Robustness Checks

The robust standard errors on the coefficient on Chinese investment need to be analyzed in tandem with the regular unclustered standard errors because there are only 5 switchers in this data set. The small sample size for Chinese investment can cause issues with how robust standard errors are calculated when the intra-cluster correlation is negative. The result that causes some skepticism is the regular standard error of EPS in Table 8 is measured to be 1.273, while, when robust standard or clustered error are applied, the standard error drops to .0373, causing the coefficient to be significant at a p-value of .1. Therefore, when analyzing these tables, I would recommend looking at both clustered and unclustered because the standard errors for coefficients on Singapore and American investment will get smaller, while the coefficient on Chinese investment will get bigger. The coefficients on Net Income are significant at a p-value of .05 in the 2-way fixed effects with regular standard errors (Tables 6 and 8), while in the regressions with robust standard errors, the coefficients on Net Income for Chinese investment are significant at a p-value of .01. Because these coefficients are significant in both tables, we can feel more confident in these point estimates. Looking at a firm’s financial indicators, there is little movement between these indicators from year to year. Revenue, Net income, Market Capitalization, and others are correlated with the previous periods measurement. On average in the United States, a successfully growing firm will see their revenue increase by 10% to 20% per year. Thus, including cluster standard errors will penalize my statistical significance on my coefficients if there is autocorrelation within units.

The second robustness check is on the parallel trends assumption, specifically on Net Income. Event Study’s graphs for Looking at the event study graphs, figures 1 through 10. Some of the parallel trends assumptions holds better than others, but most importantly, we see that in Figure 7 to Figure 10. The parallel assumptions does hold for the analysis of Chinese income on

One nuance about entry into the treatment is that by the time the company reports their financials. The investors had likely already been invested in the company between an day and a year prior to the report. Thus, the treatment effect is measured at zero, but entry into the treatment happens somewhere between -1 and 0 on this event study graph as opposed to 0 and 1. In figures 7 and 9, we see that year 0 has a bit of a dip, but this dip could not have driven entry into treatment because investors already owned part of the company by the time these financials were reported. Despite this bit of a dip, the parallel assumption does hold across these graphs. The lags for Chinese investment on Net income are all statistically insignificant. To be thorough, we can test this with the following estimation equation.