

# Building on strengths: Business

**Motu** economic & public policy research

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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 Business at NCEA level 2. This specialty is unique in that it is the only specialty in which men on average gain higher qualifications than women.

We find these women tend to do well relative to other women in the specialty if they gain a qualification at level 7 or above, particularly if they build off their Business specialty and study Management and Commerce, or if they study Health or Engineering and Related Technologies. Society and Culture is a popular field of study, but yields weak labour market outcomes if studied below level 7.

We find men who get industry training qualifications at level 4 or above do better than those who gain other levels or types of qualifications, even better than those who gain level 7 or level 8 qualifications. Higher qualifications for men have a high opportunity cost of foregone earnings, and don’t even offer as high salaries as industry training qualifications once they are completed. Men who study Engineering and Related Technologies at level 4 or above tend to do well, but those who gain qualifications in Management and Commerce don’t achieve particular labour market success. As for women, qualifications below bachelor’s level in the common field of Society and Culture are associated with weak outcomes.

For both genders, early career work experience in central government or in the Public Administration and Safety industry appears beneficial, as does Wholesale Trade experience for men.

## **JEL codes**

I20, I30, I23, I26, J15, J24

## **Keywords**

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

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## **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 Business 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.<sup>1</sup> 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 Business. 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 Business at school.

## **2. Overview of the students who specialised in Business**

Māori students who specialised in Business are defined as students who showed strong results in NCEA level 2 standards in subjects such as accounting, marketing, and financial management.<sup>2</sup>

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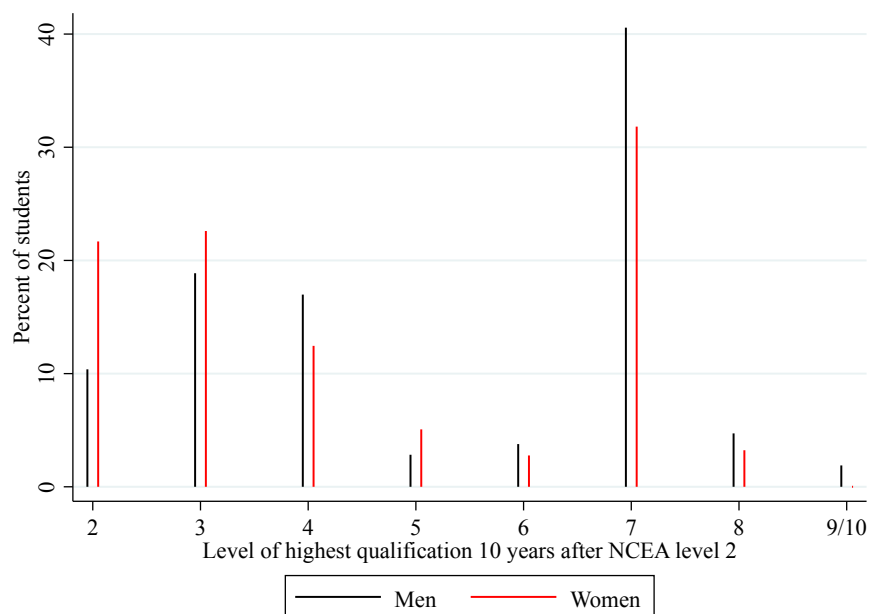
<sup>1</sup> The overall magnitude of savings is sensitive to the assumptions we use to calculate it, so the dollar values should not be taken too seriously. However, differences between students are relatively robust, so more weight can be put on the comparisons between students with different characteristics.

<sup>2</sup> The full list of subjects included in the specialty Business is: accounting; business administration; financial management; information management; management; marketing; office systems; public relations; insurance; public sector services; not

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 969 students specialised in Business, 67% of whom are female, and 15% of whom gained NCEA level 2 at a tertiary institute.

Figure 1 shows the highest level of qualification attained within 10 years of gaining NCEA level 2 by men and women who specialised in Business. On average, men tend to be more qualified than women. The most common highest qualification level for both genders is level 7 (which includes bachelor's degrees and other qualifications at a similar level), which is attained by 41% of men and 32% of women. Less than 10% of men and less than 5% of women attain qualifications above level 7. Around 22% of women compared with only 10% of men attain level 2, and around 20% of both genders attain level 3. Men are more likely than women to attain level 4.

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 Business. 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 2 shows the distribution across fields of study of the highest qualifications of men and women who specialised in Business at level 2. Among those who gain qualifications at level 4 or above, the most common field of study for both genders is Management and Commerce,

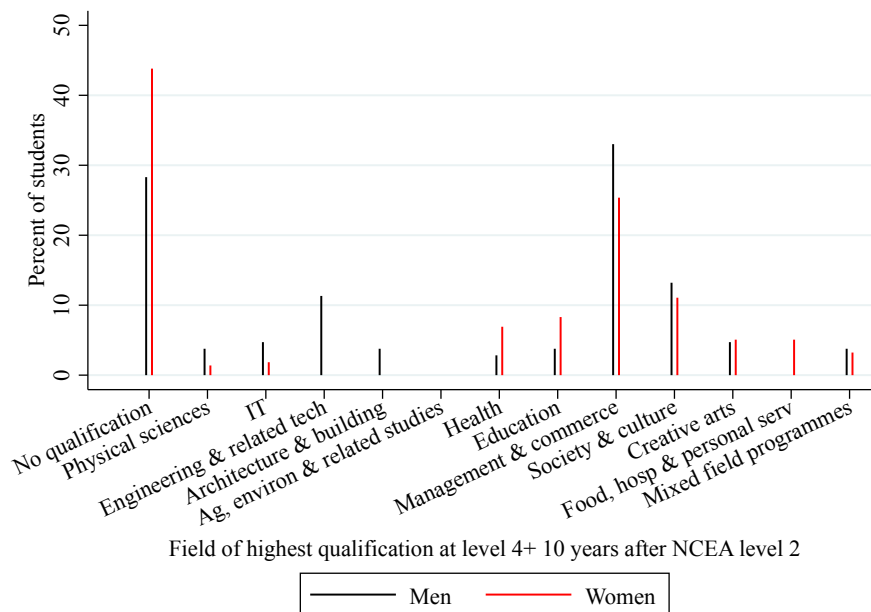
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for profit systems and structures; business operations and development; and business environment. Not all of these subjects are necessarily available to study at level 2.



with around a quarter of female students gaining a highest qualification at level 4 or above in this field, and around 35% of men. Society and Culture is the next most common for both genders. Men but not women are likely to gain highest qualifications in Engineering and Related Technologies, whereas women are more likely than men to gain highest qualifications in Health and Education.

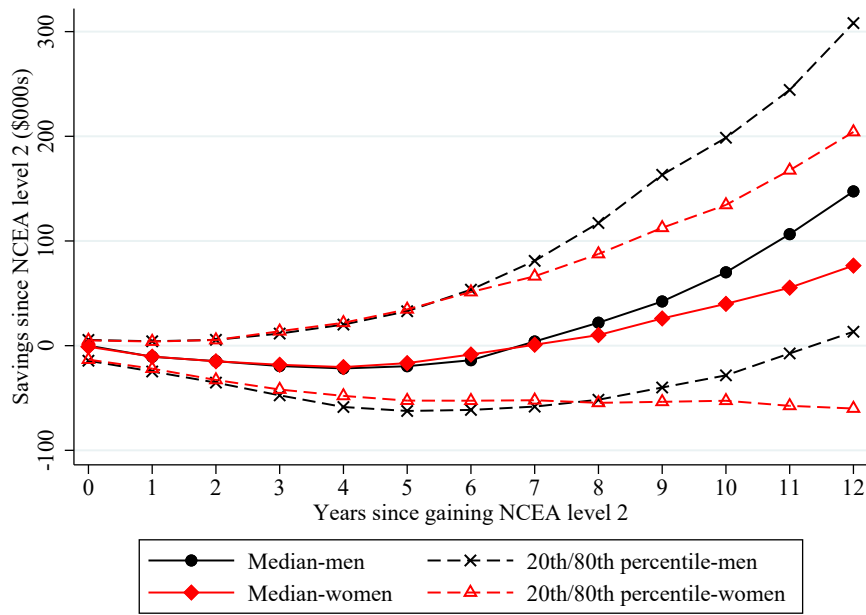
Figure 2: Distribution of field of highest qualification



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 Business. 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.

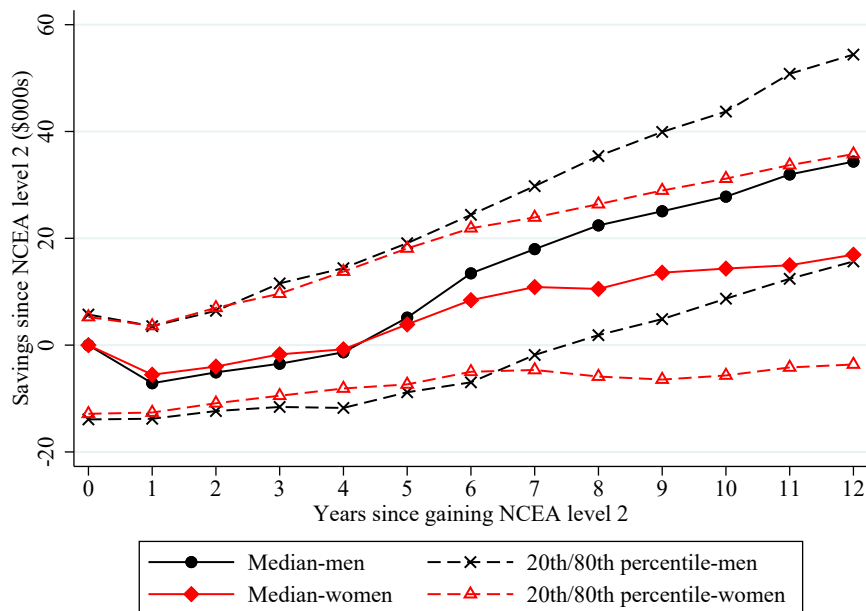
Figure 3 shows the evolution over time of the distribution of cumulative savings for men and women who specialised in Business. Median cumulative savings for men and women are similarly negative for the first six years, indicating any earnings the median students have over these years are insufficient to cover their estimated living costs and tertiary fees. By year 7, cumulative saving are close to zero for both genders, but beyond this point, median savings diverge, with men’s savings pulling ahead. By 12 years after NCEA level 2, median men’s savings are around \$150,000, approximately twice as high as women’s. Men at the upper end of the savings distribution do better than women as well, pulling ahead around year 7, whereas men’s savings at the lower end don’t leave women’s behind until year 9.

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 Business.

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 Business.

Figure 4 similarly shows how the distribution of annual savings changes over time for men and women who specialised in Business. It shows median men's annual savings begin to pull

ahead of median women's 6 years after NCEA level 2, and by year 12 are over \$15,000 higher. The large annual savings gap in year 12 suggests men's cumulative savings in later years will continue to pull further ahead of women's.

### **3. How do savings vary with level of qualifications?**

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

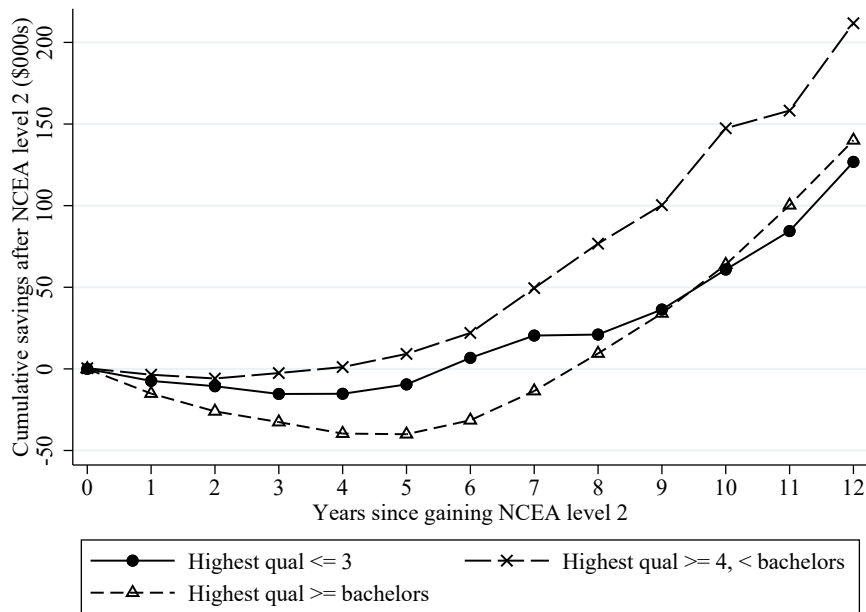
#### **3.1 Cumulative and annual savings by level of highest qualification**

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 intermediate qualifications (at least level 4 but below bachelor's level) have higher annual savings and thus higher cumulative savings than men with low qualifications (level 2 or 3) in each of the 12 years after NCEA level 2. Men with high qualifications (bachelor's level or higher) have the lowest annual savings for the first six years, but by year 9 their annual savings have overtaken those of less qualified men. However, by this point the cumulative savings of men with intermediate qualifications have a \$65,000 lead, and 12 years after NCEA remain \$70,000 above the cumulative savings of high-qualified men. Higher qualifications have a large opportunity cost, largely because they delay men's entry into full-time work. From a purely financial standpoint, the additional qualifications might not make up for the foregone earnings in the long run.

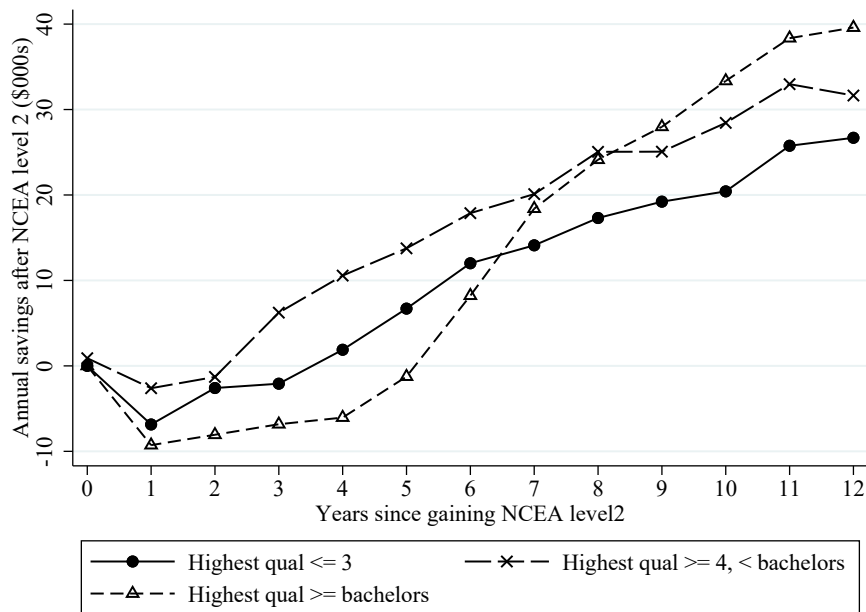
Figure 6 reveals quite a different story for women to the story for men. Throughout the period of observation, women with low and intermediate qualifications have similar annual and thus cumulative savings. The annual savings of high-qualified women are the lowest for five years, during which time women with low or intermediate qualifications develop a cumulative savings advantage over those who are gaining higher qualifications. However, from around year 5 the annual savings of women with high qualifications grow sharply as these women complete their studies and enter the labour force. Their annual savings overtake those of less qualified women, and by year 12 are nearly \$20,000 ahead and still growing strongly. This results in the most qualified women overtaking less qualified women in terms of cumulative savings in year 8, and pulling further ahead by year 12.

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

Panel A: Cumulative savings



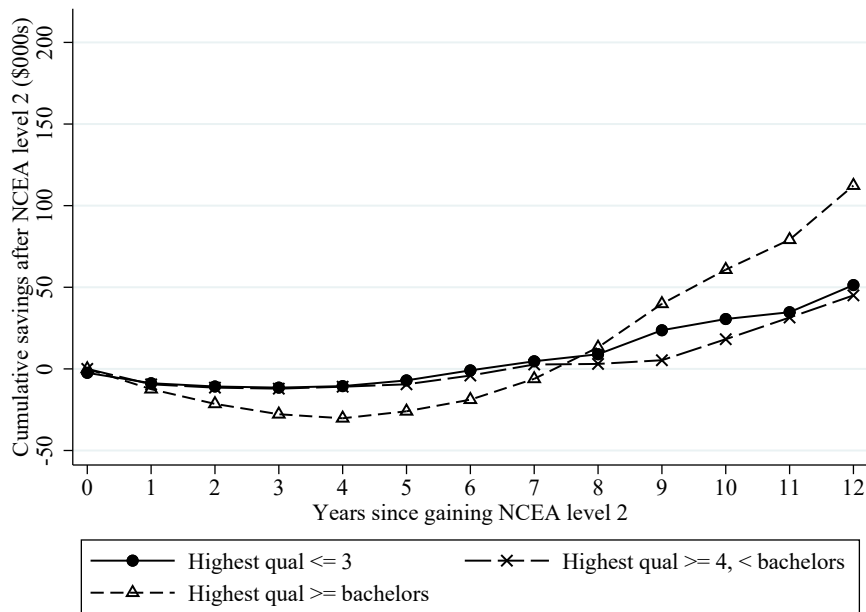
Panel B: Annual savings



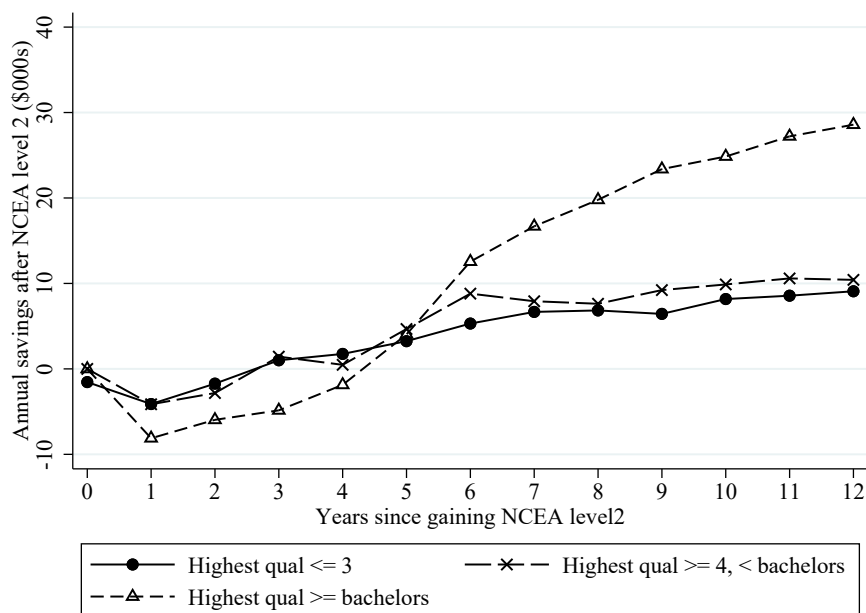
Notes: This figure shows changes over time in the median of cumulative savings since gaining NCEA level 2 (Panel A) and median of annual savings (Panel B) for men who specialised in Business and achieved different levels of highest qualification. Qualifications are included if they were gained within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

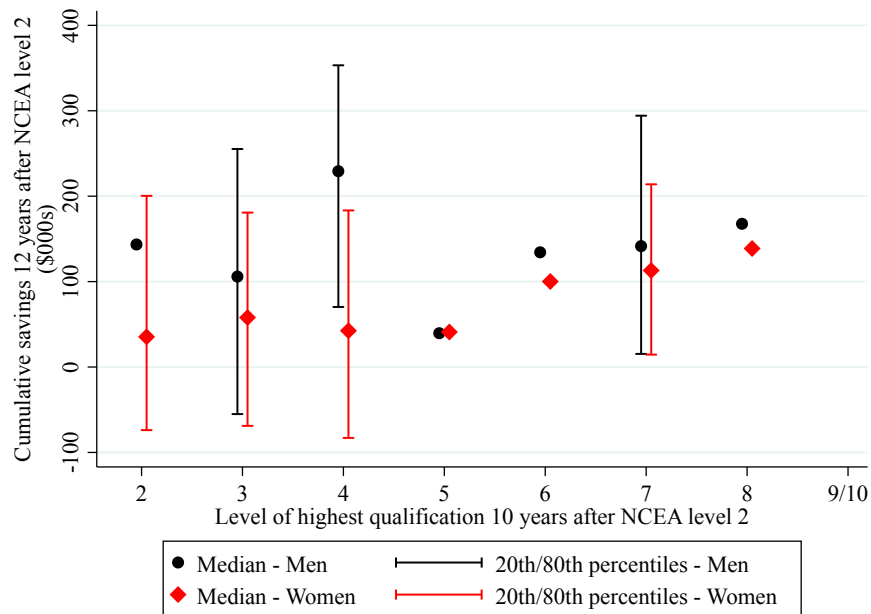


Notes: This figure shows changes over time in the median of cumulative savings since gaining NCEA level 2 (Panel A) and median of annual savings (Panel B) for women who specialised in Business and achieved different levels of highest qualification. Qualifications are included if they were gained within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

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

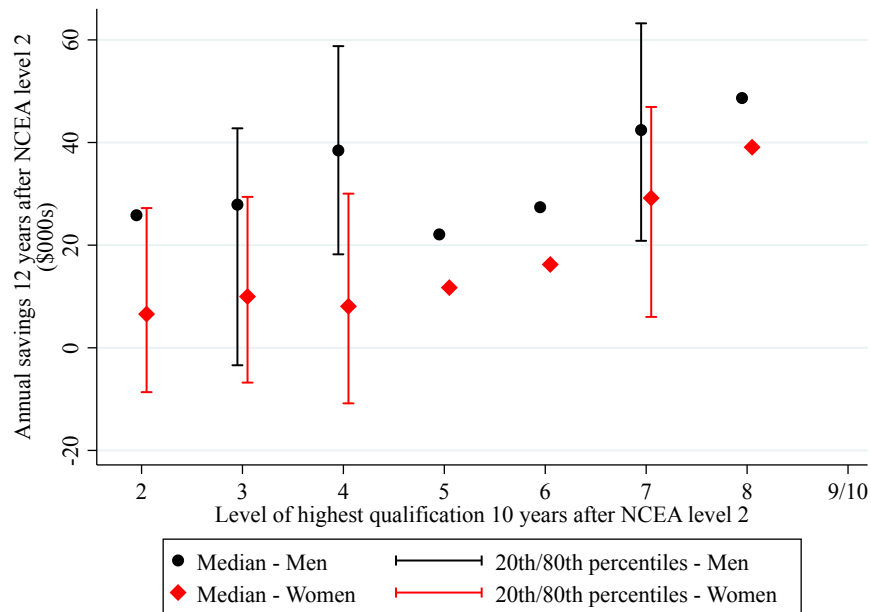
Figures 7 and 8 explore the distribution of cumulative and annual savings after 12 years for men and women with this specialty by disaggregated level of highest qualification. They show women’s savings benefit from each additional level of qualification from levels 6 to 8, whereas for men qualifications at level 7 and 8 involve a trade-off compared with level 4 of lower cumulative savings but higher annual savings.

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



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

Sixty-five percent of men but only 51% of women achieve a level 3 NCEA certificate within 5 years of NCEA level 2. The bivariate analysis shows women who achieve this qualification are more than twice as likely to be top annual savers than women who don't, but the qualification is not significantly correlated with being a top saver for men.

In regressions that control for students' backgrounds, men with qualifications at level 4, level 7, or level 8 and above are most likely to be top annual savers. However, those with level 7 qualifications are less likely than those with level 4 to be top cumulative savers, and the few men with level 8 or above are less likely again. In regressions for women, highest qualification level is



not significantly related to the probability of being a top *cumulative* saver, but women with level 7 qualifications are significantly more likely than those with lower qualifications to be top *annual* savers, and the few women with level 8 or above qualifications are even more likely to be top annual savers.

Industry training is a somewhat common pathway taken by men: 29% of men complete some industry training credits and 21% gain an industry training qualification, though only 10% gain such a qualification at level 4 or above. In the bivariate analysis, all industry training strongly predicts a man being a top cumulative saver, but this relationship is weaker in the regressions. Here, men with industry training qualifications at level 3 or below are not significantly more likely to top cumulative or annual savers when compared with similar men with only level 2 non-industry training qualifications. However, those with level 4 industry training qualifications are more likely than such low-qualified men to be both top cumulative and annual savers. In fact, they are more likely to be top savers of both types than are men with similar backgrounds who attained level 7 or higher qualifications. Nineteen percent of women gain any industry training credits and 10% any industry training qualification. Such women are no more likely than women with only level 2 non-industry training qualifications to be top savers. The gender difference in the benefit of industry training could result from differences in the fields in which men and women do industry training. We leave this possibility for future research.

Thirty-four percent of men who specialised in Business attend an industry training organisation. Conditional on student background characteristics and the highest level of qualification they achieve, this is associated with a high probability of being a top cumulative saver. Men who attend a university (68%) and women who attend a wānanga (18%) or private training establishment (58%) are less likely to be top cumulative savers than are others of their gender with the same highest level of qualification who did not attend these institutes.

In the bivariate analysis, men who attend a school or tertiary institute in a rural centre or rural area are more likely than other men to be top cumulative savers, and women who attend in a secondary urban area are less likely than other women to be top cumulative savers. Finally, women who attend a tertiary institute in a different region to their school are less likely to be top cumulative savers or top annual savers than other women. In contrast, men who attend a tertiary institute in a different region to their school are significantly more likely to be top cumulative savers. One possible explanation is that women who move away from their whānau have less help caring for their children, so childcare is more likely to divert their effort away from the labour market, whereas men who move benefit from better educational and work experience opportunities.

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 who are older when they achieve NCEA level 2 (though still aged 19 or under) are more likely to be top cumulative and annual savers, women who are stronger academically (indicated by a high percentile score) are much more likely to be top cumulative and annual savers, and women who attend higher decile schools are more likely to be top annual savers.

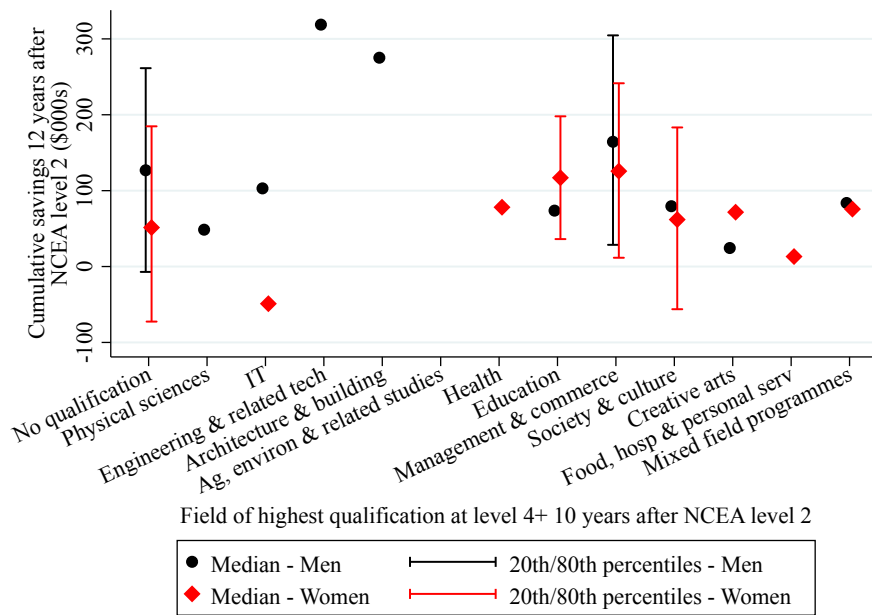
#### **4. How do savings vary with fields of study in higher education?**

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

##### **4.1 Cumulative and annual savings by fields of study**

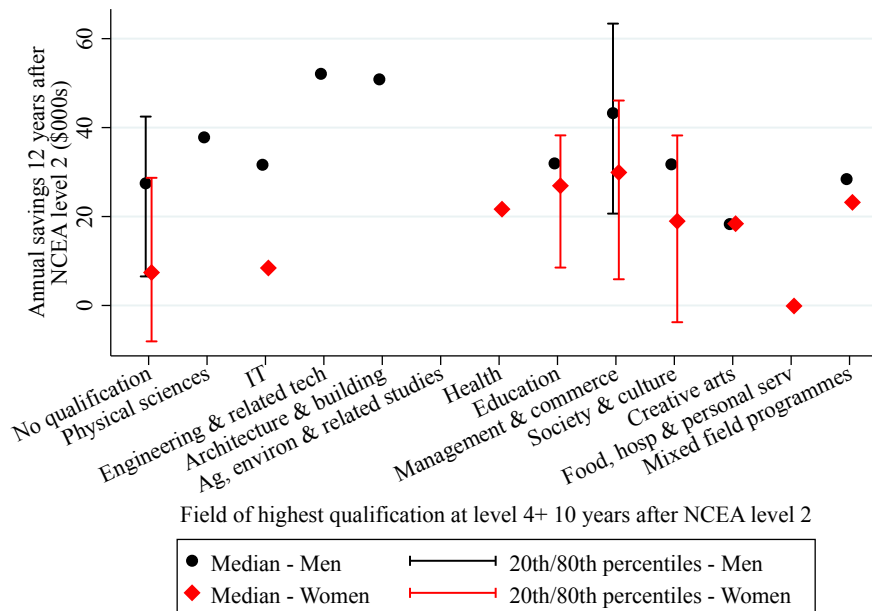
Figure 9 shows how the cumulative savings after 12 years differ for men and women whose highest qualifications at level 4 or above are in different fields. Figure 10 shows the same but for annual rather than cumulative savings. As Figure 2 showed, a substantial proportion of men and women have no qualification at level 4 or above. Such men have relatively high cumulative savings, around \$125,000 at the median, compared with around \$50,000 for women. These men also have relatively low annual savings of \$27,000, compared with \$7,000 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 Business 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 for higher qualifications is Management and Commerce, which offers women the highest cumulative and annual savings (\$125,000 and \$30,000 respectively), and men third-highest annual and cumulative savings after Engineering and Related Technologies and Architecture and Building. Notably, women with Management and Commerce qualifications have similar median cumulative and annual savings to men with no qualifications at this level. Engineering and Related Technologies, the most lucrative field for men, offers median cumulative savings of around \$320,000 and median annual savings of over \$50,000. Architecture and Building is not far behind. Society and Culture is another common field of higher study for both genders. It offers women similar cumulative savings and considerably higher annual savings than no qualifications at this level, but offers men lower cumulative savings and higher annual savings.

## 4.2 Fields of higher study of top cumulative and annual savers

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

### 4.2.1 *Fields of study at school level*

We first consider fields of study at NCEA levels 2 and 3. This is school-level study, but may be done either at school or at a tertiary institute after the student leaves school. The bivariate analysis discussed in this section is presented in Appendix Tables 5 and 6, and the regressions are in Appendix Tables 11 and 12. The first three columns in each regression table explore the correlates of being a top cumulative saver, and the other three columns look at being a top annual saver. On each side of the table, the first column controls only for student background characteristics (high school decile, percentile score etc) and fields of study at level 3. Here the coefficient on passing 14 credits in a subject at level 3 compares students with the same background and who passed 14 credits in all the same level 3 subjects except for that one. The coefficient can be interpreted as the difference in probability of being a top saver related to that one field in which they differ.

In many cases, the subjects in which a student passes 14 credits at level 3 affect the student's subsequent pathway through education, such as their fields of study at higher levels, and these in turn affect their ability to save. In the first column, all such impacts are captured by

the coefficients on the variables for passing credits in level 3 subjects. In subsequent columns, we add controls for either fields of higher study or fields of higher qualification. In these columns, the coefficients on level 3 subject credits can be interpreted as differences in the probability of being a top saver based on passing the level 3 credits in that field, given the field the student went on to study or gain qualifications in.

In simple bivariate comparisons, the fields in which men pass at least 14 credits at level 2 are not significantly associated with their probability of being a top cumulative or annual saver. The relatively small sample size likely contributes to the lack of significance. Similarly, men's achievement standard credits at level 2 are not significantly associated with being a top saver. For women, the bivariate analysis shows women who pass at least 14 credits at level 2 in any of English, Maths, Humanities, Social Science, or Science are significantly more likely to be top cumulative and top annual savers than are women who do not pass these credits in the field. The same is true of *achievement* standard credits at level 2. However, women who pass Māori credits are less likely to be top cumulative savers.

For men, passing at least 14 credits at level 3 in the Service Sector is positively associated with being a top cumulative saver in regressions that control for students' backgrounds, but no other fields of study at this level are significantly associated with being a top saver of either type. In the bivariate analysis, men who pass 14 level 3 credits in Engineering and Technology are more likely to be top cumulative savers.<sup>3</sup>

For women, passing level 3 credits in any of the academic fields is associated with a significantly higher probability of being a top annual saver in the bivariate analysis. Once student background is controlled for in the regressions, the positive relationships from the bivariate analysis become insignificant or disappear. The difference in results for level 3 credits in different fields between the bivariate and regression analysis suggests it is women with stronger academic backgrounds who tend to pass 14 credits in most of these subjects, and their higher earnings are primarily explained by their backgrounds rather than by their success in these subjects.

#### 4.2.2 *Tertiary-level fields of study*

In this subsection, we consider fields of study primarily at levels 4 and higher. Study at level 4 and above is tertiary-level study, which is not done at school. Level 7 qualifications include bachelor's degrees and other qualifications at the same level. The qualifications above level 7 are honours degrees, master's degrees, and doctorates, all of which generally involve original

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<sup>3</sup> This subject is not examined separately in the regressions.

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 is presented in Appendix Tables 7 to 10, and the regressions are in Appendix Tables 11 and 12.

Management and Commerce is the field in which men are most likely to pass at least 0.5 EFTS of courses at level 4 or above. Forty-two percent of men do so, 33% gain a qualification in the field this level, and 28% gain a qualification in the field at bachelor's level or above. In the regressions, men who pass EFTS (or gain qualifications) in this field at level 4 or above are not significantly more or less likely to be top savers than are students with the same backgrounds and level 3 fields of study, but who don't study (gain qualifications) above level 3.

Society and Culture is the next most popular field of study for men. Thirty-nine percent of men study it at level 4 or above, but only 13% gain a qualification in it. The regressions show men who gain a qualification in Society and Culture at level 4 to 6 are less likely to be top savers than are men with the same background characteristics and level 3 fields of study, but who don't study above level 3. Engineering and Related Technologies is another popular field of study for men; in the regressions, men who study it at level 4 or above have a higher probability of being a top annual saver than those do who don't study above level 3. The regressions also suggest men may decrease their probability of being top savers if they study Natural and Physical Sciences or Health at level 4 or above, or if they study Education at level 4 to 6 without gaining a qualification.

Like men, women are particularly likely to pass 0.5 EFTS in Management and Commerce at level 4 or above and to gain qualifications in this field. Women who study this field or gain a qualification in it at level 4 to 6 are insignificantly more likely to be top cumulative and annual savers than women with the same background and level 3 fields of study, but who leave education after level 3, but those who study in this field at level 7 or above are significantly more likely to be top savers, particularly top annual savers.

Society and Culture is also a popular field for women. However, women who gain qualifications in this field at level 4 to 6 are less likely to be top cumulative or annual savers than similar women who leave education before gaining a qualification above level 3. At levels 7 and above the field is no longer associated with not being a top annual saver, though women with such qualifications are still less likely to be top *cumulative* savers than are similar education-leavers.

Education is another common field for women, and in the regressions is associated with a low probability of being a top saver if studied below level 7. Several small fields that women

rarely study are strongly positively or negatively associated with being a top saver for women. In particular, Health and Engineering and Related Technologies at bachelor’s level or above are positively associated with being a top saver.

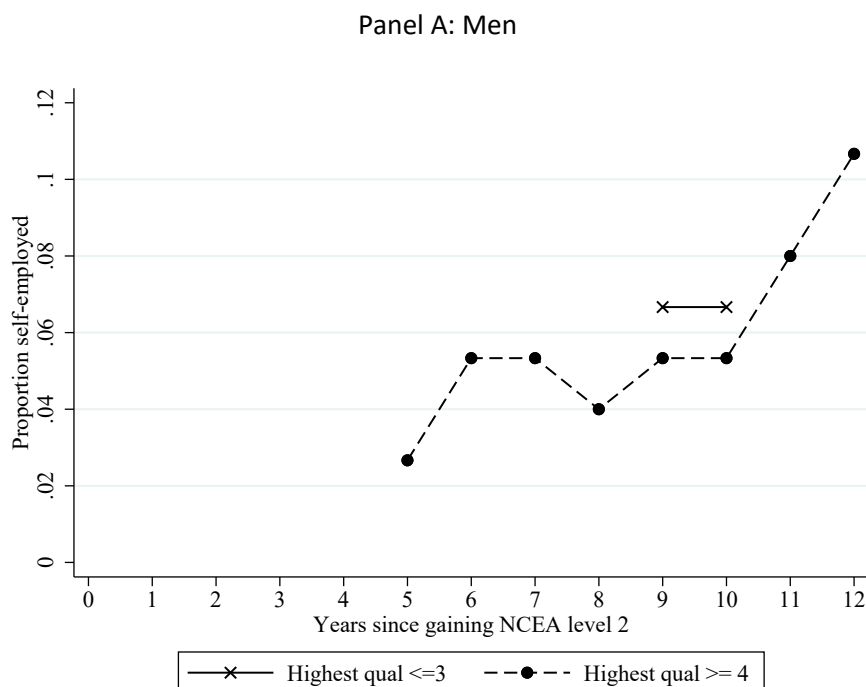
## 5. How do savings vary with self-employment?

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

### 5.1 Self-employment by level of highest qualification

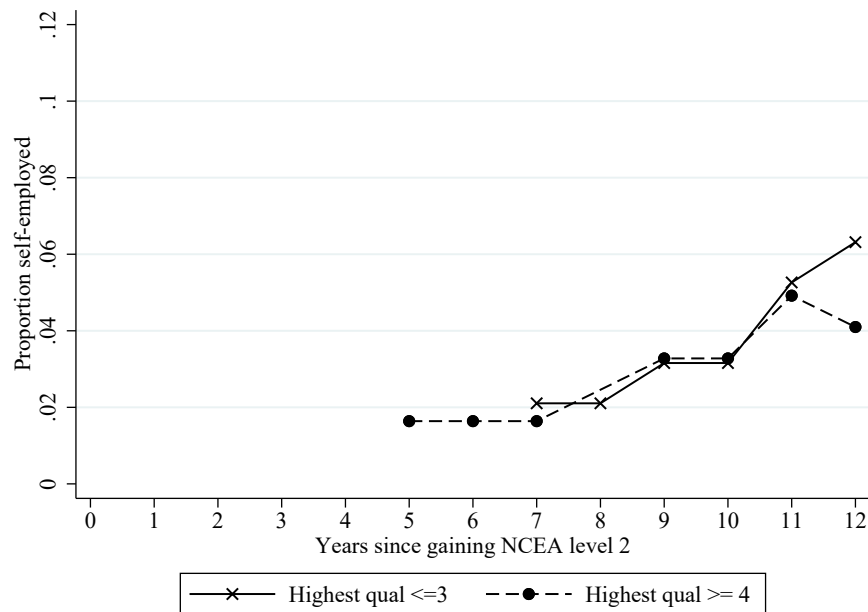
This section shows how the self-employment of students who specialised in Business varies over time for each level of highest qualification. Figure 11 shows self-employment is higher for men with qualifications at level 4 or above than for similar women, and also grows sooner for men after NCEA level 2. By year 12, nearly 11% of men with at least level 4 qualifications are self-employed, compared with only 4% of such women.

Figure 11: Self-employment over time by highest qualification



Continued on following page

Panel B: Women



Notes: This figure shows how the proportion of self-employed workers changes over time for men (Panel A) and women (Panel B) who specialised in Business 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 suppressed under Statistics New Zealand's confidentiality rules.

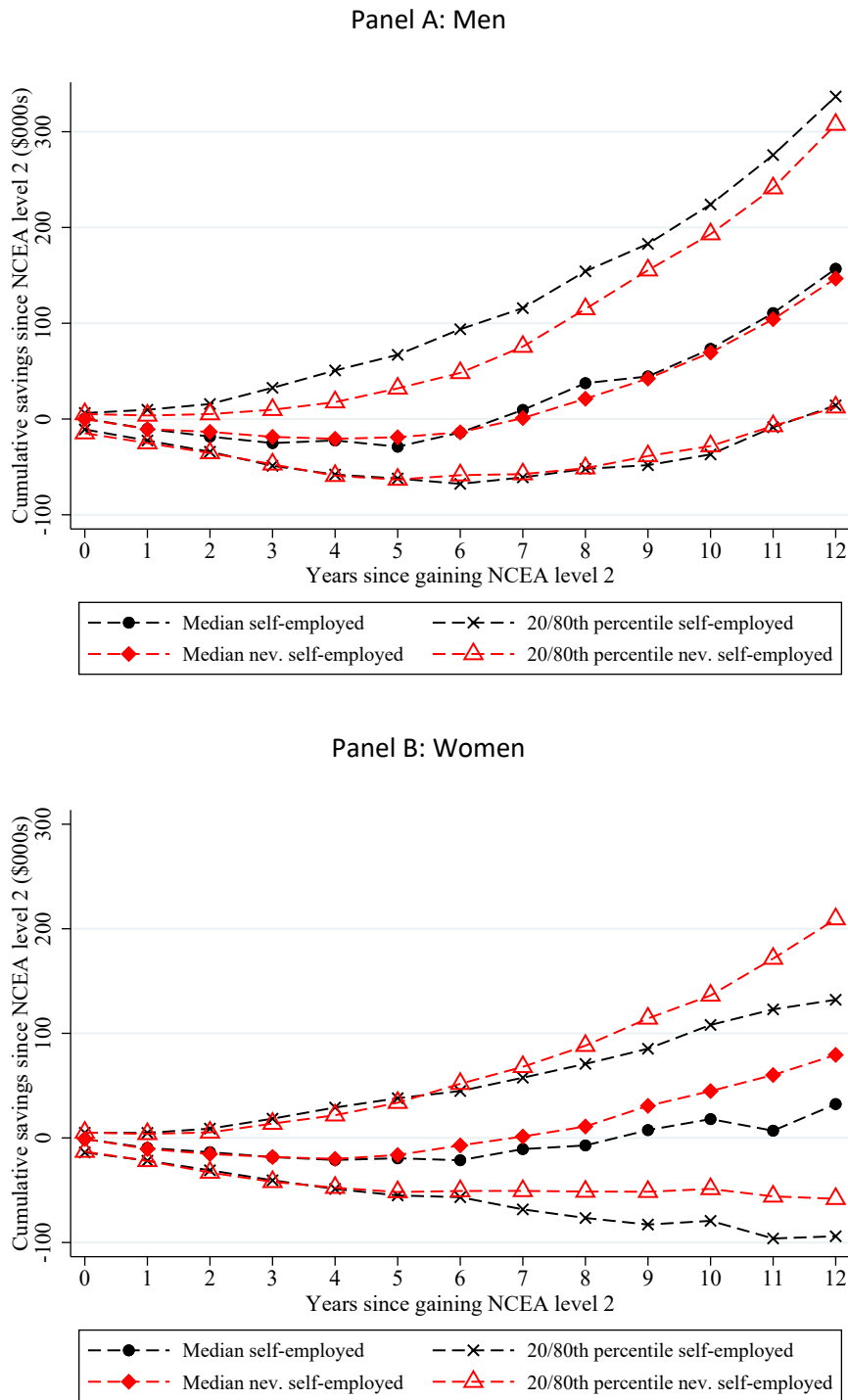
## 5.2 Cumulative and annual savings by self-employment status

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.<sup>4</sup> 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.

<sup>4</sup> 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



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

Figure 12 shows that women who are ever self-employed tend to have lower cumulative savings than women who are never self-employed, and this is true throughout the savings distribution. This gap is consistent with women with lower savings potential selecting into self-

employment, and with women who become self-employed giving up some savings potential to do so.

In contrast, the cumulative savings of men who are ever self-employed are similar to those of men who are never self-employed at the median and at the 20<sup>th</sup> percentile, but are substantially higher at the 80<sup>th</sup> percentile from soon after NCEA level 2. Having established itself, this cumulative savings gap remains fairly constant in size from year 4 onwards. That this gap arises so early for men, well before most men who become self-employed have done so, suggests men with very high savings potential are more likely to become self-employed, and that doing so doesn't seem particularly bad for their savings.

## **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 Business 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 the bivariate comparisons and the regressions that control for a wide range of characteristics including education, men's fertility is inconsistently related to whether they are top cumulative or annual savers. However, men who have a child in the eleventh or twelfth year after NCEA level 2 are consistently more likely to be top annual savers. This could be because such men increase their work to compensate for their partner reducing her work. The regressions show women who have children in the first 12 years after NCEA level 2 are mostly at least weakly less likely to be top savers when compared with women with the same educational history but no children. This is consistent with the large literature on the motherhood earnings penalty, which shows this penalty is partly driven by women exiting the labour market or reducing their work hours after having children.

Men and women who have overseas experience in year 11 or 12 are considerably more likely to be top cumulative and annual savers than are those with similar backgrounds and education, but who don't go overseas. This is partly because we impute overseas earnings and assume overseas wages are higher than New Zealand wages.

The regressions show that men and women who worked in all the first five years after NCEA level 2 are much more likely to be top cumulative savers when compared with those with the same educational, fertility, and travel history but less work experience over this period. However, work history is at most weakly related to being a top annual saver. The regressions also show that work experience for central government in this period contributes more than other work experience to being a top cumulative saver for both men and women, and experience working for a medium-sized firm is associated with a higher probability of being a top annual saver for men.

Retail Trade is the most common industry in which men and women gain early work experience (22% of men and 30% of women with any work experience), followed by Manufacturing for men (17%) and Accommodation and Food Services for women (20%). The regressions compare people with the same education, timing of children, and early years of work experience, and ask whether those with work experience in a particular industry are more likely to be top cumulative or annual savers than are those who are otherwise similar but have not worked in that particular industry. They show none of these industries is associated with a

higher likelihood of being a top saver for men or women, and Accommodation and Food Services experience is correlated with a decreased probability of being a top cumulative saver for both genders. Among the less common industries for work experience, Public Administration and Safety is associated with a higher probability of being a top cumulative saver for men and women, Wholesale Trade with a higher likelihood of being a top annual saver for men, and Health Care and Social Assistance with a lower probability of being a top annual saver for men.

## **7. Conclusions**

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

The Business specialty is unusual in that it is the only specialty in which men on average achieve higher qualifications than women. However, women appear to benefit comparatively more from gaining qualifications at level 7 or above than do men. On average, qualifications at bachelor's level or above may not pay off financially for men compared with qualifications at levels 4 to 6. For women, such higher level qualifications are strongly associated with stronger performance in the labour market, even when controlling for students' background characteristics.

One of the reasons level 4 to 6 qualifications are comparatively lucrative for men is that a non-trivial proportion of men gain industry qualifications at this level, and these qualifications have a higher payoff in the labour market than even level 8 qualifications. Women are less likely than men to do industry training, and for them it seems not to offer the same labour market benefits. This could be because women tend to do industry training in different industries to men, but we do not explore this possibility here.

Management and Commerce, a natural extension of the Business specialty, is men's most common field of study at level 4 or above, but is not associated with particularly strong outcomes. However, men do tend to do well if they study the popular field of Engineering and Related Technologies at this level. Qualifications in Society and Culture at levels 4 to 6, study in Natural and Physical Sciences or Health at level 4 or above, and Education study at levels 4 to 6

that doesn't lead to a qualification are all associated with weak labour market outcomes for men.

Management and Commerce is also a common field of higher study for women. While at levels 4 to 6 this study benefits them only insignificantly, if they study the field at level 7 or above their outcomes tend to be substantially stronger. Qualifications in Society and Culture, and study in Education below level 7 are associated with weak outcomes for women. However, the relatively small proportions of women who study Health or Engineering and Related Technologies at bachelor's level or above tend to do well.

For both genders, early career work experience in central government or in the Public Administration and Safety industry appears beneficial, as does Wholesale Trade experience for men. However, none of the most common industries where students gain work experience are particularly associated with labour market success.

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

| Characteristic   | Cumulative savings                       |            |            | Annual savings                           |            |            | Students |
|--|--|------------|------------|--|------------|------------|----------|
|  | % of students with characteristic among: |            | Odds ratio | % of students with characteristic among: |            | Odds ratio |          |
|  | Non-top savers                           | Top savers |            | Non-top savers                           | Top savers |            |          |
| (1)  | (2)                                      | (3)        | (4)        | (5)                                      | (6)        | (7)        |          |
| <b>School qualifications gained:</b>   |  |            |            |  |            |            |          |
| NCEA cert level 3 within 1 yr  | 63.4                                     | 57.1       | 0.81       | 61.4                                     | 66.7       | 1.20       | 315      |
| NCEA cert level 3 within 5 yrs   | 66.3                                     | 59.1       | 0.79       | 65.1                                     | 68.2       | 1.12       | 315      |
| University Entrance within 1 yr  | 59.5                                     | 54.5       | 0.85       | 55.4                                     | 69.6       | 1.62**     | 315      |
| <b>Level of highest qualification gained within 10 years:</b>  |  |            |            |  |            |            |          |
| Level 2  | 10.7                                     | 9.5        | 0.90       | 12.0                                     | <8.7       | <0.75**    | 315      |
| Level 3  | 19.0                                     | 18.2       | 0.96       | 20.5                                     | 9.5        | 0.47*      | 315      |
| Level 4  | 14.3                                     | 30.4       | 2.03***    | 16.7                                     | 22.7       | 1.35       | 315      |
| Level 5  | <5% have characteristic                  |            |            | <5% have characteristic                  |            |            | 315      |
| Level 6  | <5% have characteristic                  |            |            | <5% have characteristic                  |            |            | 315      |
| Level 7  | 42.9                                     | 33.3       | 0.72       | 38.1                                     | 54.5       | 1.69*      | 315      |
| Level 8  | <5% have characteristic                  |            |            | <5% have characteristic                  |            |            | 315      |
| Level 9 or 10  | <5% have characteristic                  |            |            | <5% have characteristic                  |            |            | 315      |
| <b>Industry training credits gained within 10 years:</b>   |  |            |            |  |            |            |          |
| Any credits  | 22.9                                     | 52.2       | 2.64***    | 28.6                                     | 33.3       | 1.19       | 315      |
| Any credits at level 4+  | 10.8                                     | 42.9       | 3.58***    | 14.6                                     | 27.3       | 1.79**     | 315      |
| 50+ credits  | 13.3                                     | 40.9       | 2.94***    | 16.9                                     | 27.3       | 1.59*      | 315      |
| 50+ credits at level 4+  | 6.0                                      | 22.7       | 2.79***    | 8.5                                      | 18.2       | 1.88**     | 315      |
| <b>Level of highest industry training qualification gained within 10 years:</b>  |  |            |            |  |            |            |          |
| Level 2+   | 16.9                                     | 39.1       | 2.32***    | 20.2                                     | 30.4       | 1.51       | 315      |
| Level 3+   | 11.0                                     | 33.3       | 2.72***    | 14.3                                     | 27.3       | 1.83**     | 315      |
| Level 4+   | 7.2                                      | 22.7       | 2.51***    | 8.4                                      | 18.2       | 1.90**     | 315      |
| <b>Types of tertiary institute where student enrolled within 10 years (for students who enrolled in any tertiary):</b> |  |            |            |  |            |            |          |
| Industry Training Organisation   | 27.7                                     | 57.1       | 2.63***    | 31.7                                     | 40.9       | 1.36       | 309      |
| Institute of Technology/Polytech   | 64.2                                     | 68.2       | 1.15       | 66.3                                     | 60.9       | 0.83       | 309      |
| Private Training Establishment   | 49.4                                     | 57.1       | 1.28       | 52.4                                     | 42.9       | 0.74       | 309      |
| University   | 72.3                                     | 50.0       | 0.48***    | 68.3                                     | 68.2       | 1.00       | 309      |
| Wananga  | 8.5                                      | <9.1       | <1.06      | 8.4                                      | 9.5        | 1.11       | 309      |
| Other Tertiary Provider  | 6.0                                      | 9.5        | 1.46       | 6.1                                      | 9.5        | 1.44       | 309      |
| <b>Locations of education providers where student enrolled within 10 years (including schools):</b>                    |  |            |            |  |            |            |          |
| Main urban area  | <5% do not have characteristic           |            |            | <5% do not have characteristic           |            |            | 315      |
| Secondary urban area   | 19.3                                     | 30.4       | 1.58*      | 19.5                                     | 27.3       | 1.40       | 315      |
| Minor urban area   | 20.2                                     | 22.7       | 1.12       | 20.2                                     | 22.7       | 1.12       | 315      |
| Rural centre or rural area   | 4.8                                      | 13.6       | 2.21**     | 6.0                                      | 9.1        | 1.41       | 315      |
| Different region to school   | 75.0                                     | 90.0       | 2.52**     | 76.0                                     | 85.7       | 1.68       | 291      |

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**

| Characteristic   | Cumulative savings                       |            |            | Annual savings                           |            |            | Students |
|--|--|------------|------------|--|------------|------------|----------|
|  | % of students with characteristic among: |            | Odds ratio | % of students with characteristic among: |            | Odds ratio |          |
|  | Non-top savers                           | Top savers |            | Non-top savers                           | Top savers |            |          |
| (1)  | (2)                                      | (3)        | (4)        | (5)                                      | (6)        | (7)        |          |
| <b>School qualifications gained:</b>   |  |            |            |  |            |            |          |
| NCEA cert level 3 within 1 yr  | 46.8                                     | 54.5       | 1.28       | 43.4                                     | 68.9       | 2.34***    | 654      |
| NCEA cert level 3 within 5 yrs   | 50.0                                     | 55.8       | 1.21       | 45.9                                     | 69.6       | 2.20***    | 654      |
| University Entrance within 1 yr  | 38.5                                     | 50.0       | 1.45**     | 34.1                                     | 65.9       | 2.83***    | 654      |
| <b>Level of highest qualification gained within 10 years:</b>  |  |            |            |  |            |            |          |
| Level 2  | 22.0                                     | 20.5       | 0.93       | 24.3                                     | 13.3       | 0.54***    | 654      |
| Level 3  | 23.1                                     | 20.5       | 0.88       | 24.9                                     | 11.4       | 0.45***    | 654      |
| Level 4  | 12.7                                     | 11.4       | 0.90       | 14.0                                     | 6.7        | 0.50**     | 654      |
| Level 5  | 5.8                                      | <4.4       | <0.80      | 5.8                                      | <4.3       | <0.78      | 654      |
| Level 6  | <5% have characteristic                  |            |            | <5% have characteristic                  |            |            | 654      |
| Level 7  | 30.6                                     | 36.4       | 1.23       | 25.6                                     | 54.5       | 2.61***    | 654      |
| Level 8  | <5% have characteristic                  |            |            | <5% have characteristic                  |            |            | 654      |
| Level 9 or 10  | <5% have characteristic                  |            |            | <5% have characteristic                  |            |            | 654      |
| <b>Industry training credits gained within 10 years:</b>   |  |            |            |  |            |            |          |
| Any credits  | 18.4                                     | 20.5       | 1.11       | 20.3                                     | 11.1       | 0.55**     | 654      |
| Any credits at level 4+  | 6.9                                      | 6.7        | 0.97       | 8.1                                      | <4.4       | <0.59*     | 654      |
| 50+ credits  | 9.2                                      | 11.4       | 1.20       | 10.4                                     | 4.5        | 0.47*      | 654      |
| 50+ credits at level 4+  | <5% have characteristic                  |            |            | <5% have characteristic                  |            |            | 654      |
| <b>Level of highest industry training qualification gained within 10 years:</b>  |  |            |            |  |            |            |          |
| Level 2+   | 9.8                                      | 11.6       | 1.16       | 11.0                                     | 8.9        | 0.82       | 654      |
| Level 3+   | 5.2                                      | 6.7        | 1.22       | 6.3                                      | 4.4        | 0.74       | 654      |
| Level 4+   | <5% have characteristic                  |            |            | <5% have characteristic                  |            |            | 654      |
| <b>Types of tertiary institute where student enrolled within 10 years (for students who enrolled in any tertiary):</b> |  |            |            |  |            |            |          |
| Industry Training Organisation   | 23.1                                     | 25.6       | 1.11       | 25.6                                     | 15.9       | 0.61**     | 636      |
| Institute of Technology/Polytech   | 72.2                                     | 59.5       | 0.64***    | 72.6                                     | 60.5       | 0.65***    | 636      |
| Private Training Establishment   | 60.6                                     | 46.5       | 0.64***    | 60.7                                     | 45.5       | 0.61***    | 636      |
| University   | 50.3                                     | 57.1       | 1.25       | 45.6                                     | 74.4       | 2.75***    | 636      |
| Wananga  | 20.0                                     | 11.6       | 0.59**     | 19.5                                     | 13.6       | 0.70*      | 636      |
| Other Tertiary Provider  | 7.1                                      | 7.0        | 0.99       | 8.3                                      | <4.5       | <0.58**    | 636      |
| <b>Locations of education providers where student enrolled within 10 years (including schools):</b>                    |  |            |            |  |            |            |          |
| Main urban area  | <5% do not have characteristic           |            |            | <5% do not have characteristic           |            |            | 654      |
| Secondary urban area   | 27.2                                     | 15.9       | 0.57**     | 26.0                                     | 20.5       | 0.78       | 654      |
| Minor urban area   | 23.7                                     | 22.7       | 0.96       | 24.9                                     | 19.6       | 0.78       | 654      |
| Rural centre or rural area   | 6.3                                      | 6.7        | 1.05       | 6.3                                      | 6.7        | 1.05       | 654      |
| Different region to school   | 84.3                                     | 72.5       | 0.58***    | 84.8                                     | 73.8       | 0.60***    | 579      |

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  | 0.079**<br>(0.034)                | 0.099***<br>(0.034)  | 0.099***<br>(0.033)  | 0.099***<br>(0.034) | 0.068**<br>(0.033)            | 0.076**<br>(0.034)  | 0.076**<br>(0.033)  | 0.079**<br>(0.034)  |
| Percentile score (0-1)   | -0.324<br>(0.297)                 | -0.006<br>(0.300)    | 0.070<br>(0.302)     | 0.057<br>(0.304)    | 0.166<br>(0.279)              | 0.160<br>(0.289)    | 0.208<br>(0.295)    | 0.197<br>(0.290)    |
| Multiple specialties   | 0.096*<br>(0.051)                 | 0.074<br>(0.051)     | 0.061<br>(0.050)     | 0.058<br>(0.051)    | 0.081<br>(0.050)              | 0.058<br>(0.051)    | 0.050<br>(0.052)    | 0.048<br>(0.052)    |
| School decile  | 0.007<br>(0.010)                  | 0.008<br>(0.010)     | 0.006<br>(0.010)     | 0.011<br>(0.010)    | 0.014<br>(0.010)              | 0.015<br>(0.010)    | 0.014<br>(0.010)    | 0.018*<br>(0.010)   |
| School not in main urban area  | 0.039<br>(0.060)                  | 0.042<br>(0.060)     | 0.020<br>(0.062)     | 0.018<br>(0.061)    | 0.057<br>(0.061)              | 0.062<br>(0.060)    | 0.048<br>(0.061)    | 0.047<br>(0.060)    |
| Highest qualification gained within 10 years (omitted category: level 2):                |                                   |                      |                      |                     |                               |                     |                     |                     |
| Level 3  |                                   | -0.056<br>(0.088)    | -0.069<br>(0.089)    | -0.043<br>(0.085)   |                               | 0.031<br>(0.064)    | 0.021<br>(0.063)    | 0.034<br>(0.064)    |
| Level 4  |                                   | 0.110<br>(0.100)     | -0.124<br>(0.096)    | 0.063<br>(0.098)    |                               | 0.194**<br>(0.080)  | 0.049<br>(0.079)    | 0.156**<br>(0.079)  |
| Level 5 or 6   |                                   | -0.016<br>(0.117)    | -0.011<br>(0.116)    | 0.025<br>(0.110)    |                               | 0.029<br>(0.082)    | 0.030<br>(0.080)    | 0.042<br>(0.083)    |
| Level 7  |                                   | -0.078<br>(0.083)    | -0.078<br>(0.083)    | -0.009<br>(0.085)   |                               | 0.176***<br>(0.063) | 0.175***<br>(0.063) | 0.203***<br>(0.067) |
| Level 8 to 10  |                                   | -0.271***<br>(0.079) | -0.267***<br>(0.079) | -0.165**<br>(0.084) |                               | 0.221*<br>(0.129)   | 0.223*<br>(0.129)   | 0.268**<br>(0.127)  |
| Highest industry training qualification gained within 10 years (omitted category: none): |                                   |                      |                      |                     |                               |                     |                     |                     |
| Level 2  |                                   |                      | 0.042<br>(0.112)     |                     |                               |                     | 0.023<br>(0.094)    |                     |
| Level 3  |                                   |                      | 0.112<br>(0.108)     |                     |                               |                     | 0.082<br>(0.108)    |                     |
| Level 4  |                                   |                      | 0.405***<br>(0.115)  |                     |                               |                     | 0.250**<br>(0.113)  |                     |
| Level 5 or 6   |                                   |                      | dropped              |                     |                               |                     | dropped             |                     |
| Any Gateway credits completed within 10 years  |                                   |                      |                      | -0.033<br>(0.074)   |                               |                     |                     | 0.011<br>(0.072)    |
| Enrolled in institute type within 10 years:  |                                   |                      |                      |                     |                               |                     |                     |                     |
| Industry Training Organisation   |                                   |                      |                      | 0.168***<br>(0.060) |                               |                     |                     | 0.084<br>(0.053)    |
| Institute of Technology/Polytech   |                                   |                      |                      | -0.033<br>(0.050)   |                               |                     |                     | -0.040<br>(0.052)   |
| Private Training Establishment   |                                   |                      |                      | -0.016<br>(0.048)   |                               |                     |                     | -0.005<br>(0.048)   |
| University   |                                   |                      |                      | -0.122**<br>(0.061) |                               |                     |                     | -0.059<br>(0.054)   |
| Wānanga  |                                   |                      |                      | -0.058<br>(0.071)   |                               |                     |                     | 0.059<br>(0.087)    |
| Other Tertiary Provider  |                                   |                      |                      | 0.030<br>(0.110)    |                               |                     |                     | 0.103<br>(0.106)    |
| NCEA level 2 year fixed effects  | Yes                               | Yes                  | Yes                  | Yes                 | Yes                           | Yes                 | Yes                 | Yes                 |
| R-squared  | 0.049                             | 0.090                | 0.131                | 0.140               | 0.046                         | 0.081               | 0.097               | 0.099               |
| Observations   | 315                               | 315                  | 315                  | 315                 | 315                           | 315                 | 315                 | 315                 |

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  | -0.025<br>(0.024)                 | -0.029<br>(0.024)   | -0.026<br>(0.024)   | -0.025<br>(0.024)   | 0.005<br>(0.022)              | 0.001<br>(0.022)    | 0.003<br>(0.022)    | -0.003<br>(0.022)   |
| Percentile score (0-1)   | 0.509***<br>(0.152)               | 0.490***<br>(0.164) | 0.491***<br>(0.164) | 0.479***<br>(0.176) | 0.859***<br>(0.153)           | 0.583***<br>(0.157) | 0.567***<br>(0.157) | 0.513***<br>(0.165) |
| Multiple specialties   | -0.023<br>(0.032)                 | -0.023<br>(0.032)   | -0.025<br>(0.032)   | -0.027<br>(0.032)   | 0.021<br>(0.032)              | 0.019<br>(0.031)    | 0.020<br>(0.031)    | 0.014<br>(0.030)    |
| School decile  | 0.011<br>(0.007)                  | 0.011<br>(0.007)    | 0.012<br>(0.007)    | 0.010<br>(0.007)    | 0.018**<br>(0.007)            | 0.015**<br>(0.007)  | 0.015**<br>(0.007)  | 0.016**<br>(0.007)  |
| School not in main urban area  | 0.010<br>(0.037)                  | 0.008<br>(0.037)    | 0.011<br>(0.038)    | 0.009<br>(0.038)    | 0.015<br>(0.037)              | 0.010<br>(0.035)    | 0.007<br>(0.036)    | 0.020<br>(0.036)    |
| Highest qualification gained within 10 years (omitted category: level 2):                |                                   |                     |                     |                     |                               |                     |                     |                     |
| Level 3  |                                   | -0.049<br>(0.048)   | -0.049<br>(0.049)   | -0.033<br>(0.050)   |                               | -0.052<br>(0.040)   | -0.045<br>(0.041)   | -0.053<br>(0.041)   |
| Level 4  |                                   | -0.024<br>(0.053)   | -0.031<br>(0.054)   | 0.011<br>(0.055)    |                               | -0.052<br>(0.043)   | -0.066<br>(0.045)   | -0.029<br>(0.046)   |
| Level 5 or 6   |                                   | -0.052<br>(0.060)   | -0.048<br>(0.061)   | -0.014<br>(0.063)   |                               | -0.049<br>(0.054)   | -0.045<br>(0.055)   | -0.037<br>(0.057)   |
| Level 7  |                                   | -0.022<br>(0.047)   | -0.020<br>(0.047)   | 0.007<br>(0.053)    |                               | 0.159***<br>(0.046) | 0.159***<br>(0.046) | 0.135***<br>(0.050) |
| Level 8 to 10  |                                   | 0.107<br>(0.109)    | 0.100<br>(0.108)    | 0.110<br>(0.109)    |                               | 0.261**<br>(0.113)  | 0.265**<br>(0.113)  | 0.221*<br>(0.116)   |
| Highest industry training qualification gained within 10 years (omitted category: none): |                                   |                     |                     |                     |                               |                     |                     |                     |
| Level 2  |                                   |                     | 0.081<br>(0.079)    |                     |                               |                     | -0.025<br>(0.066)   |                     |
| Level 3  |                                   |                     | 0.009<br>(0.080)    |                     |                               |                     | -0.065<br>(0.060)   |                     |
| Level 4  |                                   |                     | 0.087<br>(0.132)    |                     |                               |                     | 0.131<br>(0.118)    |                     |
| Level 5 or 6   |                                   |                     | -0.176**<br>(0.081) |                     |                               |                     | -0.057<br>(0.059)   |                     |
| Any Gateway credits completed within 10 years  |                                   |                     |                     | 0.031<br>(0.043)    |                               |                     |                     | 0.072*<br>(0.041)   |
| Enrolled in institute type within 10 years:  |                                   |                     |                     |                     |                               |                     |                     |                     |
| Industry Training Organisation   |                                   |                     |                     | 0.031<br>(0.037)    |                               |                     |                     | -0.030<br>(0.033)   |
| Institute of Technology/Polytech   |                                   |                     |                     | -0.065*<br>(0.039)  |                               |                     |                     | -0.030<br>(0.036)   |
| Private Training Establishment   |                                   |                     |                     | -0.065**<br>(0.033) |                               |                     |                     | -0.055*<br>(0.031)  |
| University   |                                   |                     |                     | -0.023<br>(0.039)   |                               |                     |                     | 0.052<br>(0.035)    |
| Wānanga  |                                   |                     |                     | -0.077**<br>(0.037) |                               |                     |                     | -0.041<br>(0.036)   |
| Other Tertiary Provider  |                                   |                     |                     | 0.017<br>(0.061)    |                               |                     |                     | -0.081**<br>(0.040) |
| NCEA level 2 year fixed effects  | Yes                               | Yes                 | Yes                 | Yes                 | Yes                           | Yes                 | Yes                 | Yes                 |
| R-squared  | 0.032                             | 0.038               | 0.041               | 0.057               | 0.074                         | 0.130               | 0.133               | 0.147               |
| Observations   | 651                               | 651                 | 651                 | 651                 | 651                           | 651                 | 651                 | 651                 |

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**

| Characteristic  | Cumulative savings                       |            |            | Annual savings                           |            |            | Students |
|---|--|------------|------------|--|------------|------------|----------|
|   | % of students with characteristic among: |            | Odds ratio | % of students with characteristic among: |            | Odds ratio |          |
|   | Non-top savers                           | Top savers |            | Non-top savers                           | Top savers |            |          |
|   | (1)                                      | (2)        | (3)        | (4)                                      | (5)        | (6)        | (7)      |
| <b>Passed at least 14 credits at level 2 by year of NCEA level 2 in:</b>                      |  |            |            |  |            |            |          |
| English   | 55.4                                     | 59.1       | 1.13       | 55.4                                     | 59.1       | 1.13       | 315      |
| Maths   | 79.5                                     | 77.3       | 0.90       | 78.0                                     | 81.8       | 1.21       | 315      |
| Māori   | 6.0                                      | <9.1       | <1.40      | 6.0                                      | 9.1        | 1.41       | 315      |
| Humanities  | 71.1                                     | 72.7       | 1.07       | 71.1                                     | 77.3       | 1.30       | 315      |
| Social Science  | 36.6                                     | 40.9       | 1.15       | 34.9                                     | 42.9       | 1.30       | 315      |
| Science   | 69.5                                     | 77.3       | 1.38       | 67.9                                     | 77.3       | 1.47*      | 315      |
| <b>Passed at least 14 achievement standard credits at level 2 by year of NCEA level 2 in:</b> |  |            |            |  |            |            |          |
| English   | 36.1                                     | 40.9       | 1.17       | 34.9                                     | 45.5       | 1.41       | 315      |
| Maths   | 75.9                                     | 77.3       | 1.06       | 74.7                                     | 77.3       | 1.12       | 315      |
| Māori   | <5% have characteristic                  |            |            | <5% have characteristic                  |            |            | 315      |
| Humanities  | 53.0                                     | 59.1       | 1.22       | 53.0                                     | 57.1       | 1.14       | 315      |
| Social Science  | 31.7                                     | 31.8       | 1.00       | 30.5                                     | 33.3       | 1.11       | 315      |
| Science   | 63.9                                     | 66.7       | 1.10       | 61.9                                     | 69.6       | 1.31       | 315      |
| <b>Passed at least 14 credits at level 3 within 5 years in:</b>                               |  |            |            |  |            |            |          |
| English   | 27.7                                     | 27.3       | 0.98       | 24.1                                     | 40.9       | 1.81***    | 315      |
| Maths   | 62.7                                     | 59.1       | 0.89       | 59.5                                     | 72.7       | 1.62**     | 315      |
| Māori   | <5% have characteristic                  |            |            | <5% have characteristic                  |            |            | 315      |
| Humanities  | 38.6                                     | 39.1       | 1.02       | 36.1                                     | 54.5       | 1.80**     | 315      |
| Social Science  | 34.9                                     | 27.3       | 0.75       | 31.7                                     | 36.4       | 1.18       | 315      |
| Science   | 61.9                                     | 59.1       | 0.91       | 57.8                                     | 69.6       | 1.50*      | 315      |
| Arts & Crafts   | 8.4                                      | 9.1        | 1.07       | 8.4                                      | 9.5        | 1.11       | 315      |
| Computing & IT  | 20.2                                     | 18.2       | 0.90       | 19.3                                     | 22.7       | 1.18       | 315      |
| Business  | 41.0                                     | 36.4       | 0.86       | 38.1                                     | 47.8       | 1.36       | 315      |
| Agriculture, Forestry, & Fisheries  | <5% have characteristic                  |            |            | <5% have characteristic                  |            |            | 315      |
| Community & Social Services   | <5% have characteristic                  |            |            | <5% have characteristic                  |            |            | 315      |
| Education   | <5% have characteristic                  |            |            | <5% have characteristic                  |            |            | 315      |
| Service Sector  | 10.8                                     | 22.7       | 1.91**     | 13.1                                     | 13.6       | 1.04       | 315      |
| Engineering & Technology  | 8.4                                      | 22.7       | 2.28***    | 10.7                                     | 13.6       | 1.24       | 315      |
| Manufacturing, Planning & Constrn   | 4.8                                      | 9.5        | 1.72*      | 6.0                                      | <8.7       | <1.35      | 315      |
| <b>Passed at least 14 achievement standard credits at level 3 within 5 years in:</b>          |  |            |            |  |            |            |          |
| English   | 21.7                                     | 22.7       | 1.05       | 19.0                                     | 33.3       | 1.78***    | 315      |
| Maths   | 59.5                                     | 54.5       | 0.85       | 56.0                                     | 68.2       | 1.52*      | 315      |
| Māori   | <5% have characteristic                  |            |            | <5% have characteristic                  |            |            | 315      |
| Humanities  | 34.5                                     | 33.3       | 0.96       | 31.7                                     | 42.9       | 1.46*      | 315      |
| Social Science  | 28.9                                     | 22.7       | 0.77       | 26.5                                     | 30.4       | 1.16       | 315      |
| Science   | 56.6                                     | 54.5       | 0.94       | 53.0                                     | 66.7       | 1.59**     | 315      |
| Arts & Crafts   | 7.2                                      | <8.7       | <1.17      | 7.2                                      | <9.1       | <1.21      | 315      |
| Computing & IT  | <5% have characteristic                  |            |            | <5% have characteristic                  |            |            | 315      |
| Business  | 30.1                                     | 30.4       | 1.01       | 28.9                                     | 33.3       | 1.18       | 315      |
| Agriculture, Forestry, & Fisheries  | <5% have characteristic                  |            |            | <5% have characteristic                  |            |            | 315      |
| Community & Social Services   | <5% have characteristic                  |            |            | <5% have characteristic                  |            |            | 315      |
| Education   | <5% have characteristic                  |            |            | <5% have characteristic                  |            |            | 315      |
| Service Sector  | <5% have characteristic                  |            |            | <5% have characteristic                  |            |            | 315      |
| Engineering & Technology  | <5% have characteristic                  |            |            | <5% have characteristic                  |            |            | 315      |
| Manufacturing, Planning & Constrn   | <5% have characteristic                  |            |            | <5% have characteristic                  |            |            | 315      |

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**

| Characteristic  | Cumulative savings                       |            |            | Annual savings                           |            |            | Students |
|---|--|------------|------------|--|------------|------------|----------|
|   | % of students with characteristic among: |            | Odds ratio | % of students with characteristic among: |            | Odds ratio |          |
|   | Non-top savers                           | Top savers |            | Non-top savers                           | Top savers |            |          |
|   | (1)                                      | (2)        | (3)        | (4)                                      | (5)        | (6)        | (7)      |
| <b>Passed at least 14 credits at level 2 by year of NCEA level 2 in:</b>                      |  |            |            |  |            |            |          |
| English   | 62.1                                     | 72.7       | 1.49**     | 59.5                                     | 84.1       | 2.91***    | 654      |
| Maths   | 46.8                                     | 63.6       | 1.73***    | 44.5                                     | 72.7       | 2.64***    | 654      |
| Māori   | 11.6                                     | 4.5        | 0.42**     | 10.5                                     | 8.9        | 0.86       | 654      |
| Humanities  | 71.8                                     | 84.1       | 1.83***    | 69.8                                     | 91.1       | 3.57***    | 654      |
| Social Science  | 29.9                                     | 38.6       | 1.36**     | 28.9                                     | 43.2       | 1.63***    | 654      |
| Science   | 48.0                                     | 61.4       | 1.54***    | 46.8                                     | 64.4       | 1.78***    | 654      |
| <b>Passed at least 14 achievement standard credits at level 2 by year of NCEA level 2 in:</b> |  |            |            |  |            |            |          |
| English   | 29.9                                     | 50.0       | 1.95***    | 27.3                                     | 60.0       | 2.90***    | 654      |
| Maths   | 39.1                                     | 55.8       | 1.72***    | 36.4                                     | 64.4       | 2.48***    | 654      |
| Māori   | 9.2                                      | 4.5        | 0.53*      | 8.1                                      | 8.9        | 1.08       | 654      |
| Humanities  | 40.5                                     | 60.5       | 1.91***    | 37.6                                     | 71.1       | 3.07***    | 654      |
| Social Science  | 22.5                                     | 30.2       | 1.37**     | 21.3                                     | 36.4       | 1.78***    | 654      |
| Science   | 31.0                                     | 44.2       | 1.56***    | 29.1                                     | 53.3       | 2.21***    | 654      |
| <b>Passed at least 14 credits at level 3 within 5 years in:</b>                               |  |            |            |  |            |            |          |
| English   | 26.4                                     | 32.6       | 1.26       | 23.7                                     | 43.2       | 1.99***    | 654      |
| Maths   | 30.2                                     | 37.2       | 1.28*      | 27.3                                     | 50.0       | 2.13***    | 654      |
| Māori   | 9.2                                      | <4.4       | <0.52**    | 8.1                                      | 6.7        | 0.84       | 654      |
| Humanities  | 32.9                                     | 43.2       | 1.41**     | 30.2                                     | 53.3       | 2.12***    | 654      |
| Social Science  | 27.2                                     | 27.3       | 1.00       | 23.3                                     | 40.9       | 1.89***    | 654      |
| Science   | 29.3                                     | 37.2       | 1.33**     | 26.6                                     | 48.9       | 2.11***    | 654      |
| Arts & Crafts   | 9.2                                      | 11.6       | 1.22       | 9.2                                      | 11.4       | 1.20       | 654      |
| Computing & IT  | 22.5                                     | 24.4       | 1.09       | 22.1                                     | 26.1       | 1.19       | 654      |
| Business  | 31.0                                     | 31.1       | 1.00       | 30.1                                     | 35.6       | 1.22       | 654      |
| Agriculture, Forestry, & Fisheries  | <5% have characteristic                  |            |            | <5% have characteristic                  |            |            | 654      |
| Community & Social Services   | <5% have characteristic                  |            |            | <5% have characteristic                  |            |            | 654      |
| Education   | <5% have characteristic                  |            |            | <5% have characteristic                  |            |            | 654      |
| Service Sector  | 27.2                                     | 31.8       | 1.19       | 29.9                                     | 20.5       | 0.66*      | 654      |
| Engineering & Technology  | <5% have characteristic                  |            |            | <5% have characteristic                  |            |            | 654      |
| Manufacturing, Planning & Constrn   | <5% have characteristic                  |            |            | <5% have characteristic                  |            |            | 654      |
| <b>Passed at least 14 achievement standard credits at level 3 within 5 years in:</b>          |  |            |            |  |            |            |          |
| English   | 15.6                                     | 24.4       | 1.53**     | 14.0                                     | 28.9       | 1.98***    | 654      |
| Maths   | 26.0                                     | 32.6       | 1.28*      | 22.7                                     | 45.5       | 2.22***    | 654      |
| Māori   | <5% have characteristic                  |            |            | <5% have characteristic                  |            |            | 654      |
| Humanities  | 22.5                                     | 34.1       | 1.56***    | 20.8                                     | 40.9       | 2.09***    | 654      |
| Social Science  | 22.5                                     | 24.4       | 1.09       | 19.2                                     | 37.0       | 1.97***    | 654      |
| Science   | 22.0                                     | 29.5       | 1.36*      | 19.7                                     | 40.0       | 2.13***    | 654      |
| Arts & Crafts   | 7.5                                      | 11.4       | 1.42       | 7.5                                      | 11.1       | 1.39       | 654      |
| Computing & IT  | <5% have characteristic                  |            |            | <5% have characteristic                  |            |            | 654      |
| Business  | 12.7                                     | 20.5       | 1.54*      | 11.0                                     | 22.7       | 1.90***    | 654      |
| Agriculture, Forestry, & Fisheries  | <5% have characteristic                  |            |            | <5% have characteristic                  |            |            | 654      |
| Community & Social Services   | <5% have characteristic                  |            |            | <5% have characteristic                  |            |            | 654      |
| Education   | <5% have characteristic                  |            |            | <5% have characteristic                  |            |            | 654      |
| Service Sector  | <5% have characteristic                  |            |            | <5% have characteristic                  |            |            | 654      |
| Engineering & Technology  | <5% have characteristic                  |            |            | <5% have characteristic                  |            |            | 654      |
| Manufacturing, Planning & Constrn   | <5% have characteristic                  |            |            | <5% have characteristic                  |            |            | 654      |

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**

| Characteristic  | Cumulative savings                       |            |            | Annual savings                           |            |            | Students |
|---|--|------------|------------|--|------------|------------|----------|
|   | % of students with characteristic among: |            | Odds ratio | % of students with characteristic among: |            | Odds ratio |          |
|   | Non-top savers                           | Top savers |            | Non-top savers                           | Top savers |            |          |
|   | (1)                                      | (2)        | (3)        | (4)                                      | (5)        | (6)        | (7)      |
| <b>Fields and levels in which student passed at least 0.5 EFTS within 10 years:</b> |  |            |            |  |            |            |          |
| Natural & Physical Sciences at level 2+   | 47.0                                     | 33.3       | 0.63**     | 43.4                                     | 47.8       | 1.15       | 315      |
| Natural & Physical Sciences at level 4+   | 13.1                                     | <8.7       | <0.69*     | 13.1                                     | <8.7       | <0.69*     | 315      |
| Natural & Physical Sciences at level 7+   | <5% have characteristic                  |            |            | <5% have characteristic                  |            |            | 315      |
| Natural & Physical Sciences at level 8+   | <5% have characteristic                  |            |            | <5% have characteristic                  |            |            | 315      |
| Information Technology at level 2+  | 23.2                                     | 18.2       | 0.78       | 22.9                                     | 22.7       | 0.99       | 315      |
| Information Technology at level 4+  | 10.8                                     | 9.1        | 0.85       | 10.8                                     | 9.1        | 0.85       | 315      |
| Information Technology at level 7+  | 4.8                                      | <8.7       | <1.59      | 4.8                                      | <8.7       | <1.59      | 315      |
| Information Technology at level 8+  | <5% have characteristic                  |            |            | <5% have characteristic                  |            |            | 315      |
| Engineering & Related Technologies at level 2+                                      | 16.9                                     | 30.4       | 1.77**     | 17.1                                     | 22.7       | 1.32       | 315      |
| Engineering & Related Technologies at level 4+                                      | 10.8                                     | 27.3       | 2.25***    | 11.0                                     | 22.7       | 1.89**     | 315      |
| Engineering & Related Technologies at level 7+                                      | <5% have characteristic                  |            |            | <5% have characteristic                  |            |            | 315      |
| Engineering & Related Technologies at level 8+                                      | <5% have characteristic                  |            |            | <5% have characteristic                  |            |            | 315      |
| Architecture & Building at level 2+   | 7.2                                      | <9.1       | <1.21      | 7.2                                      | <9.1       | <1.21      | 315      |
| Architecture & Building at level 4+   | 4.8                                      | <9.1       | <1.65      | 4.8                                      | <8.7       | <1.59      | 315      |
| Architecture & Building at level 7+   | <5% have characteristic                  |            |            | <5% have characteristic                  |            |            | 315      |
| Architecture & Building at level 8+   | <5% have characteristic                  |            |            | <5% have characteristic                  |            |            | 315      |
| Ag, Environmental & Related Studies at level 2+                                     | 8.4                                      | <8.7       | <1.03      | 8.3                                      | <8.7       | <1.04      | 315      |
| Ag, Environmental & Related Studies at level 4+                                     | <5% have characteristic                  |            |            | <5% have characteristic                  |            |            | 315      |
| Ag, Environmental & Related Studies at level 7+                                     | <5% have characteristic                  |            |            | <5% have characteristic                  |            |            | 315      |
| Ag, Environmental & Related Studies at level 8+                                     | <5% have characteristic                  |            |            | <5% have characteristic                  |            |            | 315      |
| Health at level 2+  | <5% have characteristic                  |            |            | <5% have characteristic                  |            |            | 315      |
| Health at level 4+  | <5% have characteristic                  |            |            | <5% have characteristic                  |            |            | 315      |
| Health at level 7+  | <5% have characteristic                  |            |            | <5% have characteristic                  |            |            | 315      |
| Health at level 8+  | <5% have characteristic                  |            |            | <5% have characteristic                  |            |            | 315      |
| Education at level 2+   | <5% have characteristic                  |            |            | <5% have characteristic                  |            |            | 315      |
| Education at level 4+   | <5% have characteristic                  |            |            | <5% have characteristic                  |            |            | 315      |
| Education at level 7+   | <5% have characteristic                  |            |            | <5% have characteristic                  |            |            | 315      |
| Education at level 8+   | <5% have characteristic                  |            |            | <5% have characteristic                  |            |            | 315      |
| Management & Commerce at level 2+   | 56.0                                     | 47.8       | 0.77       | 53.0                                     | 60.9       | 1.29       | 315      |
| Management & Commerce at level 4+   | 44.6                                     | 33.3       | 0.68       | 41.0                                     | 50.0       | 1.33       | 315      |
| Management & Commerce at level 7+   | 29.3                                     | 22.7       | 0.76       | 25.3                                     | 39.1       | 1.63**     | 315      |
| Management & Commerce at level 8+   | <5% have characteristic                  |            |            | <5% have characteristic                  |            |            | 315      |
| Society & Culture at level 2+   | 65.5                                     | 57.1       | 0.76       | 61.4                                     | 72.7       | 1.51*      | 315      |
| Society & Culture at level 4+   | 42.9                                     | 22.7       | 0.47***    | 38.1                                     | 40.9       | 1.10       | 315      |
| Society & Culture at level 7+   | 13.1                                     | <8.7       | <0.69      | 10.8                                     | 13.6       | 1.22       | 315      |
| Society & Culture at level 8+   | <5% have characteristic                  |            |            | <5% have characteristic                  |            |            | 315      |
| Creative Arts at level 2+   | 12.2                                     | <8.7       | <0.74      | 12.0                                     | 9.1        | 0.78       | 315      |
| Creative Arts at level 4+   | 8.5                                      | <8.7       | <1.02      | 8.4                                      | <8.7       | <1.03      | 315      |
| Creative Arts at level 7+   | <5% have characteristic                  |            |            | <5% have characteristic                  |            |            | 315      |
| Creative Arts at level 8+   | <5% have characteristic                  |            |            | <5% have characteristic                  |            |            | 315      |
| Food, Hospitality & Personal Servs at level 2+                                      | <5% have characteristic                  |            |            | <5% have characteristic                  |            |            | 315      |
| Food, Hospitality & Personal Servs at level 4+                                      | <5% have characteristic                  |            |            | <5% have characteristic                  |            |            | 315      |
| Food, Hospitality & Personal Servs at level 7+                                      | <5% have characteristic                  |            |            | <5% have characteristic                  |            |            | 315      |
| Food, Hospitality & Personal Servs at level 8+                                      | <5% have characteristic                  |            |            | <5% have characteristic                  |            |            | 315      |
| Mixed Field Programmes at level 2+  | <5% have characteristic                  |            |            | <5% have characteristic                  |            |            | 315      |
| Mixed Field Programmes at level 4+  | <5% have characteristic                  |            |            | <5% have characteristic                  |            |            | 315      |
| Mixed Field Programmes at level 7+  | <5% have characteristic                  |            |            | <5% have characteristic                  |            |            | 315      |
| Mixed Field Programmes at level 8+  | <5% have characteristic                  |            |            | <5% have characteristic                  |            |            | 315      |

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**

| Characteristic  | Cumulative savings                       |            |            | Annual savings                           |            |            | Students |
|---|--|------------|------------|--|------------|------------|----------|
|   | % of students with characteristic among: |            | Odds ratio | % of students with characteristic among: |            | Odds ratio |          |
|   | Non-top savers                           | Top savers |            | Non-top savers                           | Top savers |            |          |
|   | (1)                                      | (2)        | (3)        | (4)                                      | (5)        | (6)        | (7)      |
| <b>Fields and levels in which student passed at least 0.5 EFTS within 10 years:</b> |  |            |            |  |            |            |          |
| Natural & Physical Sciences at level 2+   | 17.8                                     | 18.2       | 1.02       | 14.5                                     | 31.1       | 2.07***    | 654      |
| Natural & Physical Sciences at level 4+   | <5% have characteristic                  |            |            | <5% have characteristic                  |            |            | 654      |
| Natural & Physical Sciences at level 7+   | <5% have characteristic                  |            |            | <5% have characteristic                  |            |            | 654      |
| Natural & Physical Sciences at level 8+   | <5% have characteristic                  |            |            | <5% have characteristic                  |            |            | 654      |
| Information Technology at level 2+  | 13.8                                     | 13.3       | 0.97       | 13.8                                     | 13.3       | 0.97       | 654      |
| Information Technology at level 4+  | <5% have characteristic                  |            |            | <5% have characteristic                  |            |            | 654      |
| Information Technology at level 7+  | <5% have characteristic                  |            |            | <5% have characteristic                  |            |            | 654      |
| Information Technology at level 8+  | <5% have characteristic                  |            |            | <5% have characteristic                  |            |            | 654      |
| Engineering & Related Technologies at level 2+                                      | 5.2                                      | 6.8        | 1.25       | 5.8                                      | <4.4       | <0.79      | 654      |
| Engineering & Related Technologies at level 4+                                      | <5% have characteristic                  |            |            | <5% have characteristic                  |            |            | 654      |
| Engineering & Related Technologies at level 7+                                      | <5% have characteristic                  |            |            | <5% have characteristic                  |            |            | 654      |
| Engineering & Related Technologies at level 8+                                      | <5% have characteristic                  |            |            | <5% have characteristic                  |            |            | 654      |
| Architecture & Building at level 2+   | <5% have characteristic                  |            |            | <5% have characteristic                  |            |            | 654      |
| Architecture & Building at level 4+   | <5% have characteristic                  |            |            | <5% have characteristic                  |            |            | 654      |
| Architecture & Building at level 7+   | <5% have characteristic                  |            |            | <5% have characteristic                  |            |            | 654      |
| Architecture & Building at level 8+   | <5% have characteristic                  |            |            | <5% have characteristic                  |            |            | 654      |
| Ag, Environmental & Related Studies at level 2+                                     | <5% have characteristic                  |            |            | <5% have characteristic                  |            |            | 654      |
| Ag, Environmental & Related Studies at level 4+                                     | <5% have characteristic                  |            |            | <5% have characteristic                  |            |            | 654      |
| Ag, Environmental & Related Studies at level 7+                                     | <5% have characteristic                  |            |            | <5% have characteristic                  |            |            | 654      |
| Ag, Environmental & Related Studies at level 8+                                     | <5% have characteristic                  |            |            | <5% have characteristic                  |            |            | 654      |
| Health at level 2+  | 9.8                                      | 6.8        | 0.72       | 9.3                                      | 11.1       | 1.17       | 654      |
| Health at level 4+  | 9.8                                      | 6.7        | 0.71       | 8.1                                      | 11.1       | 1.30       | 654      |
| Health at level 7+  | <5% have characteristic                  |            |            | <5% have characteristic                  |            |            | 654      |
| Health at level 8+  | <5% have characteristic                  |            |            | <5% have characteristic                  |            |            | 654      |
| Education at level 2+   | 13.2                                     | 6.8        | 0.54*      | 12.7                                     | 8.9        | 0.72       | 654      |
| Education at level 4+   | 12.1                                     | 6.8        | 0.59*      | 11.6                                     | 8.9        | 0.79       | 654      |
| Education at level 7+   | 8.7                                      | 6.7        | 0.79       | 7.6                                      | 8.9        | 1.15       | 654      |
| Education at level 8+   | <5% have characteristic                  |            |            | <5% have characteristic                  |            |            | 654      |
| Management & Commerce at level 2+   | 55.5                                     | 58.1       | 1.09       | 54.1                                     | 64.4       | 1.41**     | 654      |
| Management & Commerce at level 4+   | 30.1                                     | 44.2       | 1.62***    | 27.7                                     | 53.3       | 2.32***    | 654      |
| Management & Commerce at level 7+   | 14.5                                     | 27.3       | 1.82***    | 11.0                                     | 38.6       | 3.17***    | 654      |
| Management & Commerce at level 8+   | <5% have characteristic                  |            |            | <5% have characteristic                  |            |            | 654      |
| Society & Culture at level 2+   | 55.5                                     | 61.4       | 1.21       | 51.4                                     | 77.8       | 2.65***    | 654      |
| Society & Culture at level 4+   | 29.5                                     | 27.3       | 0.92       | 26.0                                     | 40.0       | 1.64***    | 654      |
| Society & Culture at level 7+   | 8.1                                      | 4.7        | 0.61       | 6.9                                      | 11.1       | 1.48*      | 654      |
| Society & Culture at level 8+   | <5% have characteristic                  |            |            | <5% have characteristic                  |            |            | 654      |
| Creative Arts at level 2+   | 14.0                                     | 13.3       | 0.96       | 13.3                                     | 15.9       | 1.18       | 654      |
| Creative Arts at level 4+   | 8.1                                      | 6.8        | 0.86       | 7.5                                      | 11.1       | 1.39       | 654      |
| Creative Arts at level 7+   | <5% have characteristic                  |            |            | <5% have characteristic                  |            |            | 654      |
| Creative Arts at level 8+   | <5% have characteristic                  |            |            | <5% have characteristic                  |            |            | 654      |
| Food, Hospitality & Personal Servs at level 2+                                      | 7.5                                      | 4.5        | 0.64       | 7.5                                      | 4.4        | 0.63       | 654      |
| Food, Hospitality & Personal Servs at level 4+                                      | 5.8                                      | <4.4       | <0.80      | 5.2                                      | <4.4       | <0.87      | 654      |
| Food, Hospitality & Personal Servs at level 7+                                      | <5% have characteristic                  |            |            | <5% have characteristic                  |            |            | 654      |
| Food, Hospitality & Personal Servs at level 8+                                      | <5% have characteristic                  |            |            | <5% have characteristic                  |            |            | 654      |
| Mixed Field Programmes at level 2+  | <5% have characteristic                  |            |            | <5% have characteristic                  |            |            | 654      |
| Mixed Field Programmes at level 4+  | <5% have characteristic                  |            |            | <5% have characteristic                  |            |            | 654      |
| Mixed Field Programmes at level 7+  | <5% have characteristic                  |            |            | <5% have characteristic                  |            |            | 654      |
| Mixed Field Programmes at level 8+  | <5% have characteristic                  |            |            | <5% have characteristic                  |            |            | 654      |

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**

| Characteristic   | Cumulative savings                       |            |            | Annual savings                           |            |            | Students |
|--|--|------------|------------|--|------------|------------|----------|
|  | % of students with characteristic among: |            | Odds ratio | % of students with characteristic among: |            | Odds ratio |          |
|  | Non-top savers                           | Top savers |            | Non-top savers                           | Top savers |            |          |
|  | (1)                                      | (2)        | (3)        | (4)                                      | (5)        | (6)        | (7)      |
| <b>Fields of highest qualification gained within 10 years:</b>               |  |            |            |  |            |            |          |
| Natural & Physical Sciences  | <5% have characteristic                  |            |            | <5% have characteristic                  |            |            | 315      |
| Information Technology   | 4.8                                      | <9.1       | <1.65      | 6.0                                      | <8.7       | <1.36      | 315      |
| Engineering & Related Technologies   | 8.5                                      | 30.4       | 2.84***    | 10.8                                     | 22.7       | 1.91**     | 315      |
| Architecture & Building  | <5% have characteristic                  |            |            | <5% have characteristic                  |            |            | 315      |
| Ag, Environmental & Related Studies  | <5% have characteristic                  |            |            | <5% have characteristic                  |            |            | 315      |
| Health   | <5% have characteristic                  |            |            | <5% have characteristic                  |            |            | 315      |
| Education  | <5% have characteristic                  |            |            | <5% have characteristic                  |            |            | 315      |
| Management & Commerce  | 34.5                                     | 31.8       | 0.91       | 30.5                                     | 47.8       | 1.76**     | 315      |
| Society & Culture  | 14.6                                     | <8.7       | <0.62**    | 12.2                                     | 13.6       | 1.11       | 315      |
| Creative Arts  | <5% have characteristic                  |            |            | <5% have characteristic                  |            |            | 315      |
| Food, Hospitality & Personal Services  | <5% have characteristic                  |            |            | <5% have characteristic                  |            |            | 315      |
| Mixed Field Programmes   | 28.6                                     | 22.7       | 0.78       | 31.7                                     | 9.1        | 0.27***    | 315      |
| <b>Fields of qualifications at level 4+ gained within 10 years:</b>          |  |            |            |  |            |            |          |
| Natural & Physical Sciences  | <5% have characteristic                  |            |            | <5% have characteristic                  |            |            | 315      |
| Information Technology   | <5% have characteristic                  |            |            | <5% have characteristic                  |            |            | 315      |
| Engineering & Related Technologies   | 8.3                                      | 27.3       | 2.68***    | 8.4                                      | 22.7       | 2.28***    | 315      |
| Architecture & Building  | <5% have characteristic                  |            |            | <5% have characteristic                  |            |            | 315      |
| Ag, Environmental & Related Studies  | <5% have characteristic                  |            |            | <5% have characteristic                  |            |            | 315      |
| Health   | <5% have characteristic                  |            |            | <5% have characteristic                  |            |            | 315      |
| Education  | <5% have characteristic                  |            |            | <5% have characteristic                  |            |            | 315      |
| Management & Commerce  | 33.7                                     | 30.4       | 0.89       | 29.3                                     | 45.5       | 1.72**     | 315      |
| Society & Culture  | 16.7                                     | <8.7       | <0.54**    | 14.3                                     | 9.5        | 0.68       | 315      |
| Creative Arts  | 6.0                                      | <8.7       | <1.36      | 6.0                                      | <8.7       | <1.35      | 315      |
| Food, Hospitality & Personal Services  | <5% have characteristic                  |            |            | <5% have characteristic                  |            |            | 315      |
| Mixed Field Programmes   | <5% have characteristic                  |            |            | <5% have characteristic                  |            |            | 315      |
| <b>Fields of qualifications at bachelor's level+ gained within 10 years:</b> |  |            |            |  |            |            |          |
| Natural & Physical Sciences  | <5% have characteristic                  |            |            | <5% have characteristic                  |            |            | 315      |
| Information Technology   | <5% have characteristic                  |            |            | <5% have characteristic                  |            |            | 315      |
| Engineering & Related Technologies   | <5% have characteristic                  |            |            | <5% have characteristic                  |            |            | 315      |
| Architecture & Building  | <5% have characteristic                  |            |            | <5% have characteristic                  |            |            | 315      |
| Ag, Environmental & Related Studies  | <5% have characteristic                  |            |            | <5% have characteristic                  |            |            | 315      |
| Health   | <5% have characteristic                  |            |            | <5% have characteristic                  |            |            | 315      |
| Education  | <5% have characteristic                  |            |            | <5% have characteristic                  |            |            | 315      |
| Management & Commerce  | 29.3                                     | 22.7       | 0.76       | 25.3                                     | 40.9       | 1.73**     | 315      |
| Society & Culture  | 10.7                                     | <8.7       | <0.83*     | 8.4                                      | 9.1        | 1.07       | 315      |
| Creative Arts  | <5% have characteristic                  |            |            | <5% have characteristic                  |            |            | 315      |
| Food, Hospitality & Personal Services  | <5% have characteristic                  |            |            | <5% have characteristic                  |            |            | 315      |
| Mixed Field Programmes   | <5% have characteristic                  |            |            | <5% have characteristic                  |            |            | 315      |

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**

| Characteristic   | Cumulative savings                       |            |            | Annual savings                           |            |            | Students |
|--|--|------------|------------|--|------------|------------|----------|
|  | % of students with characteristic among: |            | Odds ratio | % of students with characteristic among: |            | Odds ratio |          |
|  | Non-top savers                           | Top savers |            | Non-top savers                           | Top savers |            |          |
|  | (1)                                      | (2)        | (3)        | (4)                                      | (5)        | (6)        | (7)      |
| <b>Fields of highest qualification gained within 10 years:</b>               |  |            |            |  |            |            |          |
| Natural & Physical Sciences  | <5% have characteristic                  |            |            | <5% have characteristic                  |            |            | 654      |
| Information Technology   | 10.4                                     | 9.1        | 0.89       | 10.5                                     | 6.8        | 0.68       | 654      |
| Engineering & Related Technologies   | <5% have characteristic                  |            |            | <5% have characteristic                  |            |            | 654      |
| Architecture & Building  | <5% have characteristic                  |            |            | <5% have characteristic                  |            |            | 654      |
| Ag, Environmental & Related Studies  | <5% have characteristic                  |            |            | <5% have characteristic                  |            |            | 654      |
| Health   | 7.5                                      | 6.8        | 0.92       | 6.9                                      | 11.1       | 1.48       | 654      |
| Education  | 9.2                                      | 6.8        | 0.76       | 8.1                                      | 11.1       | 1.30       | 654      |
| Management & Commerce  | 28.9                                     | 39.5       | 1.45**     | 27.9                                     | 43.2       | 1.69***    | 654      |
| Society & Culture  | 12.7                                     | 6.8        | 0.56*      | 11.0                                     | 13.3       | 1.18       | 654      |
| Creative Arts  | 5.8                                      | <4.5       | <0.81      | 5.2                                      | 6.7        | 1.22       | 654      |
| Food, Hospitality & Personal Services  | 6.3                                      | <4.5       | <0.75      | 6.9                                      | <4.4       | <0.68      | 654      |
| Mixed Field Programmes   | 41.6                                     | 34.1       | 0.77       | 43.6                                     | 24.4       | 0.49***    | 654      |
| <b>Fields of qualifications at level 4+ gained within 10 years:</b>          |  |            |            |  |            |            |          |
| Natural & Physical Sciences  | <5% have characteristic                  |            |            | <5% have characteristic                  |            |            | 654      |
| Information Technology   | <5% have characteristic                  |            |            | <5% have characteristic                  |            |            | 654      |
| Engineering & Related Technologies   | <5% have characteristic                  |            |            | <5% have characteristic                  |            |            | 654      |
| Architecture & Building  | <5% have characteristic                  |            |            | <5% have characteristic                  |            |            | 654      |
| Ag, Environmental & Related Studies  | <5% have characteristic                  |            |            | <5% have characteristic                  |            |            | 654      |
| Health   | 6.9                                      | 6.7        | 0.97       | 6.3                                      | 11.1       | 1.59       | 654      |
| Education  | 8.1                                      | 6.7        | 0.84       | 8.1                                      | 8.9        | 1.08       | 654      |
| Management & Commerce  | 22.5                                     | 37.8       | 1.76***    | 20.8                                     | 43.2       | 2.24***    | 654      |
| Society & Culture  | 12.7                                     | 6.8        | 0.56*      | 11.0                                     | 13.3       | 1.18       | 654      |
| Creative Arts  | <5% have characteristic                  |            |            | <5% have characteristic                  |            |            | 654      |
| Food, Hospitality & Personal Services  | <5% have characteristic                  |            |            | <5% have characteristic                  |            |            | 654      |
| Mixed Field Programmes   | <5% have characteristic                  |            |            | <5% have characteristic                  |            |            | 654      |
| <b>Fields of qualifications at bachelor's level+ gained within 10 years:</b> |  |            |            |  |            |            |          |
| Natural & Physical Sciences  | <5% have characteristic                  |            |            | <5% have characteristic                  |            |            | 654      |
| Information Technology   | <5% have characteristic                  |            |            | <5% have characteristic                  |            |            | 654      |
| Engineering & Related Technologies   | <5% have characteristic                  |            |            | <5% have characteristic                  |            |            | 654      |
| Architecture & Building  | <5% have characteristic                  |            |            | <5% have characteristic                  |            |            | 654      |
| Ag, Environmental & Related Studies  | <5% have characteristic                  |            |            | <5% have characteristic                  |            |            | 654      |
| Health   | <5% have characteristic                  |            |            | <5% have characteristic                  |            |            | 654      |
| Education  | 5.2                                      | 4.7        | 0.90       | 5.2                                      | 4.5        | 0.89       | 654      |
| Management & Commerce  | 12.7                                     | 25.0       | 1.86***    | 9.3                                      | 37.0       | 3.29***    | 654      |
| Society & Culture  | 8.1                                      | 4.5        | 0.60       | 6.4                                      | 11.1       | 1.57*      | 654      |
| Creative Arts  | <5% have characteristic                  |            |            | <5% have characteristic                  |            |            | 654      |
| Food, Hospitality & Personal Services  | <5% have characteristic                  |            |            | <5% have characteristic                  |            |            | 654      |
| Mixed Field Programmes   | <5% have characteristic                  |            |            | <5% have characteristic                  |            |            | 654      |

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  | -0.007<br>(0.088)                 | 0.070<br>(0.097)     | 0.028<br>(0.091)   | 0.095<br>(0.089)              | 0.144<br>(0.097)    | 0.104<br>(0.091)  |
| Maths  | 0.028<br>(0.080)                  | -0.029<br>(0.082)    | -0.011<br>(0.081)  | 0.064<br>(0.078)              | 0.009<br>(0.081)    | 0.030<br>(0.079)  |
| Humanities   | 0.020<br>(0.076)                  | 0.002<br>(0.086)     | 0.047<br>(0.079)   | 0.023<br>(0.078)              | 0.014<br>(0.087)    | 0.037<br>(0.082)  |
| Social science   | -0.072<br>(0.050)                 | -0.038<br>(0.059)    | -0.045<br>(0.055)  | 0.015<br>(0.054)              | 0.006<br>(0.060)    | -0.002<br>(0.058) |
| Science  | -0.011<br>(0.070)                 | 0.059<br>(0.079)     | 0.036<br>(0.074)   | 0.029<br>(0.070)              | 0.059<br>(0.078)    | 0.047<br>(0.072)  |
| Computing & IT   | -0.028<br>(0.060)                 | -0.041<br>(0.064)    | -0.023<br>(0.060)  | 0.039<br>(0.063)              | -0.004<br>(0.065)   | 0.011<br>(0.064)  |
| Business   | -0.000<br>(0.055)                 | 0.030<br>(0.052)     | 0.017<br>(0.052)   | 0.015<br>(0.057)              | 0.033<br>(0.057)    | 0.011<br>(0.057)  |
| Service sector   | 0.153**<br>(0.077)                | 0.149*<br>(0.077)    | 0.153**<br>(0.077) | 0.043<br>(0.071)              | 0.038<br>(0.071)    | 0.041<br>(0.072)  |
| # of other fields  | 0.086*<br>(0.044)                 | 0.043<br>(0.050)     | 0.065<br>(0.046)   | 0.038<br>(0.042)              | -0.010<br>(0.050)   | 0.023<br>(0.045)  |
| Passed at least 0.5 EFTS at level 4+ within 10 years in: |                                   |                      |                    |                               |                     |                   |
| Natural & Physical Sciences                              |                                   | -0.157**<br>(0.069)  |                    |                               | -0.168**<br>(0.075) |                   |
| Information Technology                                   |                                   | -0.031<br>(0.091)    |                    |                               | -0.064<br>(0.087)   |                   |
| Engineering & Related Technologies                       |                                   | 0.130<br>(0.097)     |                    |                               | 0.185**<br>(0.094)  |                   |
| Health   |                                   | -0.127<br>(0.088)    |                    |                               | -0.177**<br>(0.089) |                   |
| Education  |                                   | -0.323***<br>(0.083) |                    |                               | -0.318**<br>(0.130) |                   |
| Management & Commerce                                    |                                   | -0.041<br>(0.075)    |                    |                               | -0.033<br>(0.066)   |                   |
| Society & Culture  |                                   | -0.105*<br>(0.054)   |                    |                               | -0.044<br>(0.059)   |                   |
| Creative Arts  |                                   | -0.087<br>(0.092)    |                    |                               | -0.041<br>(0.095)   |                   |
| # of other fields  |                                   | 0.007<br>(0.088)     |                    |                               | 0.029<br>(0.092)    |                   |
| Passed at least 0.5 EFTS at level 7+ within 10 years in: |                                   |                      |                    |                               |                     |                   |
| Natural & Physical Sciences                              |                                   | -0.076<br>(0.073)    |                    |                               | -0.056<br>(0.081)   |                   |
| Information Technology                                   |                                   | 0.083<br>(0.136)     |                    |                               | 0.109<br>(0.139)    |                   |
| Engineering & Related Technologies                       |                                   | -0.064<br>(0.191)    |                    |                               | 0.025<br>(0.194)    |                   |
| Health   |                                   | -0.094<br>(0.100)    |                    |                               | -0.073<br>(0.102)   |                   |
| Education  |                                   | 0.139<br>(0.118)     |                    |                               | 0.300<br>(0.207)    |                   |
| Management & Commerce                                    |                                   | -0.009<br>(0.072)    |                    |                               | 0.106<br>(0.076)    |                   |
| Society & Culture  |                                   | -0.007<br>(0.078)    |                    |                               | 0.038<br>(0.093)    |                   |
| Creative Arts  |                                   | 0.003<br>(0.164)     |                    |                               | 0.048<br>(0.201)    |                   |
| # of other fields  |                                   | 0.236<br>(0.273)     |                    |                               | -0.007<br>(0.265)   |                   |

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|  | (1)   | (2)   | (3)       | (4)   | (5)   | (6)      |
|--|-------|-------|-----------|-------|-------|----------|
| Gained qualification at level 4+ within 10 years in: |       |       |           |       |       |          |
| Health   |       |       | -0.133*   |       |       | -0.174** |
|  |       |       | (0.080)   |       |       | (0.083)  |
| Education  |       |       | 0.005     |       |       | -0.077   |
|  |       |       | (0.135)   |       |       | (0.158)  |
| Management & Commerce                                |       |       | 0.140     |       |       | 0.139    |
|  |       |       | (0.130)   |       |       | (0.120)  |
| Society & Culture                                    |       |       | -0.223*** |       |       | -0.120*  |
|  |       |       | (0.054)   |       |       | (0.066)  |
| # of other fields                                    |       |       | 0.071     |       |       | 0.101    |
|  |       |       | (0.064)   |       |       | (0.062)  |
| Gained bachelor's degree+ within 10 years in:        |       |       |           |       |       |          |
| Health   |       |       | -0.114    |       |       | -0.113   |
|  |       |       | (0.106)   |       |       | (0.092)  |
| Education  |       |       | -0.151    |       |       | 0.004    |
|  |       |       | (0.161)   |       |       | (0.168)  |
| Management & Commerce                                |       |       | -0.204    |       |       | -0.032   |
|  |       |       | (0.134)   |       |       | (0.131)  |
| Society & Culture                                    |       |       | 0.054     |       |       | 0.142    |
|  |       |       | (0.076)   |       |       | (0.109)  |
| # of other fields                                    |       |       | -0.049    |       |       | -0.008   |
|  |       |       | (0.094)   |       |       | (0.100)  |
| NCEA level 2 year fixed effects                      | Yes   | Yes   | Yes       | Yes   | Yes   | Yes      |
| Background characteristics                           | Yes   | Yes   | Yes       | Yes   | Yes   | Yes      |
| R-squared  | 0.085 | 0.157 | 0.134     | 0.075 | 0.144 | 0.113    |
| Observations   | 315   | 315   | 315       | 315   | 315   | 315      |

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  | -0.028<br>(0.073)                 | -0.054<br>(0.074)   | -0.043<br>(0.072)  | 0.012<br>(0.075)              | 0.003<br>(0.077)     | -0.009<br>(0.077)   |
| Maths  | -0.026<br>(0.064)                 | -0.072<br>(0.065)   | -0.059<br>(0.066)  | 0.052<br>(0.064)              | -0.014<br>(0.062)    | -0.013<br>(0.062)   |
| Humanities   | 0.073<br>(0.070)                  | 0.111<br>(0.071)    | 0.087<br>(0.069)   | 0.081<br>(0.069)              | 0.092<br>(0.072)     | 0.084<br>(0.072)    |
| Social science   | -0.069<br>(0.044)                 | -0.066<br>(0.045)   | -0.086*<br>(0.045) | 0.046<br>(0.046)              | 0.020<br>(0.047)     | 0.003<br>(0.046)    |
| Science  | 0.027<br>(0.060)                  | 0.034<br>(0.061)    | 0.029<br>(0.061)   | 0.037<br>(0.058)              | 0.020<br>(0.057)     | 0.023<br>(0.056)    |
| Computing & IT   | 0.013<br>(0.037)                  | 0.008<br>(0.037)    | -0.001<br>(0.037)  | 0.034<br>(0.038)              | 0.028<br>(0.038)     | 0.028<br>(0.038)    |
| Business   | -0.037<br>(0.037)                 | -0.037<br>(0.037)   | -0.052<br>(0.038)  | -0.057<br>(0.037)             | -0.062*<br>(0.036)   | -0.081**<br>(0.037) |
| Service sector   | 0.058<br>(0.037)                  | 0.059<br>(0.036)    | 0.072*<br>(0.037)  | -0.030<br>(0.032)             | -0.032<br>(0.032)    | -0.026<br>(0.033)   |
| # of other fields  | -0.015<br>(0.033)                 | -0.004<br>(0.033)   | -0.002<br>(0.034)  | -0.017<br>(0.029)             | -0.013<br>(0.030)    | -0.002<br>(0.030)   |
| Passed at least 0.5 EFTS at level 4+ within 10 years in: |                                   |                     |                    |                               |                      |                     |
| Natural & Physical Sciences                              |                                   | -0.002<br>(0.105)   |                    |                               | 0.074<br>(0.115)     |                     |
| Information Technology                                   |                                   | -0.180**<br>(0.078) |                    |                               | -0.078<br>(0.082)    |                     |
| Engineering & Related Technologies                       |                                   | 0.154<br>(0.181)    |                    |                               | 0.020<br>(0.174)     |                     |
| Health   |                                   | -0.144**<br>(0.061) |                    |                               | -0.097<br>(0.063)    |                     |
| Education  |                                   | -0.144**<br>(0.070) |                    |                               | -0.164***<br>(0.047) |                     |
| Management & Commerce                                    |                                   | 0.044<br>(0.048)    |                    |                               | 0.030<br>(0.041)     |                     |
| Society & Culture  |                                   | -0.061<br>(0.041)   |                    |                               | -0.038<br>(0.042)    |                     |
| Creative Arts  |                                   | 0.009<br>(0.073)    |                    |                               | -0.030<br>(0.071)    |                     |
| # of other fields  |                                   | -0.053<br>(0.061)   |                    |                               | 0.026<br>(0.053)     |                     |
| Passed at least 0.5 EFTS at level 7+ within 10 years in: |                                   |                     |                    |                               |                      |                     |
| Natural & Physical Sciences                              |                                   | 0.357<br>(0.237)    |                    |                               | 0.066<br>(0.197)     |                     |
| Information Technology                                   |                                   | 0.199<br>(0.278)    |                    |                               | 0.491*<br>(0.278)    |                     |
| Engineering & Related Technologies                       |                                   | 0.544***<br>(0.185) |                    |                               | 0.739***<br>(0.178)  |                     |
| Health   |                                   | 0.119<br>(0.092)    |                    |                               | 0.286***<br>(0.102)  |                     |
| Education  |                                   | 0.103<br>(0.083)    |                    |                               | 0.189**<br>(0.076)   |                     |
| Management & Commerce                                    |                                   | 0.098<br>(0.063)    |                    |                               | 0.285***<br>(0.062)  |                     |
| Society & Culture  |                                   | -0.085<br>(0.062)   |                    |                               | 0.053<br>(0.076)     |                     |
| Creative Arts  |                                   | -0.175*<br>(0.095)  |                    |                               | 0.215<br>(0.132)     |                     |
| # of other fields  |                                   | -0.100<br>(0.115)   |                    |                               | -0.276**<br>(0.117)  |                     |

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|  | (1)   | (2)   | (3)                 | (4)   | (5)   | (6)                  |
|--|-------|-------|---------------------|-------|-------|----------------------|
| Gained qualification at level 4+ within 10 years in: |       |       |                     |       |       |                      |
| Health   |       |       | -0.098<br>(0.082)   |       |       | -0.078<br>(0.091)    |
| Education  |       |       | -0.125*<br>(0.074)  |       |       | 0.063<br>(0.117)     |
| Management & Commerce                                |       |       | 0.070<br>(0.054)    |       |       | 0.023<br>(0.044)     |
| Society & Culture                                    |       |       | -0.119*<br>(0.066)  |       |       | -0.146***<br>(0.043) |
| # of other fields                                    |       |       | -0.100**<br>(0.041) |       |       | -0.022<br>(0.039)    |
| Gained bachelor's degree+ within 10 years in:        |       |       |                     |       |       |                      |
| Health   |       |       | 0.095<br>(0.113)    |       |       | 0.283**<br>(0.132)   |
| Education  |       |       | 0.140<br>(0.098)    |       |       | -0.011<br>(0.134)    |
| Management & Commerce                                |       |       | 0.079<br>(0.075)    |       |       | 0.290***<br>(0.070)  |
| Society & Culture                                    |       |       | -0.008<br>(0.085)   |       |       | 0.186**<br>(0.079)   |
| # of other fields                                    |       |       | 0.115<br>(0.078)    |       |       | 0.146*<br>(0.082)    |
| NCEA level 2 year fixed effects                      | Yes   | Yes   | Yes                 | Yes   | Yes   | Yes                  |
| Background characteristics                           | Yes   | Yes   | Yes                 | Yes   | Yes   | Yes                  |
| R-squared  | 0.047 | 0.103 | 0.082               | 0.102 | 0.190 | 0.171                |
| Observations   | 651   | 651   | 651                 | 651   | 651   | 651                  |

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**

| Characteristic   | Cumulative savings                       |            |            | Annual savings                           |            |            | Students |
|--|--|------------|------------|--|------------|------------|----------|
|  | % of students with characteristic among: |            | Odds ratio | % of students with characteristic among: |            | Odds ratio |          |
|  | Non-top savers                           | Top savers |            | Non-top savers                           | Top savers |            |          |
|  | (1)                                      | (2)        | (3)        | (4)                                      | (5)        | (6)        | (7)      |
| <b>Years student had any children:</b>   |  |            |            |  |            |            |          |
| Fifth year after NCEA level 2 or earlier   | 7.2                                      | 13.6       | 1.68       | 8.3                                      | 9.5        | 1.12       | 315      |
| Years 6 to 10 after NCEA level 2   | 15.7                                     | 22.7       | 1.42*      | 19.3                                     | 14.3       | 0.75       | 315      |
| Years 11 to 12 after NCEA level 2  | 13.1                                     | 27.3       | 1.96**     | 12.0                                     | 22.7       | 1.76***    | 315      |
| <b>Years of early work experience:</b>   |  |            |            |  |            |            |          |
| Any work experience in year of NCEA level 2 or earlier                           | 12.2                                     | 30.4       | 2.26***    | 14.6                                     | 22.7       | 1.51       | 315      |
| Any work experience in years 1 to 5 after NCEA level 2                           | 78.3                                     | >91.3      | >2.44***   | 80.7                                     | 85.7       | 1.34       | 315      |
| Three+ years of work experience in years 1 to 5                                  | 43.4                                     | 77.3       | 3.34***    | 49.4                                     | 52.2       | 1.09       | 315      |
| <b>Sectors of work experience in years 1 to 5 after gaining NCEA level 2:</b>    |  |            |            |  |            |            |          |
| Central government in at least one year  | 7.7                                      | 23.8       | 2.38***    | 10.4                                     | 15.8       | 1.43       | 255      |
| Central government in at least 3 years   | <5.6                                     | 17.6       | >2.06***   | 9.5                                      | <15.4      | <1.48      | 162      |
| Other government in at least one year  | <5% have characteristic                  |            |            | <5% have characteristic                  |            |            | 255      |
| Other government in at least 3 years   | <12 have characteristic                  |            |            | <12 have characteristic                  |            |            | 162      |
| Non-profit organisation in at least one year                                     | 9.2                                      | 9.5        | 1.03       | 9.0                                      | <10.5      | <1.15      | 255      |
| Non-profit organisation in at least 3 years                                      | <12 have characteristic                  |            |            | <12 have characteristic                  |            |            | 162      |
| <b>Firm size of work experience in years 1 to 5 after gaining NCEA level 2:</b>  |  |            |            |  |            |            |          |
| Small employer (<10 employees) in at least one year                              | 31.3                                     | 23.8       | 0.75       | 31.3                                     | 22.2       | 0.69       | 255      |
| Small employer (<10 employees) in at least 3 years                               | 13.5                                     | 11.8       | 0.90       | 14.0                                     | <16.7      | <1.17      | 162      |
| Medium employer (10-99 employees) in at least one year                           | 34.4                                     | 42.9       | 1.31       | 34.3                                     | 47.4       | 1.52*      | 255      |
| Medium employer (10-99 employees) in at least 3 years                            | 16.7                                     | 29.4       | 1.59*      | 16.7                                     | 36.4       | 2.18**     | 162      |
| Large employer (100+ employees) in at least one year                             | 58.5                                     | 66.7       | 1.31       | 59.7                                     | 63.2       | 1.12       | 255      |
| Large employer (100+ employees) in at least 3 years                              | 47.2                                     | 50.0       | 1.08       | 50.0                                     | 41.7       | 0.77       | 162      |
| <b>Industries of work experience in years 1 to 5 after gaining NCEA level 2:</b> |  |            |            |  |            |            |          |
| Agriculture, Forestry, Fishing in at least one year                              | 7.7                                      | <9.1       | <1.14      | 7.5                                      | <10.0      | <1.27      | 255      |
| Agriculture, Forestry, Fishing in at least 3 years                               | <12 have characteristic                  |            |            | <12 have characteristic                  |            |            | 162      |
| Manufacturing in at least one year   | 16.9                                     | 19.0       | 1.11       | 17.9                                     | 15.8       | 0.89       | 255      |
| Manufacturing in at least 3 years  | 13.5                                     | <11.1      | <0.86      | 11.9                                     | <15.4      | <1.25      | 162      |
| Construction in at least one year  | 10.9                                     | 10.0       | 0.93       | 10.4                                     | 15.8       | 1.43       | 255      |
| Construction in at least 3 years   | 8.6                                      | <11.1      | <1.20      | 7.3                                      | <15.4      | <1.78      | 162      |
| Wholesale Trade in at least one year   | 7.7                                      | 14.3       | 1.63       | 9.0                                      | 15.8       | 1.60       | 255      |
| Wholesale Trade in at least 3 years  | <12 have characteristic                  |            |            | <12 have characteristic                  |            |            | 162      |
| Retail Trade in at least one year  | 21.9                                     | 23.8       | 1.09       | 22.4                                     | 22.2       | 0.99       | 255      |
| Retail Trade in at least 3 years   | 19.4                                     | 11.1       | 0.63       | 17.1                                     | <16.7      | <0.98      | 162      |
| Accommodation & Food Services in at least one year                               | 18.5                                     | <9.1       | <0.52***   | 16.4                                     | <10.5      | <0.66*     | 255      |
| Accommodation & Food Services in at least 3 years                                | 11.1                                     | <10.5      | <0.96M     | 9.8                                      | <14.3      | <1.36M     | 162      |
| Transport, Post, Warehousing in at least one year                                | <5% have characteristic                  |            |            | <5% have characteristic                  |            |            | 255      |
| Transport, Post, Warehousing in at least 3 years                                 | <12 have characteristic                  |            |            | <12 have characteristic                  |            |            | 162      |
| Financial & Insurance Services in at least one year                              | 3.1                                      | 10.0       | 2.22**     | 3.0                                      | 10.5       | 2.41**     | 255      |
| Financial & Insurance Services in at least 3 years                               | <12 have characteristic                  |            |            | <12 have characteristic                  |            |            | 162      |
| Professional, Scientific, Technical Services in at least 1 year                  | 10.8                                     | 19.0       | 1.60       | 10.3                                     | 22.2       | 1.95**     | 255      |
| Professional, Scientific, Technical Services in at least 3 years                 | <12 have characteristic                  |            |            | <12 have characteristic                  |            |            | 162      |
| Administrative & Support Services in at least one year                           | 6.2                                      | 9.5        | 1.40       | 7.4                                      | <10.5      | <1.34      | 255      |
| Administrative & Support Services in at least 3 years                            | <12 have characteristic                  |            |            | <12 have characteristic                  |            |            | 162      |
| Public Administration & Safety in at least one year                              | 4.7                                      | 23.8       | 3.01***    | 7.6                                      | 15.8       | 1.80       | 255      |
| Public Administration & Safety in at least 3 years                               | <12 have characteristic                  |            |            | <12 have characteristic                  |            |            | 162      |
| Education & Training in at least one year  | <5% have characteristic                  |            |            | <5% have characteristic                  |            |            | 255      |
| Education & Training in at least 3 years   | <12 have characteristic                  |            |            | <12 have characteristic                  |            |            | 162      |
| Health Care & Social Assistance in at least one year                             | <5% have characteristic                  |            |            | <5% have characteristic                  |            |            | 255      |
| Health Care & Social Assistance in at least 3 years                              | <12 have characteristic                  |            |            | <12 have characteristic                  |            |            | 162      |
| Arts & Recreation Services in at least one year                                  | 7.7                                      | <8.7       | <1.10      | 7.4                                      | <10.0      | <1.29      | 255      |
| Arts & Recreation Services in at least 3 years                                   | <12 have characteristic                  |            |            | <12 have characteristic                  |            |            | 162      |
| Other industry in at least one year  | 10.9                                     | 14.3       | 1.25       | 11.9                                     | 11.1       | 0.94       | 255      |
| Other industry in at least 3 years   | <12 have characteristic                  |            |            | <12 have characteristic                  |            |            | 162      |

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**

| Characteristic   | Cumulative savings                       |            |            | Annual savings                           |            |            | Students |
|--|--|------------|------------|--|------------|------------|----------|
|  | % of students with characteristic among: |            | Odds ratio | % of students with characteristic among: |            | Odds ratio |          |
|  | Non-top savers                           | Top savers |            | Non-top savers                           | Top savers |            |          |
|  | (1)                                      | (2)        | (3)        | (4)                                      | (5)        | (6)        | (7)      |
| <b>Years student had any children:</b>   |  |            |            |  |            |            |          |
| Fifth year after NCEA level 2 or earlier   | 31.0                                     | 4.5        | 0.14***    | 31.2                                     | 4.4        | 0.13***    | 654      |
| Years 6 to 10 after NCEA level 2   | 38.5                                     | 15.9       | 0.37***    | 41.3                                     | 6.8        | 0.14***    | 654      |
| Years 11 to 12 after NCEA level 2  | 20.1                                     | 18.2       | 0.90       | 22.7                                     | 8.9        | 0.39***    | 654      |
| <b>Years of early work experience:</b>   |  |            |            |  |            |            |          |
| Any work experience in year of NCEA level 2 or earlier                           | 15.0                                     | 35.6       | 2.31***    | 17.3                                     | 26.7       | 1.52**     | 654      |
| Any work experience in years 1 to 5 after NCEA level 2                           | 79.9                                     | >95.6      | >4.37***   | 82.7                                     | 86.7       | 1.29       | 654      |
| Three+ years of work experience in years 1 to 5                                  | 45.7                                     | 80.0       | 3.58***    | 50.0                                     | 63.0       | 1.53***    | 654      |
| <b>Sectors of work experience in years 1 to 5 after gaining NCEA level 2:</b>    |  |            |            |  |            |            |          |
| Central government in at least one year  | 9.4                                      | 20.9       | 1.93***    | 11.2                                     | 17.5       | 1.48       | 543      |
| Central government in at least 3 yrs   | 3.8                                      | 8.6        | 1.69*      | 6.9                                      | <6.9       | <1.00      | 345      |
| Other government in at least one year  | 5.1                                      | 7.0        | 1.28       | 5.0                                      | 7.5        | 1.39       | 543      |
| Other government in at least 3 yrs   | <5% have characteristic                  |            |            | <5% have characteristic                  |            |            | 345      |
| Non-profit organisation in at least one year                                     | 13.0                                     | 7.0        | 0.57**     | 11.9                                     | 12.5       | 1.05       | 543      |
| Non-profit organisation in at least 3 yrs  | <5% have characteristic                  |            |            | <5% have characteristic                  |            |            | 345      |
| <b>Firm size of work experience in years 1 to 5 after gaining NCEA level 2:</b>  |  |            |            |  |            |            |          |
| Small employer (<10 employees) in at least one year                              | 29.0                                     | 20.9       | 0.71       | 28.2                                     | 23.1       | 0.81       | 543      |
| Small employer (<10 employees) in at least 3 yrs                                 | 8.9                                      | 5.6        | 0.69       | 8.0                                      | 10.7       | 1.26       | 345      |
| Medium employer (10-99 employees) in at least 1 yr                               | 43.9                                     | 42.9       | 0.97       | 44.1                                     | 43.6       | 0.99       | 543      |
| Medium employer (10-99 employees) in at least 3 yrs                              | 26.6                                     | 25.0       | 0.94       | 26.4                                     | 25.0       | 0.94       | 345      |
| Large employer (100+ employees) in at least one year                             | 59.4                                     | 74.4       | 1.71***    | 62.0                                     | 69.2       | 1.29       | 543      |
| Large employer (100+ employees) in at least 3 yrs                                | 42.5                                     | 57.1       | 1.51***    | 46.5                                     | 48.1       | 1.05       | 345      |
| <b>Industries of work experience in years 1 to 5 after gaining NCEA level 2:</b> |  |            |            |  |            |            |          |
| Agriculture, Forestry, Fishing in at least one year                              | <5% have characteristic                  |            |            | <5% have characteristic                  |            |            | 543      |
| Agriculture, Forestry, Fishing in at least 3 yrs                                 | <5% have characteristic                  |            |            | <5% have characteristic                  |            |            | 345      |
| Manufacturing in at least one year   | 9.4                                      | 11.9       | 1.22       | 9.2                                      | 12.8       | 1.32       | 543      |
| Manufacturing in at least 3 yrs  | 6.3                                      | 8.6        | 1.25       | 5.8                                      | 7.1        | 1.18       | 345      |
| Construction in at least one year  | <5% have characteristic                  |            |            | <5% have characteristic                  |            |            | 543      |
| Construction in at least 3 yrs   | <5% have characteristic                  |            |            | <5% have characteristic                  |            |            | 345      |
| Wholesale Trade in at least one year   | <5% have characteristic                  |            |            | <5% have characteristic                  |            |            | 543      |
| Wholesale Trade in at least 3 yrs  | <5% have characteristic                  |            |            | <5% have characteristic                  |            |            | 345      |
| Retail Trade in at least one year  | 30.9                                     | 27.3       | 0.87       | 30.3                                     | 30.0       | 0.99       | 543      |
| Retail Trade in at least 3 yrs   | 17.7                                     | 16.7       | 0.95       | 18.4                                     | 17.2       | 0.94       | 345      |
| Accommodation & Food Services in at least one year                               | 22.5                                     | 11.9       | 0.54**     | 21.0                                     | 17.9       | 0.86       | 543      |
| Accommodation & Food Services in at least 3 yrs                                  | 11.3                                     | 5.7        | 0.57       | 8.2                                      | 10.7       | 1.24       | 345      |
| Transport, Post, Warehousing in at least one year                                | <5% have characteristic                  |            |            | <5% have characteristic                  |            |            | 543      |
| Transport, Post, Warehousing in at least 3 yrs                                   | <5% have characteristic                  |            |            | <5% have characteristic                  |            |            | 345      |
| Financial & Insurance Services in at least one year                              | 4.3                                      | 11.6       | 2.03***    | 4.9                                      | 7.7        | 1.43       | 543      |
| Financial & Insurance Services in at least 3 yrs                                 | <5% have characteristic                  |            |            | <5% have characteristic                  |            |            | 345      |
| Professional, Scientific, Technical Services in at least 1 yr                    | 11.5                                     | 25.6       | 1.97***    | 11.9                                     | 23.1       | 1.80***    | 543      |
| Professional, Scientific, Technical Services in at least 3 yrs                   | 6.3                                      | 16.7       | 1.89**     | 9.2                                      | 10.7       | 1.13       | 345      |
| Administrative & Support Services in at least one year                           | 7.9                                      | 7.0        | 0.90       | 8.5                                      | 7.5        | 0.90       | 543      |
| Administrative & Support Services in at least 3 yrs                              | <5% have characteristic                  |            |            | <5% have characteristic                  |            |            | 345      |
| Public Administration & Safety in at least one year                              | 5.1                                      | 11.9       | 1.89***    | 6.3                                      | 10.0       | 1.44       | 543      |
| Public Administration & Safety in at least 3 yrs                                 | 2.5                                      | 11.1       | 2.27***    | 5.7                                      | <6.9       | <1.15      | 345      |
| Education & Training in at least one year  | 8.7                                      | 11.6       | 1.27       | 8.5                                      | 12.8       | 1.42       | 543      |
| Education & Training in at least 3 yrs   | <5% have characteristic                  |            |            | <5% have characteristic                  |            |            | 345      |
| Health Care & Social Assistance in at least one year                             | 12.2                                     | 14.0       | 1.12       | 12.1                                     | 12.8       | 1.06       | 543      |
| Health Care & Social Assistance in at least 3 yrs                                | 8.8                                      | <5.4       | <0.69**    | 8.0                                      | <6.7       | <0.86*     | 345      |
| Arts & Recreation Services in at least one year                                  | <5% have characteristic                  |            |            | <5% have characteristic                  |            |            | 543      |
| Arts & Recreation Services in at least 3 yrs                                     | <5% have characteristic                  |            |            | <5% have characteristic                  |            |            | 345      |
| Other industry in at least one year  | 12.2                                     | 11.9       | 0.98       | 12.1                                     | 12.8       | 1.06       | 543      |
| Other industry in at least 3 yrs   | 7.6                                      | <5.6       | <0.79      | 7.0                                      | <6.9       | <0.99      | 345      |

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  | 0.152<br>(0.101)                  | 0.194**<br>(0.095)  | 0.145<br>(0.092)    | 0.152<br>(0.097)              | 0.165*<br>(0.093)   | 0.154*<br>(0.093)    |
| Years 6 to 10  | 0.008<br>(0.079)                  | -0.007<br>(0.071)   | 0.000<br>(0.071)    | -0.110*<br>(0.062)            | -0.110*<br>(0.063)  | -0.098<br>(0.068)    |
| Years 11 and 12  | 0.136*<br>(0.082)                 | 0.128<br>(0.079)    | 0.128*<br>(0.076)   | 0.243***<br>(0.075)           | 0.238***<br>(0.074) | 0.241***<br>(0.075)  |
| Overseas at least 6 months in year relative to NCEA level 2:                       |                                   |                     |                     |                               |                     |                      |
| Any year 3 to 5  | -0.077<br>(0.100)                 | 0.002<br>(0.097)    | 0.024<br>(0.099)    | -0.091<br>(0.082)             | -0.090<br>(0.085)   | -0.078<br>(0.087)    |
| Any year 6 to 10   | 0.080<br>(0.074)                  | 0.102<br>(0.073)    | 0.094<br>(0.075)    | 0.061<br>(0.074)              | 0.064<br>(0.075)    | 0.059<br>(0.076)     |
| Year 11 or 12  | 0.275***<br>(0.081)               | 0.197**<br>(0.081)  | 0.206**<br>(0.081)  | 0.294***<br>(0.082)           | 0.250***<br>(0.081) | 0.276***<br>(0.081)  |
| Years of work experience in years 1 to 5 after NCEA level 1 (omitted category: 0): |                                   |                     |                     |                               |                     |                      |
| 1  |                                   | -0.129*<br>(0.069)  | -0.077<br>(0.069)   |                               | -0.061<br>(0.088)   | 0.019<br>(0.087)     |
| 2  |                                   | 0.020<br>(0.076)    | 0.068<br>(0.078)    |                               | -0.011<br>(0.088)   | 0.067<br>(0.093)     |
| 3  |                                   | -0.081<br>(0.073)   | 0.010<br>(0.075)    |                               | -0.194**<br>(0.088) | -0.073<br>(0.086)    |
| 4  |                                   | 0.042<br>(0.092)    | 0.132<br>(0.087)    |                               | -0.144<br>(0.094)   | -0.016<br>(0.090)    |
| 5  |                                   | 0.263***<br>(0.099) | 0.340***<br>(0.096) |                               | 0.037<br>(0.102)    | 0.128<br>(0.103)     |
| Any work experience in years 1 to 5 in:  |                                   |                     |                     |                               |                     |                      |
| Central government   |                                   | 0.251***<br>(0.096) |                     |                               | 0.027<br>(0.091)    |                      |
| Medium-sized firm (10-99 employees)  |                                   | 0.097*<br>(0.056)   |                     |                               | 0.161***<br>(0.055) |                      |
| Large firm (100+ employees)  |                                   | 0.089<br>(0.059)    |                     |                               | 0.084<br>(0.063)    |                      |
| Manufacturing  |                                   |                     | 0.010<br>(0.074)    |                               |                     | -0.020<br>(0.076)    |
| Wholesale Trade  |                                   |                     | 0.106<br>(0.080)    |                               |                     | 0.177**<br>(0.080)   |
| Retail Trade   |                                   |                     | -0.014<br>(0.070)   |                               |                     | -0.027<br>(0.071)    |
| Accommodation & Food Services  |                                   |                     | -0.110**<br>(0.056) |                               |                     | -0.000<br>(0.065)    |
| Professional, Scientific, and Technical Services                                   |                                   |                     | 0.101<br>(0.081)    |                               |                     | 0.096<br>(0.089)     |
| Administrative & Support Services  |                                   |                     | 0.160<br>(0.123)    |                               |                     | -0.016<br>(0.101)    |
| Public Administration & Safety   |                                   |                     | 0.321***<br>(0.100) |                               |                     | 0.089<br>(0.101)     |
| Education & Training   |                                   |                     | 0.249*<br>(0.142)   |                               |                     | -0.038<br>(0.118)    |
| Health Care & Social Assistance  |                                   |                     | -0.203<br>(0.125)   |                               |                     | -0.303***<br>(0.111) |
| 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  | 0.251                             | 0.387               | 0.416               | 0.271                         | 0.313               | 0.318                |
| Observations   | 315                               | 315                 | 315                 | 315                           | 315                 | 315                  |

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  | -0.173***<br>(0.029)              | -0.073***<br>(0.028) | -0.064**<br>(0.028)  | -0.081***<br>(0.027)          | -0.048<br>(0.029)    | -0.045<br>(0.029)    |
| Years 6 to 10  | -0.103***<br>(0.030)              | -0.112***<br>(0.028) | -0.107***<br>(0.029) | -0.149***<br>(0.025)          | -0.151***<br>(0.025) | -0.152***<br>(0.026) |
| Years 11 and 12  | 0.041<br>(0.039)                  | 0.046<br>(0.037)     | 0.031<br>(0.036)     | -0.057*<br>(0.032)            | -0.056*<br>(0.033)   | -0.069**<br>(0.033)  |
| Overseas at least 6 months in year relative to NCEA level 2:                       |                                   |                      |                      |                               |                      |                      |
| Any year 3 to 5  | -0.006<br>(0.072)                 | 0.071<br>(0.072)     | 0.079<br>(0.070)     | -0.048<br>(0.065)             | -0.026<br>(0.065)    | -0.016<br>(0.065)    |
| Any year 6 to 10   | 0.048<br>(0.061)                  | 0.075<br>(0.060)     | 0.068<br>(0.061)     | -0.002<br>(0.060)             | 0.001<br>(0.059)     | -0.003<br>(0.061)    |
| Year 11 or 12  | 0.154**<br>(0.077)                | 0.164**<br>(0.075)   | 0.155**<br>(0.076)   | 0.253***<br>(0.077)           | 0.260***<br>(0.077)  | 0.257***<br>(0.078)  |
| Years of work experience in years 1 to 5 after NCEA level 1 (omitted category: 0): |                                   |                      |                      |                               |                      |                      |
| 1  |                                   | -0.032<br>(0.049)    | 0.037<br>(0.044)     |                               | -0.048<br>(0.052)    | -0.051<br>(0.049)    |
| 2  |                                   | -0.011<br>(0.052)    | 0.058<br>(0.049)     |                               | -0.000<br>(0.057)    | -0.015<br>(0.054)    |
| 3  |                                   | 0.039<br>(0.062)     | 0.117**<br>(0.057)   |                               | 0.057<br>(0.063)     | 0.045<br>(0.059)     |
| 4  |                                   | 0.084<br>(0.060)     | 0.181***<br>(0.056)  |                               | 0.040<br>(0.065)     | 0.025<br>(0.060)     |
| 5  |                                   | 0.298***<br>(0.064)  | 0.372***<br>(0.061)  |                               | 0.118*<br>(0.061)    | 0.092<br>(0.058)     |
| Any work experience in years 1 to 5 in:  |                                   |                      |                      |                               |                      |                      |
| Central government   |                                   | 0.188***<br>(0.060)  |                      |                               | 0.059<br>(0.057)     |                      |
| Medium-sized firm (10-99 employees)  |                                   | 0.023<br>(0.043)     |                      |                               | -0.015<br>(0.040)    |                      |
| Large firm (100+ employees)  |                                   | 0.076*<br>(0.042)    |                      |                               | 0.009<br>(0.040)     |                      |
| Manufacturing  |                                   |                      | 0.019<br>(0.058)     |                               |                      | 0.036<br>(0.056)     |
| Wholesale Trade  |                                   |                      | -0.051<br>(0.069)    |                               |                      | 0.022<br>(0.070)     |
| Retail Trade   |                                   |                      | -0.029<br>(0.039)    |                               |                      | -0.012<br>(0.039)    |
| Accommodation & Food Services  |                                   |                      | -0.083**<br>(0.042)  |                               |                      | -0.035<br>(0.042)    |
| Professional, Scientific, and Technical Services                                   |                                   |                      | 0.080<br>(0.060)     |                               |                      | 0.090<br>(0.056)     |
| Administrative & Support Services  |                                   |                      | 0.039<br>(0.063)     |                               |                      | 0.017<br>(0.061)     |
| Public Administration & Safety   |                                   |                      | 0.152**<br>(0.074)   |                               |                      | 0.063<br>(0.070)     |
| Education & Training   |                                   |                      | 0.095<br>(0.071)     |                               |                      | 0.140*<br>(0.071)    |
| Health Care & Social Assistance  |                                   |                      | 0.010<br>(0.060)     |                               |                      | 0.003<br>(0.055)     |
| 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  | 0.185                             | 0.301                | 0.299                | 0.288                         | 0.305                | 0.315                |
| Observations   | 651                               | 651                  | 651                  | 651                           | 651                  | 651                  |

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: \*  $p < 0.10$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$ .

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