteristic			930
Health at level 7+	<5% have characteristic			<5% have characteristic			930
Health at level 8+	<5% have characteristic			<5% have characteristic			930
Education at level 2+	<5% have characteristic			<5% have characteristic			930
Education at level 4+	<5% have characteristic			<5% have characteristic			930
Education at level 7+	<5% have characteristic			<5% have characteristic			930
Education at level 8+	<5% have characteristic			<5% have characteristic			930
Management & Commerce at level 2+	9.8	10.9	1.11	9.8	10.9	1.11	930
Management & Commerce at level 4+	6.5	4.7	0.76	5.7	7.8	1.30	930
Management & Commerce at level 7+	<5% have characteristic			<5% have characteristic			930
Management & Commerce at level 8+	<5% have characteristic			<5% have characteristic			930
Society & Culture at level 2+	29.6	14.1	0.46***	27.9	20.3	0.71**	930
Society & Culture at level 4+	11.7	3.2	0.30***	10.9	7.8	0.74*	930
Society & Culture at level 7+	<5% have characteristic			<5% have characteristic			930
Society & Culture at level 8+	<5% have characteristic			<5% have characteristic			930
Creative Arts at level 2+	17.4	4.8	0.29***	15.4	12.7	0.83	930
Creative Arts at level 4+	10.2	<3.1	<0.33***	9.8	3.2	0.36***	930
Creative Arts at level 7+	<5% have characteristic			<5% have characteristic			930
Creative Arts at level 8+	<5% have characteristic			<5% have characteristic			930
Food, Hospitality & Personal Servs at level 2+	<5% have characteristic			<5% have characteristic			930
Food, Hospitality & Personal Servs at level 4+	<5% have characteristic			<5% have characteristic			930
Food, Hospitality & Personal Servs at level 7+	<5% have characteristic			<5% have characteristic			930
Food, Hospitality & Personal Servs at level 8+	<5% have characteristic			<5% have characteristic			930
Mixed Field Programmes at level 2+	<5% have characteristic			<5% have characteristic			930
Mixed Field Programmes at level 4+	<5% have characteristic			<5% have characteristic			930
Mixed Field Programmes at level 7+	<5% have characteristic			<5% have characteristic			930
Mixed Field Programmes at level 8+	<5% have characteristic			<5% have characteristic			930

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

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

	Cumulative savings			Annual savings			
	% of students with characteristic among:		Odds ratio	% of students with characteristic among:		Odds ratio	Students
Characteristic	Non-top savers (1)	Top savers (2)	(3)	Non-top savers (4)	Top savers (5)	(6)	(7)
Fields and levels in which student passed at least 0.5 EFTS within 10 years:							
Natural & Physical Sciences at level 2+	14.5	<11.1	<0.78	12.0	15.8	1.28	279
Natural & Physical Sciences at level 4+	5.3	<10.5	<1.73	5.3	<10.5	<1.73	279
Natural & Physical Sciences at level 7+	<5% have characteristic			<5% have characteristic			279
Natural & Physical Sciences at level 8+	<5% have characteristic			<5% have characteristic			279
Information Technology at level 2+	9.3	<10.0	<1.06	9.3	<10.0	<1.06	279
Information Technology at level 4+	<5% have characteristic			<5% have characteristic			279
Information Technology at level 7+	<5% have characteristic			<5% have characteristic			279
Information Technology at level 8+	<5% have characteristic			<5% have characteristic			279
Engineering & Related Technologies at level 2+	16.0	22.2	1.38	17.3	21.1	1.21	279
Engineering & Related Technologies at level 4+	4.0	10.5	2.09**	4.0	11.1	2.20*	279
Engineering & Related Technologies at level 7+	<5% have characteristic			<5% have characteristic			279
Engineering & Related Technologies at level 8+	<5% have characteristic			<5% have characteristic			279
Architecture & Building at level 2+	6.7	<10.5	<1.46	6.7	<10.5	<1.46	279
Architecture & Building at level 4+	6.7	<10.0	<1.40	6.7	<10.5	<1.46	279
Architecture & Building at level 7+	<5% have characteristic			<5% have characteristic			279
Architecture & Building at level 8+	<5% have characteristic			<5% have characteristic			279
Ag, Environmental & Related Studies at level 2+	<5% have characteristic			<5% have characteristic			279
Ag, Environmental & Related Studies at level 4+	<5% have characteristic			<5% have characteristic			279
Ag, Environmental & Related Studies at level 7+	<5% have characteristic			<5% have characteristic			279
Ag, Environmental & Related Studies at level 8+	<5% have characteristic			<5% have characteristic			279
Health at level 2+	8.0	<11.1	<1.33	6.7	15.8	2.02**	279
Health at level 4+	6.7	<10.5	<1.46	6.7	15.8	2.02**	279
Health at level 7+	6.7	<10.5	<1.46	4.0	10.5	2.09**	279
Health at level 8+	<5% have characteristic			<5% have characteristic			279
Education at level 2+	12.0	10.5	0.89	12.0	10.5	0.89	279
Education at level 4+	10.7	10.5	0.99	10.7	11.1	1.04	279
Education at level 7+	6.7	10.5	1.46	6.7	11.1	1.54	279
Education at level 8+	<5% have characteristic			<5% have characteristic			279
Management & Commerce at level 2+	25.3	33.3	1.36	25.3	36.8	1.53	279
Management & Commerce at level 4+	16.0	16.7	1.04	14.7	26.3	1.74	279
Management & Commerce at level 7+	4.0	<11.1	<2.20	4.0	11.1	2.20**	279
Management & Commerce at level 8+	<5% have characteristic			<5% have characteristic			279
Society & Culture at level 2+	42.7	36.8	0.82	41.3	45.0	1.13	279
Society & Culture at level 4+	21.3	10.5	0.50*	18.9	15.8	0.84	279
Society & Culture at level 7+	6.7	<10.5	<1.46	6.7	<10.5	<1.46	279
Society & Culture at level 8+	<5% have characteristic			<5% have characteristic			279
Creative Arts at level 2+	38.7	31.6	0.78	38.7	31.6	0.78	279
Creative Arts at level 4+	22.7	<11.1	<0.49**	23.0	<10.5	<0.46**	279
Creative Arts at level 7+	12.0	<10.5	<0.89	12.0	<10.5	<0.89	279
Creative Arts at level 8+	<5% have characteristic			<5% have characteristic			279
Food, Hospitality & Personal Servs at level 2+	11.8	<10.5	<0.90	12.0	<10.0	<0.85*	279
Food, Hospitality & Personal Servs at level 4+	6.7	<10.5	<1.46	8.0	<10.0	<1.21	279
Food, Hospitality & Personal Servs at level 7+	<5% have characteristic			<5% have characteristic			279
Food, Hospitality & Personal Servs at level 8+	<5% have characteristic			<5% have characteristic			279
Mixed Field Programmes at level 2+	<5% have characteristic			<5% have characteristic			279
Mixed Field Programmes at level 4+	<5% have characteristic			<5% have characteristic			279
Mixed Field Programmes at level 7+	<5% have characteristic			<5% have characteristic			279
Mixed Field Programmes at level 8+	<5% have characteristic			<5% have characteristic			279

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

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

	Cumulative savings			Annual savings			
	% of students with characteristic among:		Odds ratio	% of students with characteristic among:		Odds ratio	Students
	Non-top savers	Top savers		Non-top savers	Top savers		
Characteristic	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Fields of highest qualification gained within 10 years:							
Natural & Physical Sciences	<5% have characteristic			<5% have characteristic			930
Information Technology	<5% have characteristic			<5% have characteristic			930
Engineering & Related Technologies	28.5	62.5	3.03***	31.6	52.4	1.97***	930
Architecture & Building	13.8	7.8	0.59**	12.6	12.7	1.01	930
Ag, Environmental & Related Studies	6.5	4.7	0.75	6.9	3.2	0.50	930
Health	<5% have characteristic			<5% have characteristic			930
Education	<5% have characteristic			<5% have characteristic			930
Management & Commerce	4.9	7.8	1.47	4.9	7.8	1.47	930
Society & Culture	7.7	<3.1	<0.45***	7.3	3.2	0.47**	930
Creative Arts	7.7	<3.1	<0.44***	7.3	3.2	0.47**	930
Food, Hospitality & Personal Services	<5% have characteristic			<5% have characteristic			930
Mixed Field Programmes	32.8	20.3	0.59***	32.9	19.0	0.55***	930
Fields of qualifications at level 4+ gained within 10 years:							
Natural & Physical Sciences	<5% have characteristic			<5% have characteristic			930
Information Technology	<5% have characteristic			<5% have characteristic			930
Engineering & Related Technologies	23.2	57.8	3.15***	25.9	47.6	2.09***	930
Architecture & Building	13.0	7.8	0.63**	11.7	14.1	1.18	930
Ag, Environmental & Related Studies	<5% have characteristic			<5% have characteristic			930
Health	<5% have characteristic			<5% have characteristic			930
Education	<5% have characteristic			<5% have characteristic			930
Management & Commerce	<5% have characteristic			<5% have characteristic			930
Society & Culture	8.1	<3.1	<0.42***	7.7	3.2	0.45*	930
Creative Arts	8.1	<3.1	<0.42***	7.3	3.2	0.47**	930
Food, Hospitality & Personal Services	<5% have characteristic			<5% have characteristic			930
Mixed Field Programmes	<5% have characteristic			<5% have characteristic			930
Fields of qualifications at bachelor's level+ gained within 10 years:							
Natural & Physical Sciences	<5% have characteristic			<5% have characteristic			930
Information Technology	<5% have characteristic			<5% have characteristic			930
Engineering & Related Technologies	<5% have characteristic			<5% have characteristic			930
Architecture & Building	<5% have characteristic			<5% have characteristic			930
Ag, Environmental & Related Studies	<5% have characteristic			<5% have characteristic			930
Health	<5% have characteristic			<5% have characteristic			930
Education	<5% have characteristic			<5% have characteristic			930
Management & Commerce	<5% have characteristic			<5% have characteristic			930
Society & Culture	<5% have characteristic			<5% have characteristic			930
Creative Arts	<5% have characteristic			<5% have characteristic			930
Food, Hospitality & Personal Services	<5% have characteristic			<5% have characteristic			930
Mixed Field Programmes	<5% have characteristic			<5% have characteristic			930

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

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

	Cumulative savings			Annual savings			
	% of students with characteristic among:		Odds ratio	% of students with characteristic among:		Odds ratio	Students
	Non-top savers	Top savers		Non-top savers	Top savers		
Characteristic	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Fields of highest qualification gained within 10 years:							
Natural & Physical Sciences	<5% have characteristic			<5% have characteristic			279
Information Technology	<5% have characteristic			<5% have characteristic			279
Engineering & Related Technologies	<5% have characteristic			<5% have characteristic			279
Architecture & Building	<5% have characteristic			<5% have characteristic			279
Ag, Environmental & Related Studies	<5% have characteristic			<5% have characteristic			279
Health	7.9	<10.5	<1.28	5.4	15.8	2.30**	279
Education	9.3	<11.1	<1.17	9.3	<10.5	<1.11	279
Management & Commerce	16.0	22.2	1.38	16.0	26.3	1.62	279
Society & Culture	11.8	10.5	0.90	9.5	15.8	1.56	279
Creative Arts	17.3	10.5	0.62	16.2	15.8	0.98	279
Food, Hospitality & Personal Services	9.3	<10.5	<1.11	9.3	<10.0	<1.06*	279
Mixed Field Programmes	32.0	36.8	1.19	37.3	21.1	0.52**	279
Fields of qualifications at level 4+ gained within 10 years:							
Natural & Physical Sciences	<5% have characteristic			<5% have characteristic			279
Information Technology	<5% have characteristic			<5% have characteristic			279
Engineering & Related Technologies	<5% have characteristic			<5% have characteristic			279
Architecture & Building	<5% have characteristic			<5% have characteristic			279
Ag, Environmental & Related Studies	<5% have characteristic			<5% have characteristic			279
Health	8.0	<10.5	<1.26	6.7	15.8	2.02*	279
Education	9.2	10.5	1.12	9.3	11.1	1.17	279
Management & Commerce	13.5	15.8	1.15	12.2	22.2	1.74	279
Society & Culture	12.0	<11.1	<0.93	10.7	10.5	0.99	279
Creative Arts	18.7	10.5	0.57	17.6	15.8	0.90	279
Food, Hospitality & Personal Services	6.7	<10.5	<1.46	7.9	<10.0	<1.22	279
Mixed Field Programmes	<5% have characteristic			<5% have characteristic			279
Fields of qualifications at bachelor's level+ gained within 10 years:							
Natural & Physical Sciences	<5% have characteristic			<5% have characteristic			279
Information Technology	<5% have characteristic			<5% have characteristic			279
Engineering & Related Technologies	<5% have characteristic			<5% have characteristic			279
Architecture & Building	<5% have characteristic			<5% have characteristic			279
Ag, Environmental & Related Studies	<5% have characteristic			<5% have characteristic			279
Health	5.3	<10.5	<1.73	4.0	10.5	2.09**	279
Education	5.3	<10.5	<1.73	5.4	<10.5	<1.71	279
Management & Commerce	<5% have characteristic			<5% have characteristic			279
Society & Culture	6.7	<10.5	<1.46	6.7	<10.5	<1.46	279
Creative Arts	12.0	<11.1	<0.93	12.0	10.5	0.89	279
Food, Hospitality & Personal Services	<5% have characteristic			<5% have characteristic			279
Mixed Field Programmes	<5% have characteristic			<5% have characteristic			279

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	-0.089	-0.077	-0.080	-0.136**	-0.119*	-0.133**
	(0.063)	(0.058)	(0.060)	(0.067)	(0.063)	(0.064)
Maths	0.006	-0.002	0.004	0.031	-0.006	0.012
	(0.060)	(0.059)	(0.061)	(0.069)	(0.068)	(0.068)
Humanities	0.054	0.071	0.061	0.095	0.111**	0.113**
	(0.054)	(0.050)	(0.051)	(0.058)	(0.056)	(0.056)
Science	-0.035	0.013	-0.004	-0.016	-0.016	-0.026
	(0.057)	(0.058)	(0.059)	(0.064)	(0.064)	(0.064)
Arts & crafts	-0.064	-0.015	-0.017	0.026	0.068	0.055
	(0.041)	(0.040)	(0.039)	(0.051)	(0.050)	(0.050)
Service sector	0.203***	0.182***	0.198***	0.105***	0.100***	0.105***
	(0.041)	(0.040)	(0.040)	(0.039)	(0.039)	(0.039)
Engineering & technology	0.176***	0.110***	0.074**	0.111***	0.053*	0.060*
	(0.027)	(0.028)	(0.030)	(0.028)	(0.030)	(0.032)
Manufacturing, planning & constrn	-0.016	-0.001	0.005	0.048	0.069	0.050
	(0.036)	(0.044)	(0.044)	(0.039)	(0.046)	(0.048)
# of other fields	-0.032	-0.005	-0.009	0.001	0.017	0.008
	(0.020)	(0.020)	(0.019)	(0.024)	(0.024)	(0.023)
Passed at least 0.5 EFTS at level 4+ within 10 years in:						
Information Technology		-0.169***			-0.022	
		(0.035)			(0.060)	
Engineering & Related Technologies		0.134***			0.134***	
		(0.035)			(0.036)	
Architecture & Building		-0.055			-0.019	
		(0.045)			(0.051)	
Management & Commerce		-0.022			0.016	
		(0.060)			(0.068)	
Society & Culture		-0.067*			-0.050	
		(0.038)			(0.046)	
Creative Arts		-0.120***			-0.066	
		(0.032)			(0.055)	
# of other fields		-0.055*			-0.063*	
		(0.031)			(0.035)	
Passed at least 0.5 EFTS at level 7+ within 10 years in:						
Information Technology		-0.008			0.014	
		(0.040)			(0.105)	
Engineering & Related Technologies		-0.150**			0.134	
		(0.071)			(0.100)	
Architecture & Building		-0.174***			0.036	
		(0.054)			(0.110)	
Management & Commerce		0.128			0.207*	
		(0.090)			(0.119)	
Society & Culture		-0.076			-0.040	
		(0.047)			(0.073)	
Creative Arts		0.033			-0.096	
		(0.048)			(0.065)	
# of other fields		-0.091*			-0.003	
		(0.047)			(0.072)	

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	(1)	(2)	(3)	(4)	(5)	(6)
Gained qualification at level 4+ within 10 years in:						
Engineering & Related Technologies			0.211***			0.120***
			(0.038)			(0.038)
Architecture & Building			-0.034			0.016
			(0.047)			(0.056)
Management & Commerce			0.078			0.141
			(0.077)			(0.095)
Society & Culture			-0.088*			-0.072
			(0.053)			(0.058)
Creative Arts			-0.144***			-0.037
			(0.045)			(0.071)
# of other fields			0.004			0.016
			(0.035)			(0.037)
Gained bachelor's degree+ within 10 years in:						
Engineering & Related Technologies			-0.212**			0.103
			(0.083)			(0.110)
Architecture & Building			-0.169***			0.053
			(0.062)			(0.174)
Management & Commerce			0.032			0.023
			(0.117)			(0.152)
Society & Culture			-0.053			-0.047
			(0.060)			(0.082)
Creative Arts			-0.019			-0.129
			(0.054)			(0.081)
# of other fields			-0.174***			0.006
			(0.046)			(0.080)
NCEA level 2 year fixed effects	Yes	Yes	Yes	Yes	Yes	Yes
Background characteristics	Yes	Yes	Yes	Yes	Yes	Yes
R-squared	0.106	0.167	0.175	0.055	0.102	0.091
Observations	930	930	930	930	930	930

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	-0.008	0.031	0.050	0.026	0.030	0.060
	(0.123)	(0.113)	(0.114)	(0.123)	(0.111)	(0.113)
Maths	-0.032	-0.044	0.019	0.030	-0.008	0.065
	(0.108)	(0.110)	(0.110)	(0.111)	(0.113)	(0.112)
Humanities	0.132	0.073	0.069	0.072	0.028	0.026
	(0.116)	(0.108)	(0.103)	(0.114)	(0.102)	(0.101)
Science	0.020	0.021	-0.003	0.062	0.030	-0.011
	(0.099)	(0.098)	(0.097)	(0.095)	(0.094)	(0.092)
Arts & crafts	-0.027	0.033	0.025	0.001	0.051	0.039
	(0.059)	(0.063)	(0.061)	(0.062)	(0.069)	(0.065)
Service sector	0.034	0.027	0.063	0.047	0.044	0.080
	(0.059)	(0.065)	(0.062)	(0.061)	(0.065)	(0.063)
Engineering & technology	0.103	0.104	0.060	0.075	0.079	0.037
	(0.064)	(0.066)	(0.066)	(0.062)	(0.062)	(0.061)
Manufacturing, planning & constrn	0.255	0.286	0.267	-0.134*	-0.074	-0.099
	(0.259)	(0.277)	(0.258)	(0.074)	(0.085)	(0.089)
# of other fields	-0.063*	-0.055	-0.061*	-0.005	0.002	-0.007
	(0.036)	(0.036)	(0.036)	(0.035)	(0.038)	(0.038)
Passed at least 0.5 EFTS at level 4+ within 10 years in:						
Information Technology		-0.114			-0.094	
		(0.124)			(0.141)	
Engineering & Related Technologies		0.184			0.255*	
		(0.146)			(0.146)	
Architecture & Building		-0.222***			-0.174**	
		(0.079)			(0.082)	
Management & Commerce		-0.023			0.044	
		(0.072)			(0.081)	
Society & Culture		-0.072			-0.049	
		(0.059)			(0.073)	
Creative Arts		-0.164**			-0.228***	
		(0.065)			(0.064)	
# of other fields		-0.115*			-0.105*	
		(0.060)			(0.060)	
Passed at least 0.5 EFTS at level 7+ within 10 years in:						
Information Technology		dropped			dropped	
Engineering & Related Technologies		0.134			0.088	
		(0.326)			(0.393)	
Architecture & Building		0.049			0.297	
		(0.118)			(0.188)	
Management & Commerce		0.182			0.213	
		(0.153)			(0.159)	
Society & Culture		0.026			-0.002	
		(0.132)			(0.138)	
Creative Arts		-0.001			0.120	
		(0.089)			(0.099)	
# of other fields		0.166**			0.256***	
		(0.079)			(0.091)	

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	(1)	(2)	(3)	(4)	(5)	(6)
Gained qualification at level 4+ within 10 years in:						
Engineering & Related Technologies			0.412**			0.488***
			(0.177)			(0.188)
Architecture & Building			-0.160**			-0.090
			(0.080)			(0.075)
Management & Commerce			-0.059			0.019
			(0.081)			(0.089)
Society & Culture			-0.080			0.010
			(0.128)			(0.148)
Creative Arts			-0.151*			-0.153*
			(0.078)			(0.086)
# of other fields			-0.092*			-0.080
			(0.051)			(0.056)
Gained bachelor's degree+ within 10 years in:						
Engineering & Related Technologies			0.275			0.341
			(0.208)			(0.222)
Architecture & Building			-0.129			0.098
			(0.117)			(0.213)
Management & Commerce			0.249			0.274*
			(0.152)			(0.159)
Society & Culture			0.089			0.025
			(0.170)			(0.186)
Creative Arts			0.073			0.180
			(0.101)			(0.115)
# of other fields			0.090			0.210**
			(0.085)			(0.093)
NCEA level 2 year fixed effects	Yes	Yes	Yes	Yes	Yes	Yes
Background characteristics	Yes	Yes	Yes	Yes	Yes	Yes
R-squared	0.075	0.142	0.145	0.068	0.153	0.148
Observations	279	279	279	279	279	279

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	12.6	11.1	0.89	13.0	9.5	0.75	930
Years 6 to 10 after NCEA level 2	24.8	34.4	1.43***	27.5	25.0	0.90	930
Years 11 to 12 after NCEA level 2	15.8	19.0	1.19	17.4	14.1	0.82	930
Years of early work experience:							
Any work experience in year of NCEA level 2 or earlier	25.5	49.2	2.23***	28.3	37.5	1.39**	930
Any work experience in years 1 to 5 after NCEA level 2	89.5	>96.9	>3.11***	90.3	95.2	1.91*	930
Three+ years of work experience in years 1 to 5	63.8	93.8	6.43***	68.7	76.2	1.36**	930
Sectors of work experience in years 1 to 5 after gaining NCEA level 2:							
Central government in at least one year	9.1	11.3	1.20	10.3	8.3	0.83	849
Central government in at least 3 years	7.0	11.9	1.48**	8.3	10.2	1.19	654
Other government in at least one year	<5% have characteristic			<5% have characteristic			849
Other government in at least 3 years	<5% have characteristic			<5% have characteristic			654
Non-profit organisation in at least one year	7.7	9.5	1.19	6.7	11.5	1.54*	849
Non-profit organisation in at least 3 years	<5% have characteristic			<5% have characteristic			654
Firm size of work experience in years 1 to 5 after gaining NCEA level 2:							
Small employer (<10 employees) in at least one year	37.7	27.0	0.68***	36.3	31.7	0.85	849
Small employer (<10 employees) in at least 3 years	23.6	16.7	0.72*	21.9	18.8	0.86	654
Medium employer (10-99 employees) in at least one year	45.2	46.0	1.02	45.7	44.3	0.95	849
Medium employer (10-99 employees) in at least 3 years	22.8	28.3	1.23	23.1	25.0	1.08	654
Large employer (100+ employees) in at least one year	53.2	58.7	1.19	53.8	56.7	1.10	849
Large employer (100+ employees) in at least 3 years	40.1	51.7	1.40***	42.4	47.9	1.19	654
Industries of work experience in years 1 to 5 after gaining NCEA level 2:							
Agriculture, Forestry, Fishing in at least one year	10.4	7.9	0.79	10.8	5.0	0.50**	849
Agriculture, Forestry, Fishing in at least 3 years	5.7	5.0	0.90	5.9	<4.1	<0.73	654
Manufacturing in at least one year	26.4	21.9	0.82	26.0	23.0	0.88	849
Manufacturing in at least 3 years	15.2	15.0	0.99	15.4	14.3	0.93	654
Construction in at least one year	25.9	38.1	1.53***	26.6	36.7	1.44***	849
Construction in at least 3 years	18.5	32.2	1.66***	18.9	33.3	1.76***	654
Wholesale Trade in at least one year	9.5	6.3	0.70	9.0	8.3	0.94	849
Wholesale Trade in at least 3 years	<5% have characteristic			<5% have characteristic			654
Retail Trade in at least one year	17.3	6.3	0.39***	16.6	9.8	0.61**	849
Retail Trade in at least 3 years	9.5	<3.3	<0.41***	8.3	4.2	0.55*	654
Accommodation & Food Services in at least one year	8.6	<3.1	<0.40***	7.6	3.4	0.49*	849
Accommodation & Food Services in at least 3 years	<5% have characteristic			<5% have characteristic			654
Transport, Post, Warehousing in at least one year	<5% have characteristic			<5% have characteristic			849
Transport, Post, Warehousing in at least 3 years	<5% have characteristic			<5% have characteristic			654
Financial & Insurance Services in at least one year	<5% have characteristic			<5% have characteristic			849
Financial & Insurance Services in at least 3 years	<5% have characteristic			<5% have characteristic			654
Professional, Scientific, Technical Services in at least 1 year	7.7	7.9	1.02	7.2	9.8	1.29	849
Professional, Scientific, Technical Services in at least 3 years	<5% have characteristic			<5% have characteristic			654
Administrative & Support Services in at least one year	7.7	<3.2	<0.46***	7.6	<3.3	<0.47**	849
Administrative & Support Services in at least 3 years	<5% have characteristic			<5% have characteristic			654
Public Administration & Safety in at least one year	10.4	14.3	1.31	11.7	8.3	0.74	849
Public Administration & Safety in at least 3 years	7.6	15.0	1.66***	9.4	12.2	1.25	654
Education & Training in at least one year	5.0	7.9	1.44	4.9	9.8	1.72**	849
Education & Training in at least 3 years	<5% have characteristic			<5% have characteristic			654
Health Care & Social Assistance in at least one year	<5% have characteristic			<5% have characteristic			849
Health Care & Social Assistance in at least 3 years	<5% have characteristic			<5% have characteristic			654
Arts & Recreation Services in at least one year	<5% have characteristic			<5% have characteristic			849
Arts & Recreation Services in at least 3 years	<5% have characteristic			<5% have characteristic			654
Other industry in at least one year	13.1	14.3	1.08	12.6	15.0	1.17	849
Other industry in at least 3 years	7.0	9.8	1.29	7.6	8.2	1.06	654

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	26.7	15.8	0.58	26.7	15.8	0.58**	279
Years 6 to 10 after NCEA level 2	34.7	15.8	0.42***	36.0	15.8	0.40***	279
Years 11 to 12 after NCEA level 2	24.0	<11.1	<0.46**	26.7	<10.0	<0.37***	279
Years of early work experience:							
Any work experience in year of NCEA level 2 or earlier	17.3	33.3	1.95**	18.7	27.8	1.50	279
Any work experience in years 1 to 5 after NCEA level 2	78.4	>90.0	>2.13M	81.1	88.9	1.68	279
Three+ years of work experience in years 1 to 5	47.3	84.2	4.39***	50.7	72.2	2.14**	279
Sectors of work experience in years 1 to 5 after gaining NCEA level 2:							
Central government in at least one year	11.9	22.2	1.71**	11.5	23.5	1.87**	231
Central government in at least 3 yrs	<5.6	12.5	>1.71**	5.3	<14.3	<2.00	156
Other government in at least one year	6.8	<11.1	<1.48	6.6	<11.8	<1.60	231
Other government in at least 3 yrs	<12 have characteristic			<12 have characteristic			156
Non-profit organisation in at least one year	8.5	<10.5	<1.19	8.3	<11.1	<1.27	231
Non-profit organisation in at least 3 yrs	<12 have characteristic			<12 have characteristic			156
Firm size of work experience in years 1 to 5 after gaining NCEA level 2:							
Small employer (<10 employees) in at least one year	22.0	22.2	1.01	21.7	23.5	1.09	231
Small employer (<10 employees) in at least 3 yrs	8.6	<12.5	<1.31	7.9	<14.3	<1.57	156
Medium employer (10-99 employees) in at least 1 yr	55.2	52.6	0.93	55.7	52.9	0.92	231
Medium employer (10-99 employees) in at least 3 yrs	28.6	33.3	1.17	28.9	30.8	1.07	156
Large employer (100+ employees) in at least one year	61.0	72.2	1.49	61.7	62.5	1.03	231
Large employer (100+ employees) in at least 3 yrs	38.9	46.7	1.25	41.0	46.2	1.17	156
Industries of work experience in years 1 to 5 after gaining NCEA level 2:							
Agriculture, Forestry, Fishing in at least one year	6.8	<10.0	<1.35M	5.1	<11.1	<1.80	231
Agriculture, Forestry, Fishing in at least 3 yrs	<12 have characteristic			<12 have characteristic			156
Manufacturing in at least one year	10.3	10.5	1.01	11.9	<11.1	<0.94	231
Manufacturing in at least 3 yrs	<12 have characteristic			<12 have characteristic			156
Construction in at least one year	<12 have characteristic			<12 have characteristic			231
Construction in at least 3 yrs	<12 have characteristic			<12 have characteristic			156
Wholesale Trade in at least one year	5.2	<11.1	<1.78	5.1	<11.1	<1.80	231
Wholesale Trade in at least 3 yrs	<12 have characteristic			<12 have characteristic			156
Retail Trade in at least one year	34.5	27.8	0.78	35.0	29.4	0.82	231
Retail Trade in at least 3 yrs	19.4	13.3	0.72	17.9	<14.3	<0.81	156
Accommodation & Food Services in at least one year	23.7	15.8	0.67	22.0	17.6	0.80	231
Accommodation & Food Services in at least 3 yrs	11.1	<12.5	<1.10	10.5	<14.3	<1.28	156
Transport, Post, Warehousing in at least one year	6.8	<10.5	<1.41	5.1	<11.8	<1.89	231
Transport, Post, Warehousing in at least 3 yrs	<12 have characteristic			<12 have characteristic			156
Financial & Insurance Services in at least one year	<12 have characteristic			<12 have characteristic			231
Financial & Insurance Services in at least 3 yrs	<12 have characteristic			<12 have characteristic			156
Professional, Scientific, Technical Services in at least 1 yr	5.2	16.7	2.33***	6.7	12.5	1.67	231
Professional, Scientific, Technical Services in at least 3 yrs	<12 have characteristic			<12 have characteristic			156
Administrative & Support Services in at least one year	6.8	<10.5	<1.41	6.7	<11.1	<1.50	231
Administrative & Support Services in at least 3 yrs	<12 have characteristic			<12 have characteristic			156
Public Administration & Safety in at least one year	8.5	16.7	1.73**	8.3	18.8	1.96*	231
Public Administration & Safety in at least 3 yrs	5.6	18.8	2.17**	7.7	16.7	1.84*	156
Education & Training in at least one year	8.8	<11.1	<1.21	10.0	<11.1	<1.09	231
Education & Training in at least 3 yrs	<12 have characteristic			<12 have characteristic			156
Health Care & Social Assistance in at least one year	11.9	<11.1	<0.94	11.5	<11.8	<1.02	231
Health Care & Social Assistance in at least 3 yrs	<12 have characteristic			<12 have characteristic			156
Arts & Recreation Services in at least one year	<12 have characteristic			<12 have characteristic			231
Arts & Recreation Services in at least 3 yrs	<12 have characteristic			<12 have characteristic			156
Other industry in at least one year	15.3	10.5	0.72	14.8	<11.8	<0.81	231
Other industry in at least 3 yrs	<12 have characteristic			<12 have characteristic			156

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	-0.033	-0.033	-0.010	-0.032	-0.040	-0.021
	(0.041)	(0.040)	(0.039)	(0.036)	(0.037)	(0.036)
Years 6 to 10	0.083***	0.073**	0.063**	0.033	0.040	0.034
	(0.032)	(0.031)	(0.031)	(0.030)	(0.031)	(0.031)
Years 11 and 12	0.020	0.025	0.029	-0.018	-0.018	-0.010
	(0.036)	(0.036)	(0.035)	(0.034)	(0.034)	(0.035)
Overseas at least 6 months in year relative to NCEA level 2:						
Any year 3 to 5	0.030	0.076	0.087	-0.066	-0.072	-0.076
	(0.070)	(0.068)	(0.069)	(0.071)	(0.071)	(0.068)
Any year 6 to 10	0.067*	0.059	0.061	-0.002	-0.001	0.000
	(0.039)	(0.039)	(0.039)	(0.039)	(0.040)	(0.040)
Year 11 or 12	0.032	0.028	0.046	0.333***	0.326***	0.336***
	(0.047)	(0.046)	(0.046)	(0.054)	(0.055)	(0.054)
Years of work experience in years 1 to 5 after NCEA level 1 (omitted category: 0):						
1		-0.044	0.055		-0.006	0.056
		(0.037)	(0.037)		(0.059)	(0.057)
2		0.002	0.133***		0.074	0.159***
		(0.043)	(0.043)		(0.061)	(0.061)
3		-0.026	0.139***		-0.045	0.064
		(0.050)	(0.050)		(0.062)	(0.061)
4		0.040	0.200***		0.061	0.165***
		(0.049)	(0.050)		(0.061)	(0.061)
5		0.179***	0.316***		0.044	0.131**
		(0.048)	(0.047)		(0.058)	(0.058)
Any work experience in years 1 to 5 in:						
Central government		-0.015			-0.094**	
		(0.050)			(0.043)	
Medium-sized firm (10-99 employees)		0.025			-0.016	
		(0.029)			(0.028)	
Large firm (100+ empployees)		0.038			0.047	
		(0.031)			(0.030)	
Ag, Forestry, Fishing			-0.038			-0.084**
			(0.044)			(0.040)
Manufacturing			-0.105***			-0.050
			(0.032)			(0.033)
Construction			-0.009			0.012
			(0.035)			(0.037)
Wholesale Trade			-0.061			-0.030
			(0.042)			(0.048)
Retail Trade			-0.181***			-0.133***
			(0.033)			(0.035)
Accommodation & Food Services			-0.186***			-0.112**
			(0.032)			(0.044)
Professional, Scientific, and Technical Services			0.004			-0.033
			(0.050)			(0.056)
Administrative & Support Services			-0.108***			-0.111***
			(0.037)			(0.039)
Public Administration & Safety			-0.060			-0.096**
			(0.047)			(0.041)
Education & Training			-0.039			0.031
			(0.063)			(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	0.193	0.231	0.265	0.176	0.188	0.205
Observations	930	930	930	930	930	930

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	-0.047	0.011	0.030	-0.017	0.025	0.032
	(0.057)	(0.051)	(0.054)	(0.051)	(0.053)	(0.053)
Years 6 to 10	-0.117**	-0.093*	-0.075	-0.067	-0.051	-0.043
	(0.052)	(0.049)	(0.049)	(0.048)	(0.049)	(0.048)
Years 11 and 12	-0.071	-0.117**	-0.120**	-0.159***	-0.186***	-0.185***
	(0.056)	(0.050)	(0.054)	(0.050)	(0.048)	(0.051)
Overseas at least 6 months in year relative to NCEA level 2:						
Any year 3 to 5	0.120	0.177*	0.133	0.142	0.181**	0.185*
	(0.120)	(0.094)	(0.098)	(0.098)	(0.088)	(0.100)
Any year 6 to 10	0.001	-0.027	-0.003	0.008	-0.014	0.010
	(0.087)	(0.073)	(0.074)	(0.074)	(0.068)	(0.069)
Year 11 or 12	0.159	0.132	0.106	0.254**	0.245**	0.216**
	(0.110)	(0.090)	(0.092)	(0.101)	(0.098)	(0.104)
Years of work experience in years 1 to 5 after NCEA level 1 (omitted category: 0):						
1		0.081	0.115		0.080	0.068
		(0.103)	(0.094)		(0.110)	(0.104)
2		-0.001	0.035		0.019	-0.009
		(0.082)	(0.067)		(0.091)	(0.079)
3		0.045	0.105		0.075	0.080
		(0.108)	(0.083)		(0.103)	(0.088)
4		0.147	0.177*		0.160	0.164
		(0.109)	(0.094)		(0.111)	(0.104)
5		0.493***	0.509***		0.365***	0.361***
		(0.120)	(0.109)		(0.119)	(0.116)
Any work experience in years 1 to 5 in:						
Central government		0.128			0.084	
		(0.099)			(0.087)	
Medium-sized firm (10-99 employees)		0.032			-0.029	
		(0.069)			(0.067)	
Large firm (100+ empployees)		0.036			-0.054	
		(0.069)			(0.071)	
Ag, Forestry, Fishing			-0.085			0.096
			(0.083)			(0.106)
Manufacturing			0.029			-0.129
			(0.092)			(0.081)
Construction			-0.158			-0.126
			(0.113)			(0.113)
Wholesale Trade			0.169			0.108
			(0.140)			(0.127)
Retail Trade			-0.008			-0.063
			(0.066)			(0.068)
Accommodation & Food Services			-0.055			-0.074
			(0.064)			(0.067)
Professional, Scientific, and Technical Services			0.206*			0.072
			(0.107)			(0.112)
Administrative & Support Services			0.038			0.012
			(0.093)			(0.107)
Public Administration & Safety			0.068			0.037
			(0.114)			(0.108)
Education & Training			0.052			-0.061
			(0.099)			(0.094)
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	0.220	0.401	0.422	0.292	0.364	0.384
Observations	279	279	279	279	279	279

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.