

5 Results

This section will contain all insights that came from the analysis of the dataset at hand. We will see the relation between the explanatory variables and the electronic banking adoption variable. More specifically, it will address the research question about the relationship between electronic banking adoption and the distance to the bank branch. Following the research methodology, formulated in the preceding section, the results are presented in form of t-tests, as well as various regression models. We will start the discussion with the findings from our t-tests.

5.1 t-Tests

As we have seen in the research methodology section we run different kinds of t-tests to examine our hypotheses. We structure this subsection along those hypotheses.

Males are more likely to adopt electronic banking In order to check this hypothesis we check for differences in the mean of our outcome variable across the the two sexes. The p -value of 0.0000 is smaller than our confidence level of 0.01 and we find a t -statistic of -14.6415. Therefore, we can reject our null hypothesis in favour of the alternative hypothesis that the fraction of e-banking adopters is larger for males. The 99% confidence interval for the likelihood of adopting electronic banking for a male is 52.25%-54.32%, compared to the one for females 44.05%-46.08%. Consequently, with 99% certainty, we can conclude that our first hypothesis holds true within the sample at hand and males are indeed more likely to adopt electronic banking.

Age has a negative effect on electronic banking adoption We address this hypothesis by looking at the average age within the the groups of electronic banking users and others. With a t -statistic of 33.5096 and a p -values of 0.0000 we are able to reject the null hypothesis in favour of our working hypothesis that the average age within the group of e-banking adopters is significantly lower compared to the others. The 99% confidence intervals lets us conclude that the mean age is somewhere between 38.21 and 38.96 for the e-banking users and between 45.77 and 46.66 for the others.

Larger distances to a bank branch are positively correlated with electronic banking adoption In order to test this hypothesis we first check for differences in the mean distance between e-banking users and others. For the sake of better comprehensibility one can find the t -statistics, p -values as well as the conclusion for each t-test concerning the four distance measures in table 5.1 below. All these t-test are conducted with regard to our third null hypothesis, stating that there is no difference in the mean distance between e-banking users and other. Besides, one can also observe the previously mentioned results concerning sex and age in table 5.1.

All in all, we can say that all t-tests regarding our distance measures give us conclusive evidence that our third hypothesis seems to be valid on the 99% confidence level. However, regarding our test for differences in the mean of the e-banking dummy across municipalities with a bank branch and the others we find opposing evidence. On the 99% confidence level we are only able to reject the null hypothesis when we look at the fraction of e-banking users in Vaduz in comparison to the others. There we find a t -statistic of 6.6973 and a corresponding p -value of 0.000, which lets us conclude that the share of electronic banking adopters in Vaduz is indeed smaller then in the other municipalities. This is in line with our third hypothesis that larger distances are associated with a higher e-banking adoption. Nonetheless, we do not find this for the other two municipalities with a bank branch Eschen and Balzers. There, we cannot reject the null hypothesis.