1. A referee report/ critical assessment

"The Effect of Income on Religiousness" by Thomas Buser

Summary. What are the factors in religion or spending time in religious activities that bring utility to individuals? There are three main reasons to be religious (Azzi and Ehrenberg, 1975): First, it is the salvation motive or afterlife consumption. Second, the consumption motive meaning deriving current satisfaction from religious activities based on beliefs and social reasons. Third, social motive (Azzi & Ehrenberg, 1975) meaning by the environment and believe that participation in religious activities will increase the probability of success in business.

Attendance is one of the way of measuring the religiosity. Income often correlates with the utility via consumption (Heady, Muffels, & Wooden, 2007). The main author's contribution is to show that income effects religiosity even in traditional Catholic regions where salvation motive is seems to have a big role. The paper shows that the rapid expansion of Evangelical churches into Latin America fits the general pattern where successful and fast-expanding religions tend to be above average severe, more sectarian, religious conservative, and demanding in terms of financial and time contributions (Iannaccone 1998). Latin American has recently experienced a dramatic shift away from Catholicism towards Evangelical denominations (Levine 2009) and those new Evangelical churches specifically has as a goal for the poor and lower middle class households. The Evangelical communities are very diverse; all are smaller, more tightly integrated, and more attended than the official Catholic Church.

The question how could income affect denomination and church attendance, the answer of Buser (2015) was that churches can be modelled as social clubs with donation as a fee for increasing social utility. How income affects religious behavior and affiliation is an especially important question for developing countries which experience a growth for the average incomes of poor and lower middle class households. As far as these families became richer, it will have an impact on the way of society's development whether these families will become more or less religious, or even change their religion. It was used self-collected survey data from Ecuador to measure effect of income on religiousness. Dataset consists of relatively poor households who

spend all their (monthly) income. Religiousness is measured both by self-assessment on the scale from 0 to 10 (variable religiousness), and by the number of religious services that are attended in a month (variable attendance). As a source of exogenous income variation author used a change in the eligibility criteria for a government cash transfer in Ecuador for poor families and finds a positive relationship between non-labor income and religious participation. It was applied RD design with several robustness checks to estimate causal effects and found significant effects of income on religiousness. Families with more income are more religious and go to the church more often (variable attendance). They are also more likely are the members of an Evangelical community rather than of the mainstream Catholic Church.

Research questions. The paper gives the answer to several research questions. Do people become more or less religious as they become richer? Do people change their religion as they become richer? Do people increase or decrease church attendance as they become richer? The paper was the first to provide credible causal estimates of both positive and negative income shocks on church membership and attendance at the household level. As the result, it was founded positive and sizable effects of income on church attendance and religious denomination. To estimate the effect of income on religious attendance, Buser (2015) exploits a feature of a cash transfer program: families who are below a threshold on a poverty index are eligible for a cash transfer. The index variable called -selben2- and the threshold is at fortieth percentile. The estimation approach consists of comparing people around the threshold. The variable -eligible- equals one if a family's index is below the threshold, and is zero otherwise. On average, the size of the transfer (income shock) is about 12 percent of family income. The choice of the fuzzy vs. sharp design was because not all families who are eligible for transfer collection, do this. It was used several validity checks for the chosen methods, such that F-statistics for the first stage controlling for the first, second, and third degree polynomials and the check of whether included variables shows a discontinuity at the threshold, as well as sensitivity check to the bandwidth choice.

Limitations. The paper uses national INEC data set from the Institute of Statistics for the whole population (14 mln) above the age 16 divided into five large cities with 72 % as urban, 76 %

are Catholics and 10 % are non-Catholic (Evangelical) Christian Denomination. Non-Catholic community have been active in Ecuador since the late nineteenth century, but the numbers of their followers remained marginal until fairly recently. As a source of exogenous income change, the cash transfer program Bono Desarallo Humano (BDH) was used. The program has started from 2003 and is aimed to the poorest 40 % of the households. Eligibility for the BDH is determined by the households' percentile on a wealth index (SELBEN) based on a range of observable variables. In 2007-2008 the definition of the index was changed (SELBEN II) which led to changes in eligibility for many households close to the cutoff 40 percentile. Some households who had received the transfer for over seven years suddenly lost it while others suddenly gained it. Therefore, the most reasonable was to use fuzzi RD design to check discontinuities at the cut-off.

For data collection, it was randomly sampled households from poor neighborhoods in three urban centers (Guayaquil, Quito, and Santo Domingo) using the SELBEN II dataset. The sampling frame consisted of the following households scored within 0.3 SD of the threshold on SELBEN II; they were single-core households so that the sample only contained households, which, if eligible, receive the transfer exactly once; located in those three urban centers; complied with their status of receiver or non-receiver before the change was implemented.

The choice of SELBEN II as an instrument is justified by following reasons. The BDH program is not conditional on certain expected recipients behavior. SELBEN was re-estimated, not all other recipients continues to receive it, and those who did not receive it before, started to do it.

Empirical substance of the econometric analysis - weaknesses and strong points and important assumptions and modeling decisions

RD analysis can be characterized in at least two different ways: (1) as “discontinuity at a cut-point” (Hahn, Todd, and van der Klaauw, 1999) or (2) as “local randomization” (Lee and Lemieux 2009). The discontinuity at a cut-point focuses on the jump which direction and magnitude is a direct measure of the causal effect of the treatment on the outcome for candidates near the threshold. Local randomization is based on the premise that differences between

candidates who just miss and just make a threshold are random. All these factors justifies the choice of fuzzi RD design.

Validity. To contribute to the validity of the study, households must not be able to precisely manipulate the assignment variable (Lee and Lemieux 2009), so that near the cutoff every household has the same chance to have a score just above and just below the cutoff. In this survey this assumption is not a strong one as neither the weights of the variables nor the cutoff score were public information at the time the households were visited. The data from the distribution of SELBEN II scores shows that there is indeed no indication of bunching near the threshold. Sampling frame ensures that all households in the sample complied with their status of recipient or non-recipient before the change.

Use subsample. The paper has shown that Evangelicals tend to go to church more often than people adhering to other religions. This leads to the question whether the observed shift to Evangelical churches is enough to explain the effect of income on church attendance. Given that the income shock has no impact on self-rated religiousness, Buser (2015) has splited the sample into below and above average religious families and apply RD design to each subsample. It was assumed symmetry in analysis, i.a. effect of losing income is the exact opposite of the effect of gaining income. Then the author has relaxed this assumption by splitting the sample into those who received the transfer before the change and those who did not receive the transfer before the change (i.e., comparing those who newly gained it to those who continued without the transfer). The survey data does not contain information on potential pathways for the effects of income on attendance and denomination that remains any discussion of the mechanisms behind the results speculative.

The strong points of the study. Doing survey based with use of different subsamples (groups), and possibility for the asymmetric effect of the positive and negative shocks give strong points to study. Vast validity checks, i.e. sensitivity checks for bandwidth choice, first stage regression, distribution check of the running variable, etc. Including of polynomials and controls into the regression provides a test for the robustness of results.

The weak points of the study. We can say nothing about external validity but only about

internal validity. As was mentioned before the survey has very strong internal validity due to several robustness checks and due to chosen design. It was possible to use another method for study, such that local linear regression, IV design, propensity score matching as there is rich dataset. As far as only mothers has been interviewed, they are not fully representative of the population.

Suggestions for the future analysis. There two important theories of religiosity are the secularization hypothesis and the religion-market model. According to the demand-side theory, economic development reduces religious participation and beliefs. According to the supply-side theory, religiosity depends on the presence of a state religion, regulation of the religion market, suppression of organized religion under Communism, and the degree of religious pluralism. In accordance with the secularization view, economic development measure by per capita GDP tends to reduce religiosity. Moreover, instrumental estimates suggest that this link reflects causation from economic development to religiosity, rather than the opposite. Although religiosity declines overall with economic development, the nature of the interaction varies with the dimension of development. For example, religiosity can positively related to education and the presence of children and negatively related to urbanization.

Buser (2015) found that moderate differences in income had significant effects on the number of times families attended religious services and the kind of church that they attended. A higher income was positively related to frequency of religious service attendance and increased the likelihood of joining Evangelical communities (Buser 2015). Meanwhile he argues that church activities and Evangelical communities, may have been previously unavailable to less affluent families due to an emphasis on donation or other cultural, monetary aspects of religion. That is the reason why income and religious service attendance are positively correlated. Buser's (2015) results show that higher income leads to more religious participation contrary the cross-country studies showed that national income is negatively correlated with religious participation. In reconciliation of these two diverging findings, Buser (2015) posits that as societies develop, the national income rises with the average level of education, and it is the combination of the two that leads to less religiousness. Findings of the survey suggest that there is a significant

relationship, regardless of the direction, between income and religious affiliation highlighting the monetary aspects of religion what make religiousness costly in time and money and could influence religious mobility. However, income is not the only explanatory factor for religious mobility (Newport 1979). The vast literature on religious mobility in and outside of the United States, it can suggested other factors to be significant predictors of religious mobility. It can be higher education measure in years of education, economic mobility that can be measured by economic immigration, higher income, exogamy, being younger (younger people tend to be less religious), urban vs. rural individuals, being female vs. male. It could be interesting to investigate what other factors can lead to church mobility using other variables and undertake several checks to improve validity.

2. ***Replication of Tables and Figures (except figure 1 and 2)***

I cannot use command "eststo" to store results and then to move then into "estadd" to make tables. The reason that I do not do any estimates. That is why the descriptive statistics will be done in word using Stata output. Finally, the table has been replicated in the following way:

For the construction of the first table, one would need to create frequency tables which display the values of a group variable, weighted with the number of occurrences of each single value. The eligibility change divides households into four groups: winners losers always-winners always-losers. It was use tab both for winner and losers to show frequency statistics for each

```
tab group
tab losers
tab winners
```

type of the group variables and total number of frequesises and then merging the table into the one in the word.

/Table 2 - Descriptive statistics

To replicate Tables 2 as well table 3 it has been used to datasets - itself data.dta and inec.dta obtained from website of the National Institute of Statistics (INEC) of Ecuador to Calculate descriptive statistics reported in the paper.. To replicate Table 2 for self-collected data (column 2

and 3 of the table) was used the same tab command as in Table 1 to receive description statistic for each variable. The same command tab was used to see the descriptive statistics with denomication variable to find out that is religion is in the household practices and then generated dummi denomination variable. The same was done with var attendance, i.e. how often is a church visit and generation of its dummi variable.

```
tab denomination, gen(denominationx)
tab attendance, gen(attendancex)
```

To simplify construction of the tables and to make results more readable, all variables are labeled:

Then it was prepared summary statistics.

```
label var denominationx1 "Catholic"
label var denominationx2 "Non-catholic christian"
label var denominationx3 "Jewish"
label var denominationx4 "Atheist/none"
label var denominationx5 "Other
```

Table 3 - Church attendance by denomination (Percentages)

Table 3 shows attendance figures separately for Evangelicals and for the rest of the sample. The table also shows the corresponding numbers for the urban population from the INEC survey. Here we tabulate attendance of Evangelical church (protestant) suppressesing the printing of the frequencies in columns sorting by protestant to see frequencies of attendance per month if protestant and if not protestant. Then summarizing all attendances per month.

```
tab attendance protestant, col nof
bysort protestant: sum attendpermonth
```

Graphs 3. First Stage.

Figure 3 shows collection rates left and right of the cutoff. Compliance rates are high: 97 percent of ineligible households do not collect the transfer while 86 percent of eligible households collect their BDH transfer. transfer.BDH (cash transfer program) = $\partial 0 + \partial 1$eligible + $\partial 2$selben2

where -collect- equals one if families collect the cash transfer and is zero otherwise.

There are several ways to replicate the results tables 3,4,5, and RD graphs. I would do it using programs (loops) to make it easier to construct graphs. Obtained data can be used to build the same tables in Word. First we need to clean inec data and generate additional variables..

```
use INEC.DTA
// generate and clean the data
gen protestant=(RE02==2|RE02==10|RE02==11|RE02==12)
replace protestant=. if mi(RE02)
gen religious=RE03
replace religious=. if RE03==99
gen female=p02==2
gen mother=female==1&(p04==1|p04==2)
gen age=p03 if p03!=99
gen sample=ciudad==90150|ciudad==170150

gen attendance=7 if  RE05==2
replace attendance=6 if  RE05==1
replace attendance=5 if  RE05==4
replace attendance=4 if  RE05==3
replace attendance=3 if  RE05==5
replace attendance=2 if  RE05==6
replace attendance=1 if  RE05==7
label define attend 7 "More than once a week" 6 "Once a week" 5 "More than once a month" 4 "Once a month" ///
                3 "Once a year" 2 "On special occasions" 1 "Never"
label values attendance attend

gen religion=1 if RE02==1
replace religion=2 if protestant==1
replace religion=3 if RE02==9
replace religion=4 if RE02==13|RE02==15
replace religion=5 if RE02==3|RE02==4|RE02==7|RE02==8|RE02==14
label define religion 1 "Catholic" 2 "Non-catholic christian" 3 "Jews" 4 "Atheists/none" 5 "Other"
label values religion religion
save "M:\ECON5106\Prosjekt_2018\INEC2.dta", replace
```

To build to comparable datasets as in table 2 I also need to generate some other variables and make descriptive.

Then we make regression tables for these discriptives.

```
**Regression table for online appendix:
eststo clear
eststo: reg protestant female age if sample==1 & Quintile==2 , r
eststo: reg protestant female age i.Quintiles, r
esttab, b(3) se(3) nogaps compress drop(1.Quintiles)
eststo clear
```

```
**Descriptives:

tab religion if sample==1 & Quintile==2
tab religion
tab attendance if sample==1 & Quintile==2
tab attendance
tab attendance protestant if sample==1 & Quintile==2, col nofreq
tab attendance protestant, col nofreq
sum religious if sample==1 & Quintile==2
sum religious

tab protestant Quintiles, col
```

Then we construct table 4. Table 4 presents IV regressions results: effects of eligibility for cash transfer given homogeneous and symmetric effect. The Table consists of several IV 2SLS regressions that can be later make as a loop. Variables in use are: *score2_1* (SELBEN II score), *moremoneyold* (dummy for having received the BDH before change), *collect_2* (dummy for receiving the monthly transfer). Collect_2 is instrumented by - moremoneynew- , the binary variable of having SELBEN II below cutoff). Other variables are *ageresponder* (age of responders), *householdsize* (household size), *schooling_resp* (years of the schooling for head of householders). Several covariates are included into the analysis to check whether observed characteristics influence results and for the results robustness check.

There following steps that lying inside IV 2SLS method:

The first stage is the regression of endogenous variables on the instrument:

$$collect\_2_i = a_0 + a_1 moremoneynew_i + u_i$$

The second stage – regression of the results from 1st stage on assignment variable, covariates, several polynomials. 1st-ordered polynomial) is calculated by the following way:

$$attendpermonth_i = a_0 + a_1\, score2\_1_i + a_2 moremoneyold_i + a_3 collect\_2_i + e_i$$

2nd-ordered polynomial is calculated by the following way:

$$attendpermonth = a_0 + a_1\, score2\_1_i + a_2 moremoneyold_i + a_3 collect\_2_i + a_4 score2\_1sq_i + e_i$$

3nd-ordered polynomial is calculated by the following way:

$$attendpermonth = a_0 + a_1\, score2\_1_i + a_2 moremoneyold_i + a_3 collect\_2_i + a_4 score2\_1sq_i + a_5 score2\_1cu_i + e_i$$

Results in the Table 4 give the effect of income on church attendance, being Evangelical, and self-rated religiousness for compliers. The assignment variable SELBEN II is included into the equation to correct on observables possible selection bias.

Table 5 shows Results from IV regression: effect of eligibility for cash transfer (sample split by religiousness). Figure 3 compares compliance rate and gives results of whether there is a discontinuity at the cutoff. Figure 3 shows that there is discontinuity near threshold. The figure shows the proportion of households who collect the BDH above and below the cutoff. Observations divided into bins with a width of 0.4 points and the SELBEN II score is normalized to be zero at the cutoff. Households to the left of the cutoff are eligible to receive the transfer while those to the right are not. Figure 3 can be done by to methods – by parametric as it was done by Buser (2015), or by nonparametric using command rdplot. This method (parametric) estimates the effect near the cut-off and uses all available information from the sample as a function of the assignment variable and treatment status. Figure 4,5,6 is can be built identically.

Figur 4 shows that there is no gap at the threshold and the coefficients reported in table 4 are small (equal to around 10 % of a SD) and insignificant. In the Figure 5 Buser (2015) relax assumption about homogeneous effect of the income shock on the attendance and being Evangelical.

```
// Table 4
ivregress 2sls attendpermonth score2_1 moremoneyold (collect_2=moremoneynew), vce(cluster parroqui)
ivregress 2sls attendpermonth score2_1 score2_1sq moremoneyold (collect_2=moremoneynew), vce(cluster parroqui)
ivregress 2sls attendpermonth score2_1 score2_1sq score2_1cu moremoneyold (collect_2=moremoneynew), vce(cluster parroqui)
ivregress 2sls attendpermonth score2_1 ageresponder householdsize schooling_resp moremoneyold (collect_2=moremoneynew), vce(cluster parroqui)
ivregress 2sls attendpermonth score2_1 score2_1sq ageresponder householdsize schooling_resp moremoneyold (collect_2=moremoneynew), vce(cluster parroqui)
ivregress 2sls attendpermonth score2_1 score2_1sq score2_1cu ageresponder householdsize schooling_resp moremoneyold (collect_2=moremoneynew), vce(cluster parroqui)

ivregress 2sls protestant score2_1 moremoneyold (collect_2=moremoneynew), vce(cluster parroqui)
ivregress 2sls protestant score2_1 score2_1sq moremoneyold (collect_2=moremoneynew), vce(cluster parroqui)
ivregress 2sls protestant score2_1 score2_1sq score2_1cu moremoneyold (collect_2=moremoneynew), vce(cluster parroqui)
ivregress 2sls protestant score2_1 ageresponder householdsize schooling_resp moremoneyold (collect_2=moremoneynew), vce(cluster parroqui)
ivregress 2sls protestant score2_1 score2_1sq ageresponder householdsize schooling_resp moremoneyold (collect_2=moremoneynew), vce(cluster parroqui)
ivregress 2sls protestant score2_1 score2_1sq score2_1cu ageresponder householdsize schooling_resp moremoneyold (collect_2=moremoneynew), vce(cluster parroqui)

ivregress 2sls religiousness score2_1 (collect_2=moremoneynew), vce(cluster parroqui)
ivregress 2sls religiousness score2_1 score2_1sq (collect_2=moremoneynew), vce(cluster parroqui)
ivregress 2sls religiousness score2_1 score2_1sq score2_1cu (collect_2=moremoneynew), vce(cluster parroqui)
ivregress 2sls religiousness score2_1 ageresponder householdsize schooling_resp moremoneyold (collect_2=moremoneynew), vce(cluster parroqui)
ivregress 2sls religiousness score2_1 score2_1sq ageresponder householdsize schooling_resp moremoneyold (collect_2=moremoneynew), vce(cluster parroqui)
ivregress 2sls religiousness score2_1 score2_1sq score2_1cu ageresponder householdsize schooling_resp moremoneyold (collect_2=moremoneynew), vce(cluster parroqui)
```

```
/// Table 5. Attendance
ivregress 2sls attendp score2_1 moremoneyold (collect_2=moremoneynew) if religiousness>=6.827599, vce(cluster parroqui)
ivregress 2sls attendpermonth score2_1 score2_1sq moremoneyold (collect_2=moremoneynew) if religiousness>=6.827599, vce(cluster parroqui)
ivregress 2sls attendpermonth score2_1 score2_1sq score2_1cu moremoneyold (collect_2=moremoneynew) if religiousness>=6.827599, vce(cluster parroqui)
ivregress 2sls attendpermonth score2_1 ageresponder householdsize schooling_resp moremoneyold (collect_2=moremoneynew) if religiousness>=6.827599, vce(cluster parroqui)
ivregress 2sls attendpermonth score2_1 score2_1sq ageresponder householdsize schooling_resp moremoneyold (collect_2=moremoneynew) if religiousness>=6.827599, vce(cluster parroqui)
ivregress 2sls attendpermonth score2_1 score2_1sq score2_1cu ageresponder householdsize schooling_resp moremoneyold (collect_2=moremoneynew) if religiousness>=6.827599, vce(cluster parroqui)
ivregress 2sls attendp score2_1 moremoneyold (collect_2=moremoneynew) if religiousness<6.827599, vce(cluster parroqui)
ivregress 2sls attendpermonth score2_1 score2_1sq moremoneyold (collect_2=moremoneynew) if religiousness<6.827599, vce(cluster parroqui)
ivregress 2sls attendpermonth score2_1 score2_1sq score2_1cu moremoneyold (collect_2=moremoneynew) if religiousness<6.827599, vce(cluster parroqui)
ivregress 2sls attendpermonth score2_1 ageresponder householdsize schooling_resp moremoneyold (collect_2=moremoneynew) if religiousness<6.827599, vce(cluster parroqui)
ivregress 2sls attendpermonth score2_1 score2_1sq ageresponder householdsize schooling_resp moremoneyold (collect_2=moremoneynew) if religiousness<6.827599, vce(cluster parroqui)
ivregress 2sls attendpermonth score2_1 score2_1sq score2_1cu ageresponder householdsize schooling_resp moremoneyold (collect_2=moremoneynew) if religiousness<6.827599, vce(cluster parroqui)
/// Being evangelical
ivregress 2sls protestant score2_1 moremoneyold (collect_2=moremoneynew) if religiousness>=6.827599, vce(cluster parroqui)
ivregress 2sls protestant score2_1 score2_1sq moremoneyold (collect_2=moremoneynew) if religiousness>=6.827599, vce(cluster parroqui)
ivregress 2sls protestant score2_1 score2_1sq score2_1cu moremoneyold (collect_2=moremoneynew) if religiousness>=6.827599, vce(cluster parroqui)
ivregress 2sls protestant score2_1 ageresponder householdsize schooling_resp moremoneyold (collect_2=moremoneynew) if religiousness>=6.827599, vce(cluster parroqui)
ivregress 2sls protestant score2_1 score2_1sq ageresponder householdsize schooling_resp moremoneyold (collect_2=moremoneynew) if religiousness>=6.827599, vce(cluster parroqui)
ivregress 2sls protestant score2_1 score2_1sq score2_1cu ageresponder householdsize schooling_resp moremoneyold (collect_2=moremoneynew) if religiousness>=6.827599, vce(cluster parroqui)
ivregress 2sls protestant score2_1 moremoneyold (collect_2=moremoneynew) if religiousness<6.827599, vce(cluster parroqui)
ivregress 2sls protestant score2_1 score2_1sq moremoneyold (collect_2=moremoneynew) if religiousness<6.827599, vce(cluster parroqui)
ivregress 2sls protestant score2_1 score2_1sq score2_1cu moremoneyold (collect_2=moremoneynew) if religiousness<6.827599, vce(cluster parroqui)
ivregress 2sls protestant score2_1 ageresponder householdsize schooling_resp moremoneyold (collect_2=moremoneynew) if religiousness<6.827599, vce(cluster parroqui)
ivregress 2sls protestant score2_1 score2_1sq ageresponder householdsize schooling_resp moremoneyold (collect_2=moremoneynew) if religiousness<6.827599, vce(cluster parroqui)
ivregress 2sls protestant score2_1 score2_1sq score2_1cu ageresponder householdsize schooling_resp moremoneyold (collect_2=moremoneynew) if religiousness<6.827599, vce(cluster parroqui)
```

Given that the income shock has no impact on self-rated religiousness, we can split the sample into below and above average religious families and apply our regression discontinuity strategy to each subsample. Thus, the Figure 5 shows relationship between SELBEN II score and monthly church attendance, being Evangelical to the left and right of the cutoff point. The observations are divided into two groups: below and above averaged of self-religiousness. Panel A and C of Figure 5 shows that there is a clear discontinuity at the threshold. Panel B and D shows that there is no clear discontinuity at the threshold.

Thus, we can estimate the effect of income shocks on four different subgroups - always receives, non-receivers, those who lose transfer (negative shock) and those who gained transfers (positive shock). Later Buser (2015) relaxes assumption about symmetric effect of the negative and positive shock and checks whether there is an asymmetry in responses to the different shocks. To replicate Figure 6 with results from IV regressions from Table 6 for regression discontinuity graphs (positive vs negative shocks) the additional variables were generated. Figure 6 shows regressions discontinuity graphs for these subsamples. For the positive shock, those to the left of the cutoff newly gained the transfer while those to the right never received it. For the negative shock, those to the left of the cutoff kept receiving the transfer after the change while those to the right lost it.

```
// Table 6. Effect of eligibility for cash transfer
gen scorewin_sq=scorewin*scorewin
gen scorewin_cu=scorewin^3
gen scorelose_sq=scorelose*scorelose
gen scorelose_cu=scorelose^3
ivregress 2sls attendwin scorewin (collect_2=moremoneynew), vce(cluster parroqui)
ivregress 2sls attendwin scorewin scorewin_sq (collect_2=moremoneynew), vce(cluster parroqui)
ivregress 2sls attendwin scorewin scorewin_sq scorewin_cu (collect_2=moremoneynew), vce(cluster parroqui)
ivregress 2sls attendwin scorewin ageresponder householdsize schooling_resp (collect_2=moremoneynew), vce(cluster parroqui)
ivregress 2sls attendwin scorewin scorewin_sq ageresponder householdsize schooling_resp (collect_2=moremoneynew), vce(cluster parroqui)
ivregress 2sls attendwin scorewin scorewin_sq scorewin_cu ageresponder householdsize schooling_resp (collect_2=moremoneynew),
vce(cluster parroqui)
ivregress 2sls atendlose scorelose (collect_2=moremoneynew), vce(cluster parroqui)
ivregress 2sls atendlose scorelose scorelose_sq (collect_2=moremoneynew), vce(cluster parroqui)
ivregress 2sls atendlose scorelose scorelose_sq scorelose_cu (collect_2=moremoneynew), vce(cluster parroqui)
ivregress 2sls atendlose scorelose ageresponder householdsize schooling_resp (collect_2=moremoneynew), vce(cluster parroqui)
ivregress 2sls atendlose scorelose scorelose_sq ageresponder householdsize schooling_resp (collect_2=moremoneynew), vce(cluster parroqui)
ivregress 2sls atendlose scorelose scorelose_sq scorelose_cu ageresponder householdsize schooling_resp (collect_2=moremoneynew),
vce(cluster parroqui)
/// being evangelical
ivregress 2sls protwin scorewin (collect_2=moremoneynew), vce(cluster parroqui)
ivregress 2sls protwin scorewin scorewin_sq (collect_2=moremoneynew), vce(cluster parroqui)
ivregress 2sls protwin scorewin scorewin_sq scorewin_cu (collect_2=moremoneynew), vce(cluster parroqui)
ivregress 2sls protwin scorewin ageresponder householdsize schooling_resp (collect_2=moremoneynew), vce(cluster parroqui)
ivregress 2sls protwin scorewin scorewin_sq ageresponder householdsize schooling_resp (collect_2=moremoneynew), vce(cluster parroqui)
ivregress 2sls protwin scorewin scorewin_sq scorewin_cu ageresponder householdsize schooling_resp (collect_2=moremoneynew), vce(cluster
parroqui)
ivregress 2sls protlose scorelose (collect_2=moremoneynew), vce(cluster parroqui)
ivregress 2sls protlose scorelose scorelose_sq (collect_2=moremoneynew), vce(cluster parroqui)
ivregress 2sls protlose scorelose scorelose_sq scorelose_cu (collect_2=moremoneynew), vce(cluster parroqui)
ivregress 2sls protlose scorelose ageresponder householdsize schooling_resp (collect_2=moremoneynew), vce(cluster parroqui)
ivregress 2sls protlose scorelose scorelose_sq ageresponder householdsize schooling_resp (collect_2=moremoneynew), vce(cluster parroqui)
ivregress 2sls protlose scorelose scorelose_sq scorelose_cu ageresponder householdsize schooling_resp (collect_2=moremoneynew), vce(cluster
parroqui)
/// being evangelical (above average)
ivregress 2sls protwin scorewin (collect_2=moremoneynew) if religiousness>=6.827599, vce(cluster parroqui)
ivregress 2sls protwin scorewin scorewin_sq (collect_2=moremoneynew) if religiousness>=6.827599, vce(cluster parroqui)
ivregress 2sls protwin scorewin scorewin_sq scorewin_cu (collect_2=moremoneynew) if religiousness>=6.827599, vce(cluster parroqui)
ivregress 2sls protwin scorewin ageresponder householdsize schooling_resp (collect_2=moremoneynew) if religiousness>=6.827599, vce(cluster
parroqui)
ivregress 2sls protwin scorewin scorewin_sq ageresponder householdsize schooling_resp (collect_2=moremoneynew) if
religiousness>=6.827599, vce(cluster parroqui)
ivregress 2sls protwin scorewin scorewin_sq scorewin_cu ageresponder householdsize schooling_resp
(collect_2=moremoneynew) if religiousness>=6.827599, vce(cluster parroqui)
ivregress 2sls protlose scorelose (collect_2=moremoneynew) if religiousness>=6.827599, vce(cluster parroqui)
ivregress 2sls protlose scorelose scorelose_sq (collect_2=moremoneynew) if religiousness>=6.827599, vce(cluster parroqui)
ivregress 2sls protlose scorelose scorelose_sq scorelose_cu (collect_2=moremoneynew) if religiousness>=6.827599, vce(cluster
parroqui)
ivregress 2sls protlose scorelose ageresponder householdsize schooling_resp (collect_2=moremoneynew) if
religiousness>=6.827599, vce(cluster parroqui)
ivregress 2sls protlose scorelose scorelose_sq ageresponder householdsize schooling_resp (collect_2=moremoneynew) if
religiousness>=6.827599, vce(cluster parroqui)
ivregress 2sls protlose scorelose scorelose_sq scorelose_cu ageresponder householdsize schooling_resp
(collect_2=moremoneynew) if religiousness>=6.827599, vce(cluster parroqui)
/// self-rated religiousness
ivregress 2sls relwin scorewin (collect_2=moremoneynew), vce(cluster parroqui)
ivregress 2sls relwin scorewin scorewin_sq (collect_2=moremoneynew), vce(cluster parroqui)
ivregress 2sls relwin scorewin scorewin_sq scorewin_cu (collect_2=moremoneynew), vce(cluster parroqui)
ivregress 2sls relwin scorewin ageresponder householdsize schooling_resp (collect_2=moremoneynew), vce(cluster parroqui)
ivregress 2sls relwin scorewin scorewin_sq ageresponder householdsize schooling_resp (collect_2=moremoneynew), vce(cluster
parroqui)
ivregress 2sls relwin scorewin scorewin_sq scorewin_cu ageresponder householdsize schooling_resp
(collect_2=moremoneynew), vce(cluster parroqui)
ivregress 2sls rellose scorelose (collect_2=moremoneynew), vce(cluster parroqui)
ivregress 2sls rellose scorelose scorelose_sq (collect_2=moremoneynew), vce(cluster parroqui)
ivregress 2sls rellose scorelose scorelose_sq scorelose_cu (collect_2=moremoneynew), vce(cluster parroqui)
ivregress 2sls rellose scorelose ageresponder householdsize schooling_resp (collect_2=moremoneynew), vce(cluster parroqui)
ivregress 2sls rellose scorelose scorelose_sq ageresponder householdsize schooling_resp (collect_2=moremoneynew),
vce(cluster parroqui)
ivregress 2sls rellose scorelose scorelose_sq scorelose_cu ageresponder householdsize schooling_resp
(collect_2=moremoneynew), vce(cluster parroqui)
```

Appendix to replication

Table 1 - Number of Observations

		Eligibility before change		
		no	yes	
Eligibility after change	no (nonrecipients)	648	653	1,301
	yes (recipients)	670	674	1,344
		1,318	1,327	2,645

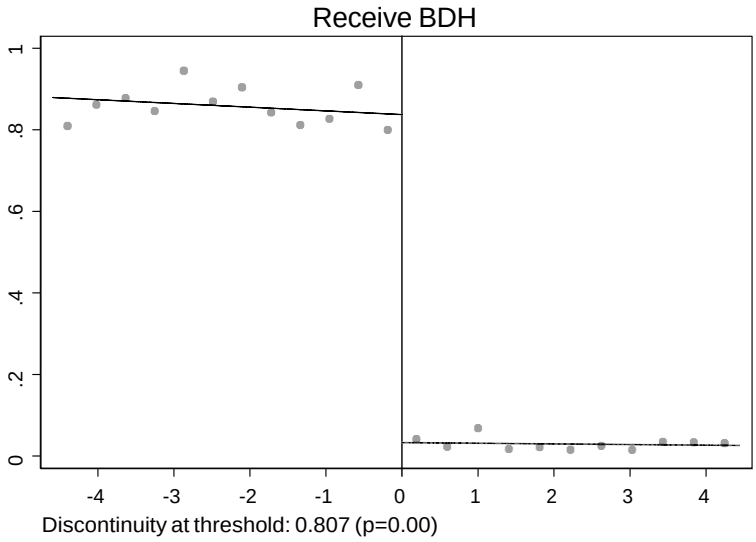


Figure 3. First stage

Table 2 - Descriptive statistics

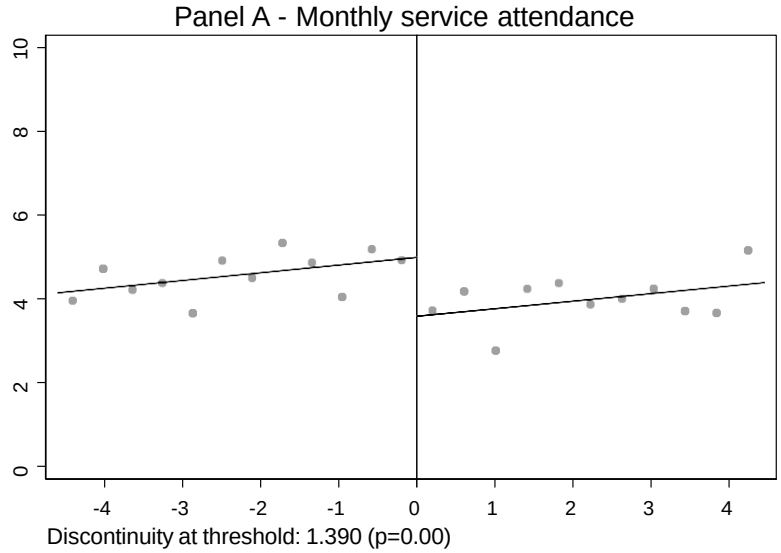
	Sample			INEC survey	
	Observations	Percent		Population 1, %	Population 2, %
Religion:					
Catholic	1,971	74.52		69.73	76.17
Non-Catholic Christian	452	17.09		16.65	10.04
Jewish	2	0.08		0.50	0.24
Atheist/none	53	2.00		8.07	6.57
Other	167	6.31		5.05	6.98
Service attendance:					
Never	192	7.26	Never	7.35	8.17
Only for special occations	310	11.72	Only for special occations	16.68	14.14
Less than once a month	138	5.22	Once a year	7.90	7.68
Once a month	324	12.25	Once a month	21.41	22.53
2 to 3 times a month	507	19.17	More than once a month	7.35	7.79
Once a week	738	27.90	Once a week	30.74	33.52
2 to 3 times a week	257	9.72	More than once a week	8.56	6.16
4 to 6 times a week	106	4.01			
Every day	73	2.76			
	Mean	SD		Mean	Mean
Attendance per month	4.32	6.14			
Religiousness (0-10)	6.83	2.38		6.79 / SD 1.77	6.74 / SD 1.81
Household size	4.46	1.97			
Age responder	42.7	11.04			
Years of schooling of responders	7.4	3.69			
Household expenditure	297	151			

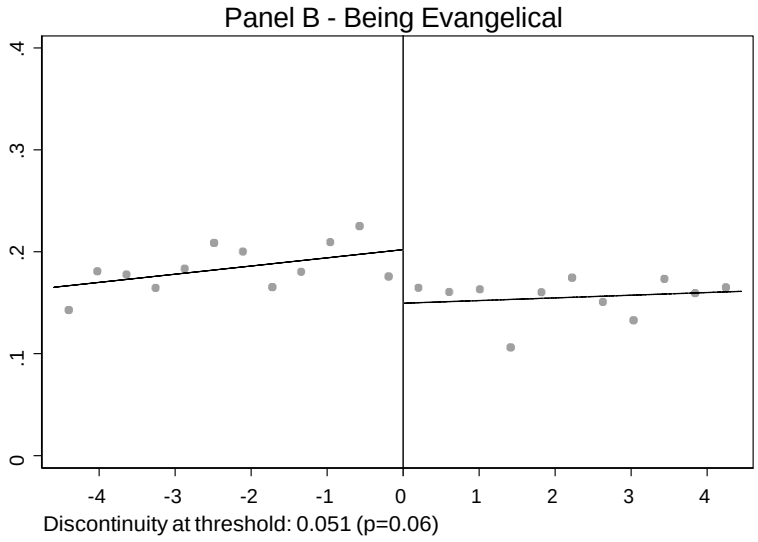
Table 3 - Church Attendance by Denomination

	Sample			INEC Pop 1		INEC Pop 2	
	Evangelical	Rest		Evangelical	Rest	Evangelical	Rest
Never	5.53	7.62	Never	2.42	8.45	1.02	9.03
Only for special occations	5.75	7.62	Only for special occations	7.88	18.63	5.19	15.21
Less than once a month	4.20	5.43	Once a year	1.82	9.25	3.05	8.24
Once a month	5.75	13.59	Once a month	9.70	23.99	9.98	24.04
2 to 3 times a month	9.96	21.07	More than once a month	3.03	8.31	4.99	8.13
Once a week	20.58	29.41	Once a week	42.42	28.15	41.45	32.57
2 to 3 times a week	25.66	6.43	More than once a week	32.73	3.22	34.32	2.78
4 to 6 times a week	11.95	2.37					
Every day	10.62	1.14					
Attendance per month	9.27 (9.34)	3.30 (4.63)					

Table 4 - IV Regression Results: Effects of Eligibility for Cash Transfers

	(1)	(2)	(3)	(4)	(5)	(6)	Observations
Church attendance	1.727*** (0.497)	1.722*** (0.494)	1.524*** (0.903)	1.872*** (0.512)	1.863*** (0.511)	1.634* (0.836)	2645
Being Evangelical	0.066** (0.032)	0.064** (0.032)	0.034 (0.058)	0.071** (0.033)	0.069** (0.033)	0.037 (0.056)	2645
Self-rated religiousness	0.270 (0.174)	0.256 (0.174)	0.314 (0.269)	0.278 (0.171)	0.267 (0.171)	0.350 (0.157)	2645
1st-order polynomial	√			√			
2nd-order polynomial		√			√		
3-rd order polynomial			√			√	
Controls				√	√	√	





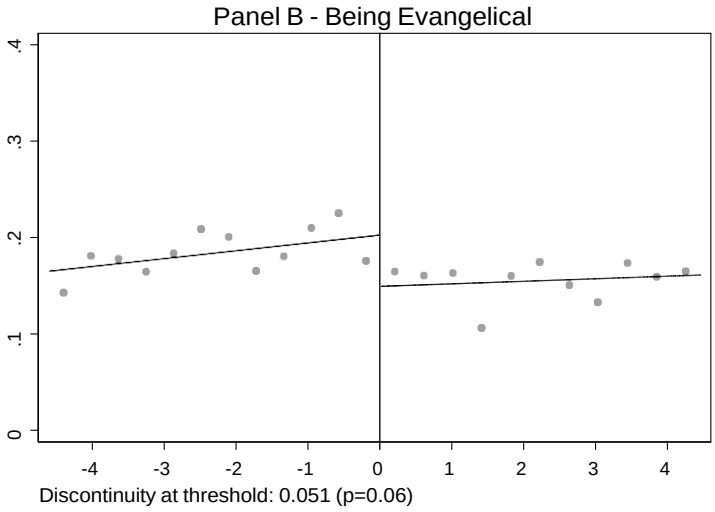


Figure 4. Regression Discontinuity Graphs

Table 5 - IV Regression Results: Effects of Eligibility for Cash Transfers (Sample split by religiousness)

	(1)	(2)	(3)	(4)	(5)	(6)	Observations
Church attendance:	2.456***	2.495***	2.081**	2.617***	2.639***	2.072**	1480
Above average religious	(0.738)	(0.709)	(1.051)	(0.799)	(0.782)	(1.044)	
Below average religious	0.620	0.548	0.776	0.735	0.666	0.995	1165
	(0.641)	(0.659)	(0.981)	(0.605)	(0.624)	(0.958)	
Being Evangelical:	0.140***	0.132***	0.054	0.150***	0.142***	0.060	1480
Above average religious	(0.040)	(0.040)	(0.057)	(0.042)	(0.042)	(0.060)	
Below average religious	-0.027	-0.023	0.005	-0.025	-0.020	0.008	1165
	(0.054)	(0.055)	(0.094)	(0.054)	(0.056)	(0.095)	
1st-order polynomial	√			√			
2nd-order polynomial		√			√		
3-rd order polynomial			√			√	
Controls				√	√	√	

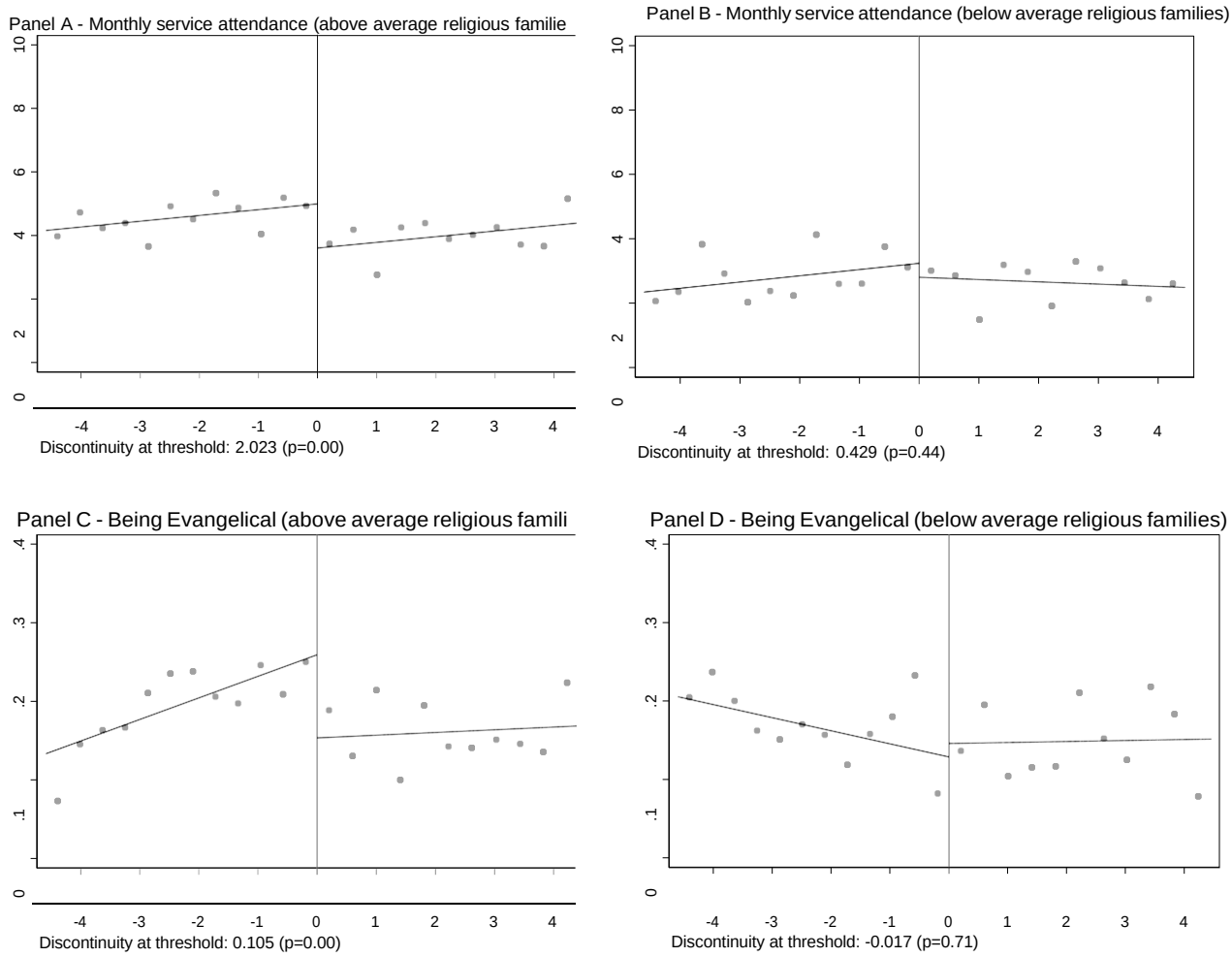
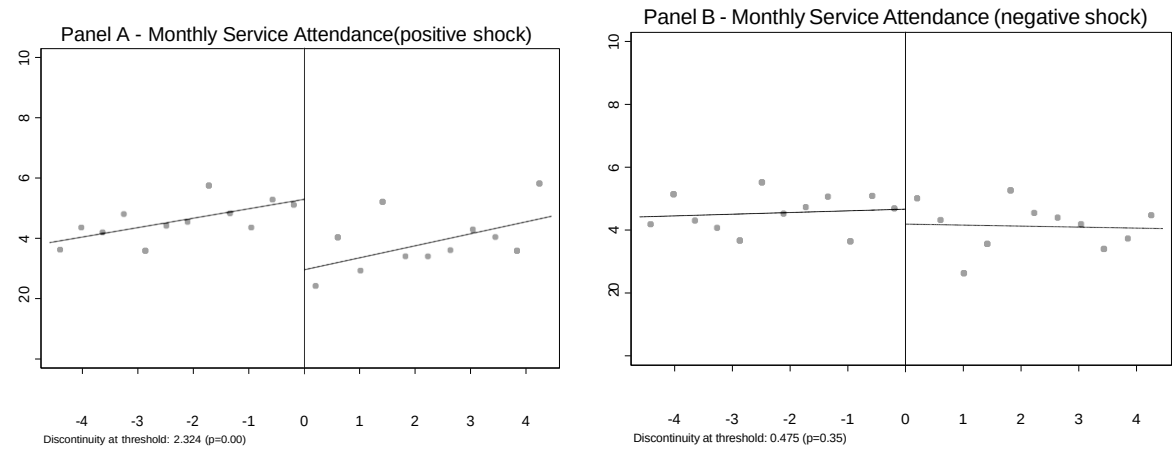


Figure 5. Regression Discontinuity Graphs
(*By religiousness*)



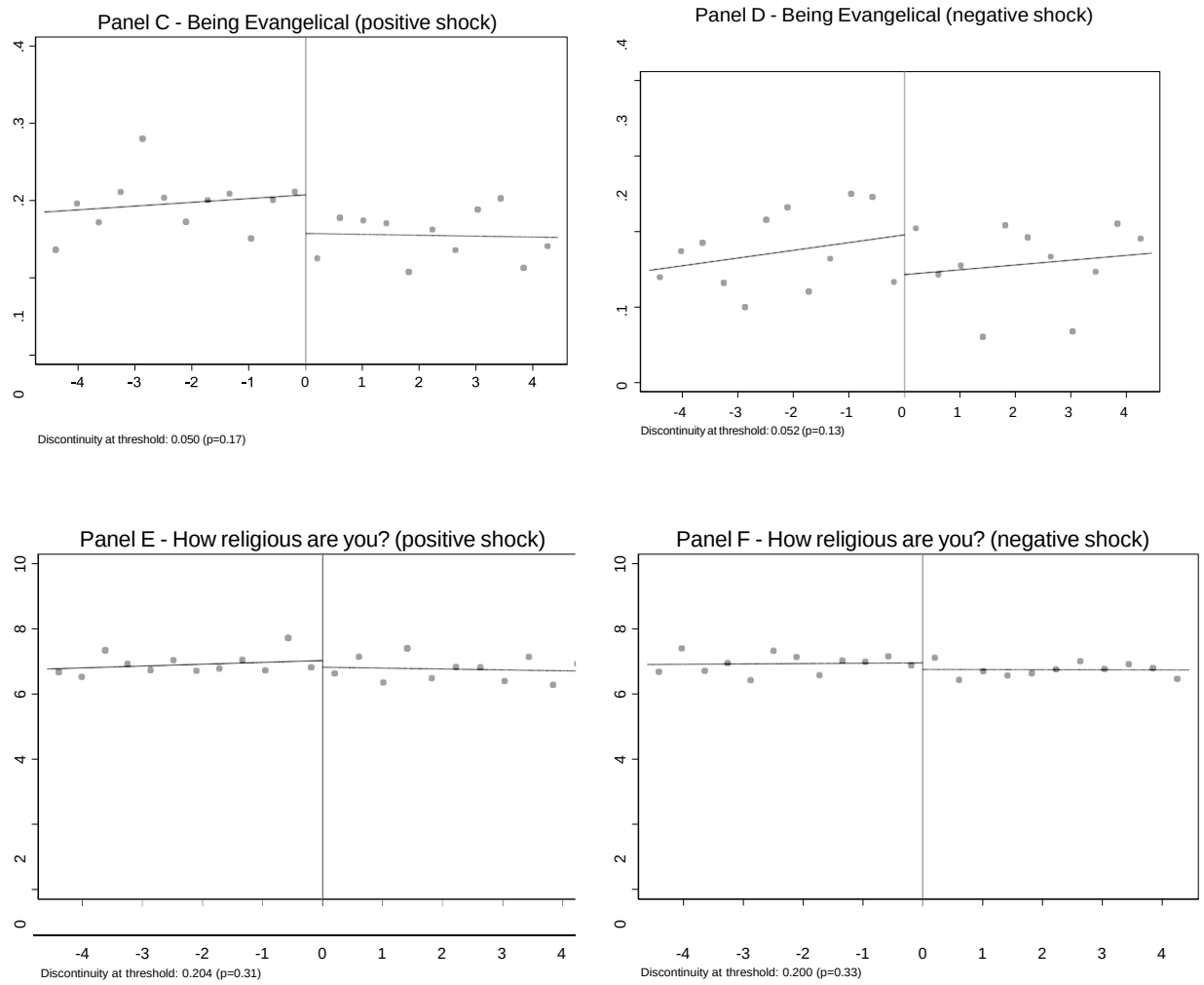


Figure 6. Regression Discontinuity Graphs (Positive vs negative shocks)

Table 6 - IV Regression Results: Effects of Eligibility for Cash Transfers (Positive vs negative income shocks)

	(1)	(2)	(3)	(4)	(5)	(6)	Observations
Church attendance:							
Gaining transfer (versus continuing without)	3.056*** (0.931)	3.084*** (0.941)	2.777* (1.661)	3.340*** (0.929)	3.355*** (0.937)	2.913** (1.409)	1318
Keeping transfer (versus losing transfer)	0.579 (0.611)	0.555 (0.588)	0.552 (0.894)	0.603 (0.599)	0.591 (0.577)	0.628 (0.895)	1327
Being Evangelical:							
Gaining transfer (versus continuing without)	0.069 (0.046)	0.065 (0.047)	0.058 (0.103)	0.083* (0.045)	0.080* (0.0464)	0.068 (0.098)	1318
Keeping transfer (versus losing transfer)	0.062* (0.037)	0.062 (0.038)	0.014 (0.044)	0.062* (0.037)	0.061 (0.038)	0.014 (0.044)	1327
Being Evangelical (above average religious):							
Gaining transfer (versus continuing without)	0.121* (0.065)	0.107 (0.069)	0.006 (0.101)	0.151** (0.069)	0.136* (0.075)	0.025 (0.099)	744
Keeping transfer (versus losing transfer)	0.155*** (0.036)	0.152*** (0.035)	0.091* (0.053)	0.159*** (0.037)	0.156*** (0.035)	0.101* (0.058)	736
Self-rated religiousness:							
Gaining transfer (versus continuing without)	0.308 (0.241)	0.281 (0.255)	0.191 (0.368)	0.335 (0.230)	0.306 (0.240)	0.235 (0.347)	1318
Keeping transfer (versus losing transfer)	0.237 (0.239)	0.232 (0.234)	0.413 (0.408)	0.229 (0.235)	0.230 (0.230)	0.441 (0.401)	1327
1st-order polynomial	√			√			
2nd-order polynomial		√			√		
3-rd order polynomial			√			√	
Controls				√	√	√	

3. Extended/complement the analysis in the paper

There several ways for possible extension of The RD design. One of the it is to undertake several further robustness and validity checks. The online Appendix contains used validity tests. Table A2 shows F-statistics for the 1st stage, i.e. regression of a binary indicator of transfer collection on the assignment variable, controlling for the 1st, 2nd and 3rd degree polynomials in the SELBEN2 score. The F-statistics are in all cases very high and well above the rule of thumb threshold of around ten (Angrist and Pischke 2009). In table A3 it was done the test whether the background variables which we include as controls exhibits a discontinuity at the threshold by using the regression discontinuity approach described above with the controls as dependent variable. Neither housholds size, respondents age, nor years of schooling of the respondent vary significant around the cutoff conditional on a linear control in the forcing variable.

One of checks that can be done in addition to analysis is the balance test to check discontinuity for the average covariates around the threshold. Another test that could be done, is a density test or the test to check whether it is possible to manipulate variables of interest for the respondents. In the paper it was mentioned that the households in the sample were visited by professional enumerators who were instructed to only conduct the interview with the mother of the household. In case of here absence, the enumerators ought to visit the household again. In case of repeated absence, a random replacement was drawn from within the same parish. Therefore, it would be interesting to check the sensitivity of the estimated effect to the data range. Balancing test can performed by doing the following loop:

```
// Balance test

foreach v of var schooling_resp {
        reg `v' moremoneynew i.group score2_1, vce(cluster parroqui)
        test moremoneynew
        di "`v' " r(p)
        predict p
        bys score2_1 : egen m = mean(`v')
        twoway (sc m score2_1) (line p score2_1), name(`v', replace)
        drop p m
}
```

Balancing test of predetermined variables near the threshold is used to check whether the observed baseline covariates are locally balanced in either side of the cut-off. Balancing is performed when it is achieved local randomization for the treatment variable. If so then any discontinuities will violate the assumption about local random assignment. In this part I am doing balancing just one variable to be of interest, i.e. schooling. I argue that schooling can influence by example of Equador in Latin America.

In the appendix of the paper, Buser (2015) did several validity and robustness checks, but not the balancing test. We know that randomization can be achieved by the random sampling, but still we have different covariates that need to run regression for using the IV “moremoneynew”, each group of those who receive transfers, who does not receive it and IV SELBEN2.

In order to do estimation strategy to be valid, households must not be able to precisely manipulate the assignment variables (Lee and Lemieux 2009). In order to make RD valid design together with local randomization it is required that it was not able to precisely determine position on the SELBEN2 index for individuals (or mothers in our case), so that near the cutoff every households would have the same chance to have a score just above and just below the cutoff. Out of description of sample collection it is obvious that there was a little probability for manipulation of results for SELBEN2 variable, due to tight communication in the district between potential respondents and show that they are poorer than they actually are. Thus In the paper this assumption about not possibility for manipulation is not a strong as neither the weights of the variables nor the

cutoff score were publicly announced at the time the households were visited. The cutoff was predetermined ex post such that exactly 40 % of households receive the cash transfer. The fact of manipulation of assignment variable and self-selection is to ways that can justify using RD method. The Figure 2 as far as concern the distribution of SELBEN2 score showed that there is no indication of bunching near the threshold. Any way in order to exclude the possibility for manipulation, we need to do some proper testing to justify using of RD design. Self-selection can give some problems to causal inference by making it nonvalid (Lee, Lemiex, 2010).

```
//// balanced

// 3.2. Distribution of the forcing variable
// testing for violation of no manipulation assumption!
hist score2_1, start(-4.591001)
```

In the article the author argues that respondents are not able to control over the running variable. Figure 3.2 shows the frequency distribution of SELBEN2 for population generated using the full SELBEN2 database with the cutoff normalized to zero.

```
// 3.3 Cutoff at other points

/// Generating placebo cutoffs and seeing whether there are discontinuities

gen score_lower = score2_1 if score2_1<0
su score_lower, detail
```

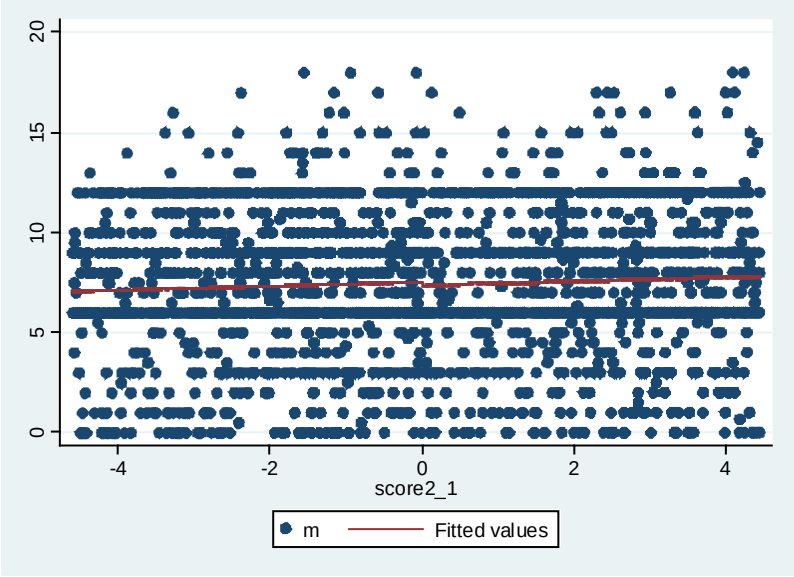
One of the ways for extension of the study is to find out whether people who are high educated are less religiouss according to the findings of Buser (2015). According to the data from Ecuador, all children attend school for 9 years and that this be free according to constitution. Although the primary school enrolment rate exceeds 95%, 25%, near the one of fourth of children will have dropped out by the end of the 5th grade. The education system in Ecuador is very strong.

There are over 100 secondary schools. Grades 7 – 9 are free. Thereafter parents must pay school fees if they would like their children to study further that probably make it difficult to have many years of schooling.

It seems interesting to check whether people are more religious if I divide the sample into 3 subsample – those who have less than 5 years at school, from 5 to 9 years and more than 9 years at school and then build IV regression for attendance, being evangelical (protestant) and religiousness.

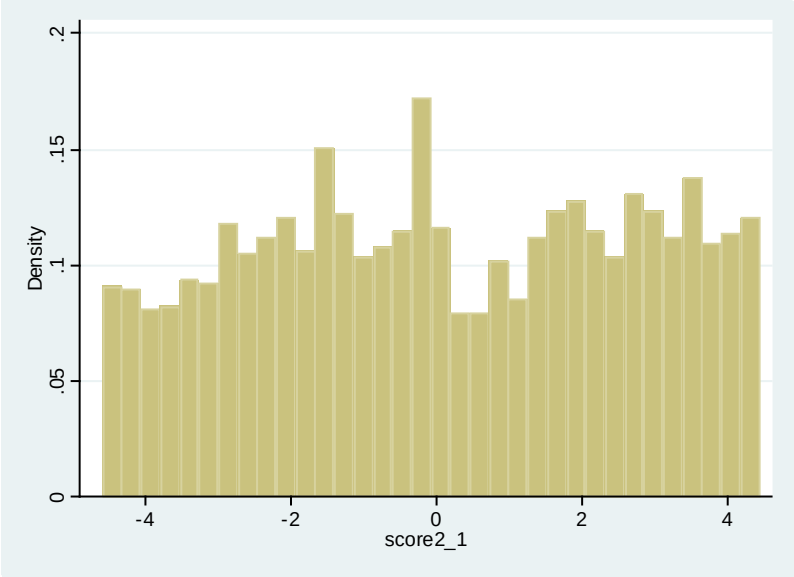
The results from RD regression is shown in the figure 4.1, figure 4.2. and figure 4.3. using non-parametric approach and rdplot command.

The most common non-parametric method used in RD design is a local linear regression. The major benefit of using non-parametric methods in RD design is that they provide estimates based on data closer to the cut-off, which is intuitively appealing. This reduces some bias that can result from using data farther away from the cutoff to estimate the discontinuity at the cutoff. More formally, local linear regressions are preferred because they have better bias properties and have better convergence.



Schooling

3.1 Balance check. Test for the discontinuity for schooling.



// Figure 3.2. Distribution of the forcing variable. Testing for violation of no manipulation assumption

	(1) attendperm~h	(2) attendperm~h	(3) attendperm~h	(4) attendperm~h	(5) attendperm~h	(6) attendperm~h
collect_2	4.074**	4.009**	4.518*	4.119**	4.065**	4.500*
	(1.304)	(1.235)	(2.104)	(1.326)	(1.266)	(2.144)
score2_1	0.599**	0.591**	0.802	0.611**	0.604**	0.785
	(0.193)	(0.187)	(0.668)	(0.191)	(0.186)	(0.679)
moremoneyold	0.811*	0.810*	0.786*	0.807*	0.805*	0.782*
	(0.333)	(0.328)	(0.355)	(0.352)	(0.347)	(0.369)
score2_1sq		-0.0188	-0.0181		-0.0156	-0.0152
		(0.0432)	(0.0434)		(0.0420)	(0.0420)
score2_1cu			-0.0121			-0.0104
			(0.0344)			(0.0353)
households~e				0.120	0.120	0.118
				(0.126)	(0.127)	(0.132)
ageresponder				0.0390*	0.0389*	0.0369
				(0.0157)	(0.0157)	(0.0200)
schooling_~p				0.0947	0.0876	0.0815
				(0.173)	(0.175)	(0.178)
_cons	2.601***	2.752***	2.516**	-0.156	-0.0158	-0.0859
	(0.516)	(0.497)	(0.970)	(1.258)	(1.246)	(1.184)
N	473	473	473	473	473	473

Standard errors in parentheses
* p<0.05, ** p<0.01, *** p<0.001

	(1) protestant	(2) protestant	(3) protestant	(4) protestant	(5) protestant	(6) protestant
collect_2	0.0980	0.0926	-0.0211	0.102	0.0945	-0.0189
	(0.0693)	(0.0673)	(0.113)	(0.0674)	(0.0654)	(0.111)
score2_1	0.00871	0.00801	-0.0392	0.00964	0.00872	-0.0385
	(0.0100)	(0.00988)	(0.0309)	(0.00980)	(0.00964)	(0.0306)
moremoneyold	-0.0157	-0.0159	-0.0105	-0.0160	-0.0162	-0.0104
	(0.0407)	(0.0407)	(0.0389)	(0.0401)	(0.0402)	(0.0384)
score2_1sq		-0.00153	-0.00169		-0.00210	-0.00220
		(0.00246)	(0.00238)		(0.00259)	(0.00254)
score2_1cu			0.00270			0.00271
			(0.00154)			(0.00153)
households~e				0.000581	0.000640	0.00125
				(0.00613)	(0.00612)	(0.00606)
ageresponder				0.00110	0.00109	0.00163
				(0.000960)	(0.000951)	(0.00105)
schooling_~p				-0.0202	-0.0211	-0.0195
				(0.0146)	(0.0145)	(0.0149)
_cons	0.140***	0.153***	0.205**	0.116	0.134	0.153
	(0.0424)	(0.0437)	(0.0657)	(0.0810)	(0.0795)	(0.0817)
N	473	473	473	473	473	473

Standard errors in parentheses
* p<0.05, ** p<0.01, *** p<0.001

	(1) religiousn~s	(2) religiousn~s	(3) religiousn~s	(4) religiousn~s	(5) religiousn~s	(6) religiousn~s
collect_2	-0.256	-0.270	-0.182	-0.252	-0.257	-0.157
	(0.386)	(0.404)	(0.439)	(0.435)	(0.454)	(0.450)
score2_1	-0.0850	-0.0869	-0.0503	-0.0925	-0.0930	-0.0518
	(0.0633)	(0.0657)	(0.175)	(0.0718)	(0.0739)	(0.175)
moremoneyold	-0.376	-0.376	-0.380	-0.281	-0.281	-0.286
	(0.235)	(0.235)	(0.229)	(0.241)	(0.240)	(0.232)
score2_1sq		-0.00410	-0.00398		-0.00121	-0.00112
		(0.0240)	(0.0236)		(0.0257)	(0.0253)
score2_1cu			-0.00209			-0.00237
			(0.0114)			(0.0115)
households~e				-0.123**	-0.123**	-0.124**
				(0.0380)	(0.0376)	(0.0390)
ageresponder				0.0217*	0.0217*	0.0213*
				(0.00986)	(0.00990)	(0.0108)
schooling_~p				0.0868	0.0863	0.0849
				(0.0901)	(0.0910)	(0.0897)
_cons	7.196***	7.229***	7.188***	6.391***	6.402***	6.386***
	(0.200)	(0.304)	(0.259)	(0.648)	(0.802)	(0.769)
N	473	473	473	473	473	473

Standard errors in parentheses
* p<0.05, ** p<0.01, *** p<0.001

Table 3.2.1. Effect of attendance, being evangelical and religiosity for sample med schooling less than 5 years

	(1) attendperm~h	(2) attendperm~h	(3) attendperm~h	(4) attendperm~h	(5) attendperm~h	(6) attendperm~h
collect_2	1.727***	1.722***	1.524	1.872***	1.863***	1.634
	(0.497)	(0.494)	(0.903)	(0.512)	(0.511)	(0.836)
score2_1	0.189*	0.189*	0.108	0.211*	0.210*	0.117
	(0.0819)	(0.0824)	(0.290)	(0.0854)	(0.0862)	(0.260)
moremoneyold	-0.00823	-0.00784	0.00153	0.115	0.116	0.127
	(0.330)	(0.330)	(0.354)	(0.327)	(0.326)	(0.344)
score2_1sq		-0.00184	-0.00183		-0.00332	-0.00333
		(0.00900)	(0.00904)		(0.00949)	(0.00954)
score2_1cu			0.00443			0.00511
			(0.0140)			(0.0118)
households~e				0.0313	0.0316	0.0317
				(0.0578)	(0.0580)	(0.0576)
ageresponder				0.0638***	0.0637***	0.0638***
				(0.00996)	(0.00996)	(0.0101)
schooling_~p				0.0610*	0.0609*	0.0597*
				(0.0302)	(0.0302)	(0.0303)
_cons	3.528***	3.542***	3.629***	0.0686	0.0943	0.198
	(0.174)	(0.187)	(0.342)	(0.469)	(0.473)	(0.473)
N	2645	2645	2645	2630	2630	2630

Standard errors in parentheses
* p<0.05, ** p<0.01, *** p<0.001

	(1) protestant	(2) protestant	(3) protestant	(4) protestant	(5) protestant	(6) protestant
collect_2	0.0657*	0.0638*	0.0342	0.0710*	0.0688*	0.0371
	(0.0321)	(0.0323)	(0.0584)	(0.0330)	(0.0331)	(0.0563)
score2_1	0.00566	0.00547	-0.00660	0.00681*	0.00659*	-0.00637
	(0.00311)	(0.00312)	(0.0152)	(0.00307)	(0.00309)	(0.0143)
moremoneyold	-0.0129	-0.0127	-0.0113	-0.0115	-0.0113	-0.00978
	(0.0175)	(0.0174)	(0.0167)	(0.0185)	(0.0184)	(0.0178)
score2_1sq		-0.000684	-0.000682		-0.000798	-0.000799
		(0.000743)	(0.000743)		(0.000764)	(0.000765)
score2_1cu			0.000660			0.000710
			(0.000787)			(0.000730)
households~e				0.00384	0.00389	0.00391
				(0.00295)	(0.00295)	(0.00297)
ageresponder				0.000547	0.000543	0.000558
				(0.000724)	(0.000722)	(0.000724)
schooling_~p				-0.000647	-0.000659	-0.000828
				(0.00198)	(0.00199)	(0.00205)
_cons	0.147***	0.153***	0.165***	0.108	0.114	0.129
	(0.0189)	(0.0197)	(0.0282)	(0.0599)	(0.0595)	(0.0694)
N	2645	2645	2645	2630	2630	2630

Standard errors in parentheses
* p<0.05, ** p<0.01, *** p<0.001

	(1) religiousn~s	(2) religiousn~s	(3) religiousn~s	(4) religiousn~s	(5) religiousn~s	(6) religiousn~s
collect_2	0.270	0.256	0.313	0.278	0.267	0.350
	(0.173)	(0.174)	(0.269)	(0.171)	(0.171)	(0.257)
score2_1	0.0119	0.0104	0.0338	0.0117	0.0106	0.0443
	(0.0298)	(0.0299)	(0.0883)	(0.0304)	(0.0304)	(0.0858)
moremoneyold	-0.00759	-0.00651	-0.00921	0.0315	0.0323	0.0283
	(0.0846)	(0.0844)	(0.0820)	(0.0887)	(0.0886)	(0.0861)
score2_1sq		-0.00524	-0.00524		-0.00412	-0.00412
		(0.00704)	(0.00703)		(0.00695)	(0.00694)
score2_1cu			-0.00128			-0.00185
			(0.00398)			(0.00387)
households~e				-0.0386*	-0.0384*	-0.0384*
				(0.0191)	(0.0193)	(0.0194)
ageresponder				0.0202***	0.0202***	0.0201***
				(0.00578)	(0.00577)	(0.00576)
schooling_~p				0.0168	0.0168	0.0172
				(0.0133)	(0.0133)	(0.0130)
_cons	6.709***	6.749***	6.724***	5.863***	5.895***	5.857***
	(0.120)	(0.131)	(0.157)	(0.389)	(0.408)	(0.399)
N	2645	2645	2645	2630	2630	2630

Standard errors in parentheses
* p<0.05, ** p<0.01, *** p<0.001

Table 3.2.2. Effect of attendance, being evangelical and religiosity for sample med schooling from 5 to 9 years

	(1) attendperm~h	(2) attendperm~h	(3) attendperm~h	(4) attendperm~h	(5) attendperm~h	(6) attendperm~h
collect_2	0.0859	0.0245	-0.640	0.372	0.301	-0.645
	(0.685)	(0.688)	(1.172)	(0.783)	(0.776)	(1.033)
score2_1	-0.181*	-0.183*	-0.438	-0.147	-0.148	-0.510
	(0.0836)	(0.0838)	(0.381)	(0.0933)	(0.0930)	(0.374)
moremoneyold	-0.126	-0.118	-0.0720	0.00643	0.0173	0.0814
	(0.385)	(0.376)	(0.397)	(0.364)	(0.352)	(0.378)
score2_1sq		-0.0321	-0.0329		-0.0385**	-0.0399**
		(0.0180)	(0.0182)		(0.0147)	(0.0148)
score2_1cu			0.0138			0.0196
			(0.0196)			(0.0200)
households~e				-0.0459	-0.0439	-0.0508
				(0.100)	(0.102)	(0.106)
ageresponder				0.0459	0.0457	0.0444
				(0.0256)	(0.0254)	(0.0252)
schooling_~p				0.196	0.195	0.188
				(0.105)	(0.105)	(0.0994)
_cons	4.266***	4.499***	4.766***	0.338	0.631	1.165
	(0.276)	(0.342)	(0.524)	(0.936)	(0.954)	(0.843)
N	1063	1063	1063	1048	1048	1048

Standard errors in parentheses
* p<0.05, ** p<0.01, *** p<0.001

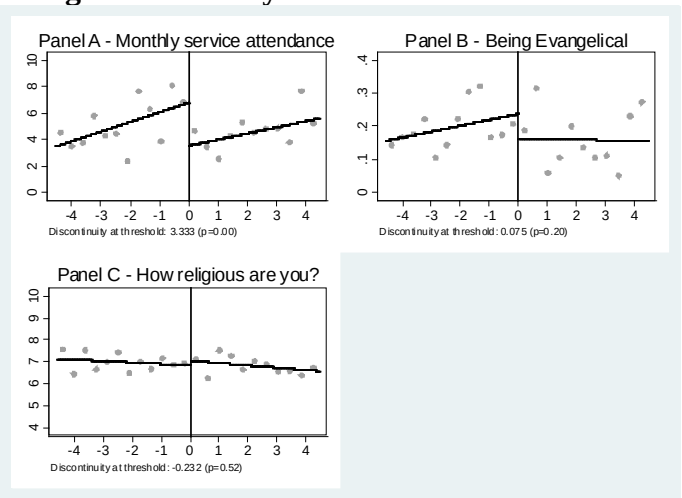
	(1) protestant	(2) protestant	(3) protestant	(4) protestant	(5) protestant	(6) protestant
collect_2	0.0537	0.0502	0.0330	0.0681	0.0641	0.0379
	(0.0357)	(0.0361)	(0.0516)	(0.0394)	(0.0398)	(0.0460)
score2_1	0.000205	0.0000790	-0.00651	0.00288	0.00279	-0.00723
	(0.00526)	(0.00530)	(0.0195)	(0.00496)	(0.00497)	(0.0182)
moremoneyold	-0.00798	-0.00750	-0.00631	-0.00546	-0.00485	-0.00308
	(0.0167)	(0.0167)	(0.0184)	(0.0182)	(0.0183)	(0.0198)
score2_1sq		-0.00184	-0.00186		-0.00216	-0.00219
		(0.00164)	(0.00165)		(0.00158)	(0.00159)
score2_1cu			0.000357			0.000544
			(0.00109)			(0.00101)
households~e				0.000655	0.000765	0.000575
				(0.00644)	(0.00631)	(0.00635)
ageresponder				0.000338	0.000328	0.000292
				(0.00135)	(0.00136)	(0.00136)
schooling_~p				-0.00392	-0.00400	-0.00418
				(0.00531)	(0.00541)	(0.00531)
_cons	0.152***	0.165***	0.172***	0.171	0.187	0.202
	(0.0234)	(0.0271)	(0.0314)	(0.114)	(0.120)	(0.115)
N	1063	1063	1063	1048	1048	1048

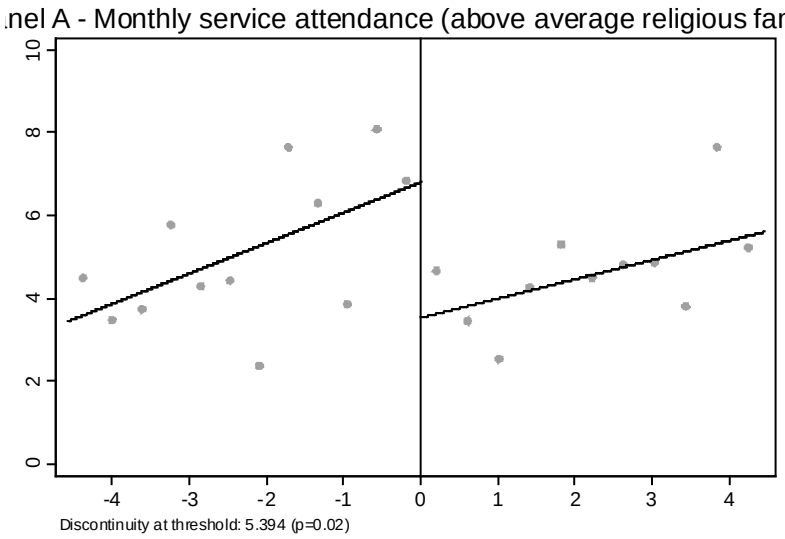
Standard errors in parentheses
* p<0.05, ** p<0.01, *** p<0.001

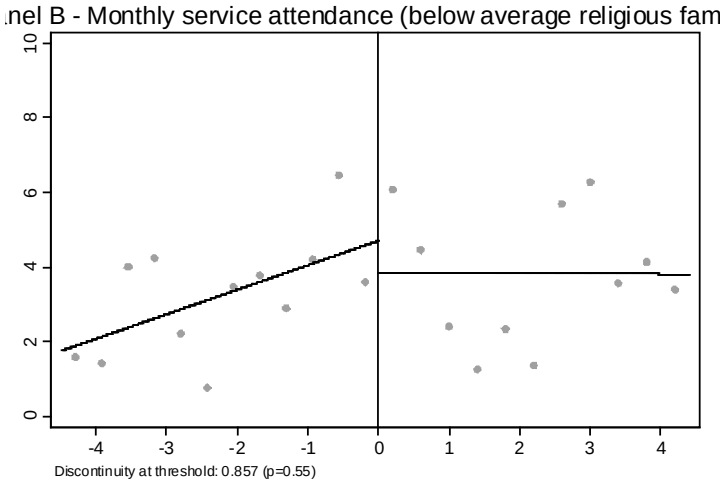
	(1) religiousn~s	(2) religiousn~s	(3) religiousn~s	(4) religiousn~s	(5) religiousn~s	(6) religiousn~s
collect_2	0.351	0.334	0.187	0.382	0.368	0.224
	(0.321)	(0.323)	(0.501)	(0.325)	(0.327)	(0.517)
score2_1	-0.00432	-0.00492	-0.0612	0.000478	0.000151	-0.0547
	(0.0522)	(0.0522)	(0.151)	(0.0536)	(0.0535)	(0.164)
moremoneyold	0.00601	0.00833	0.0185	0.0251	0.0273	0.0370
	(0.0848)	(0.0839)	(0.0968)	(0.0914)	(0.0910)	(0.108)
score2_1sq		-0.00882	-0.00899		-0.00793	-0.00814
		(0.00885)	(0.00888)		(0.00844)	(0.00845)
score2_1cu			0.00305			0.00298
			(0.00724)			(0.00813)
households~e				0.0299	0.0303	0.0293
				(0.0304)	(0.0306)	(0.0315)
ageresponder				0.0227***	0.0227***	0.0225***
				(0.00637)	(0.00638)	(0.00655)
schooling_~p				-0.0128	-0.0131	-0.0141
				(0.0294)	(0.0294)	(0.0279)
_cons	6.643***	6.707***	6.766***	5.752***	5.813***	5.894***
	(0.165)	(0.188)	(0.213)	(0.514)	(0.527)	(0.509)
N	1063	1063	1063	1048	1048	1048

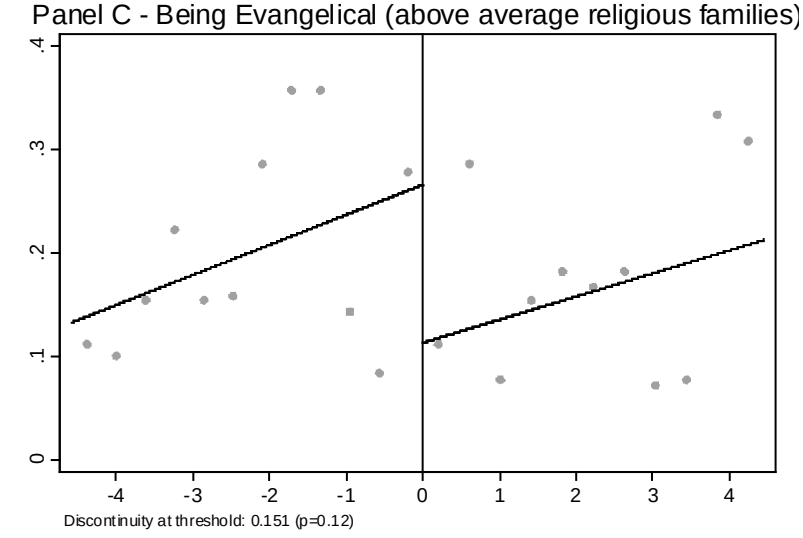
Standard errors in parentheses
* p<0.05, ** p<0.01, *** p<0.001

Table 3.2.1. Effect of attendance, being evangelical and religiosity for sample med schooling more than 9 years.




nel A - Monthly service attendance (above average religious fam
0
2
4
6
8
10
-4
-3
-2
-1
0
1
2
3
4
Discontinuity at threshold: 5.394 (p=0.02)


nel B - Monthly service attendance (below average religious fam
0
2
4
6
8
10
-4
-3
-2
-1
0
1
2
3
4
Discontinuity at threshold: 0.857 (p=0.55)


Panel C - Being Evangelical (above average religious families)
0
.1
.2
.3
.4
-4
-3
-2
-1
0
1
2
3
4
Discontinuity at threshold: 0.151 (p=0.12)

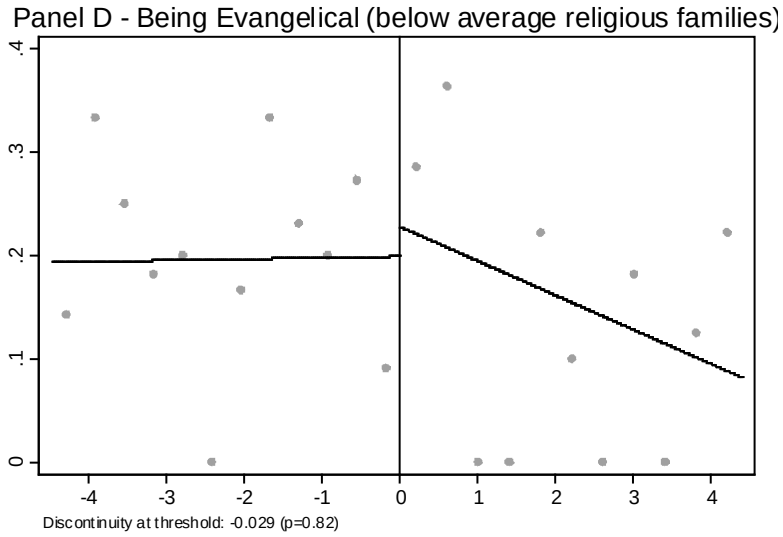
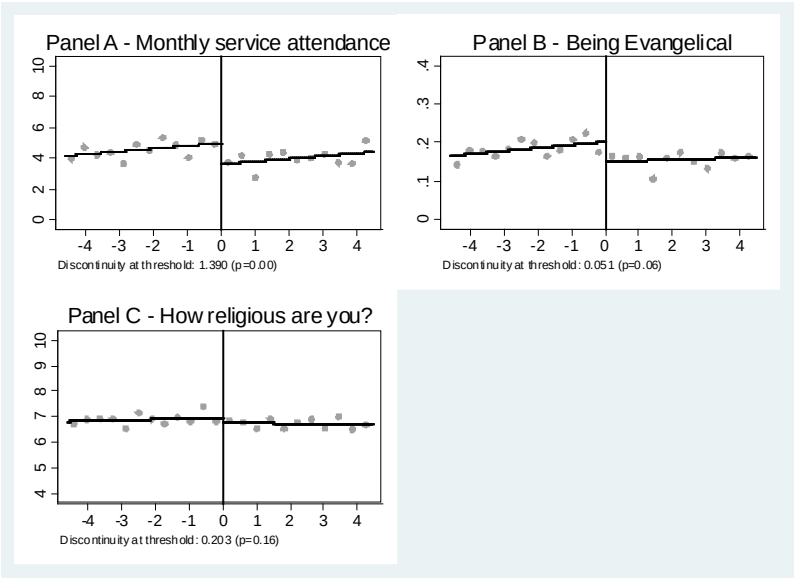
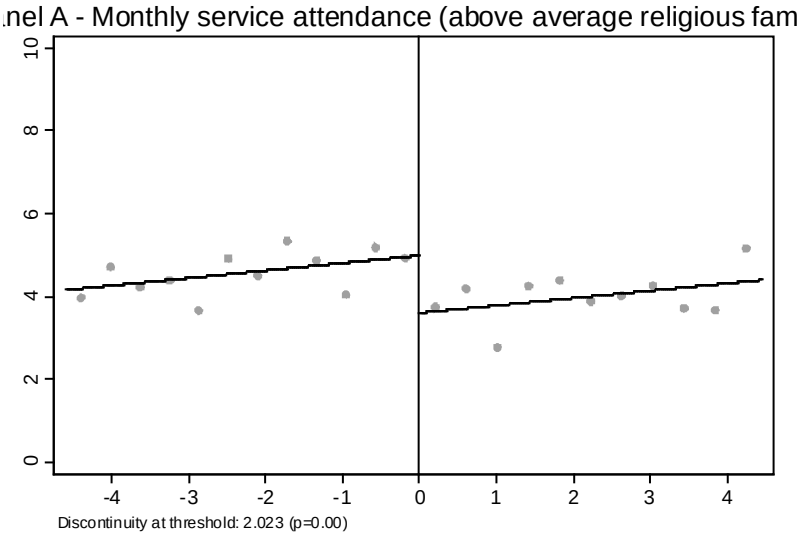
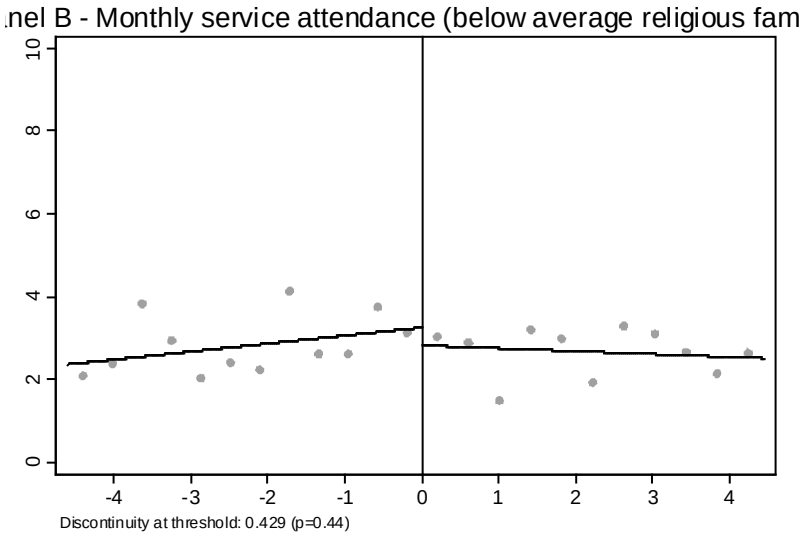
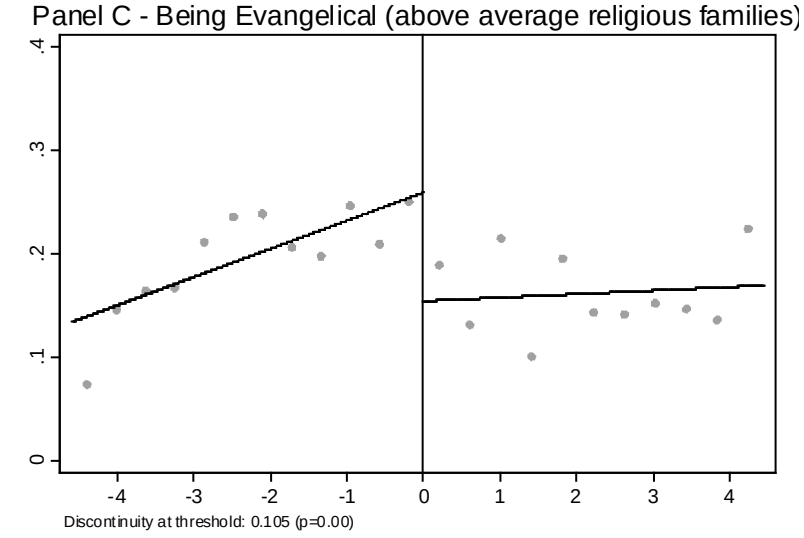


Figure 4.1. Effect of schooling on religiousness for school attendance less than 5 years.






nel B - Monthly service attendance (below average religious fam
0
2
4
6
8
10
-4
-3
-2
-1
0
1
2
3
4
Discontinuity at threshold: 0.429 (p=0.44)


Panel C - Being Evangelical (above average religious families)
0
.1
.2
.3
.4
-4
-3
-2
-1
0
1
2
3
4
Discontinuity at threshold: 0.105 (p=0.00)

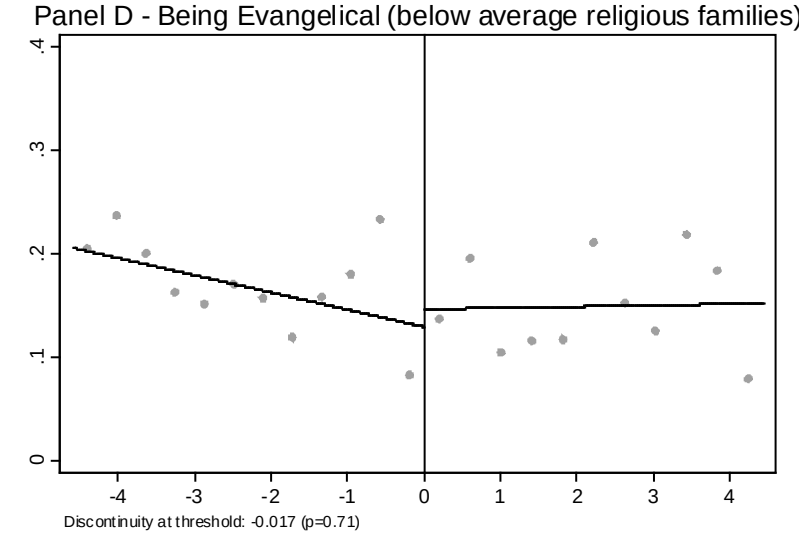
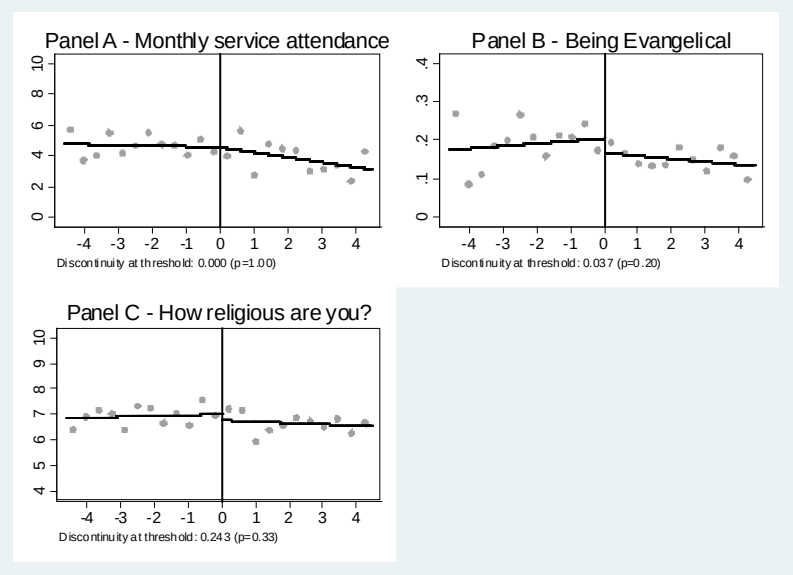
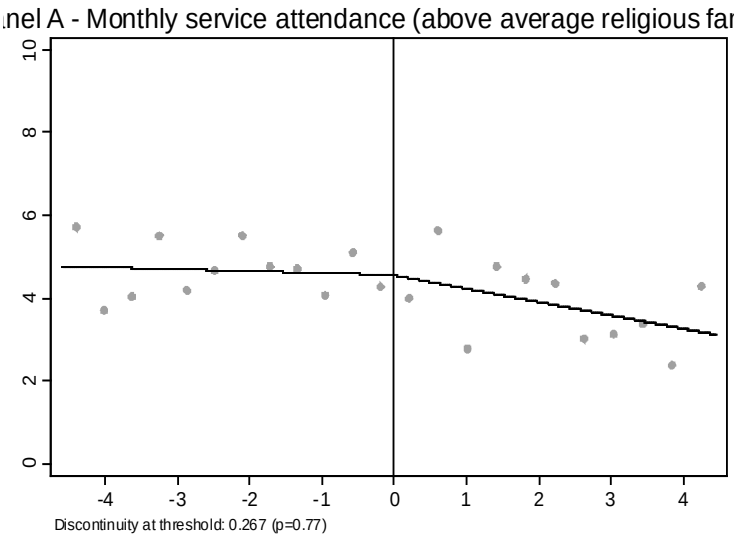
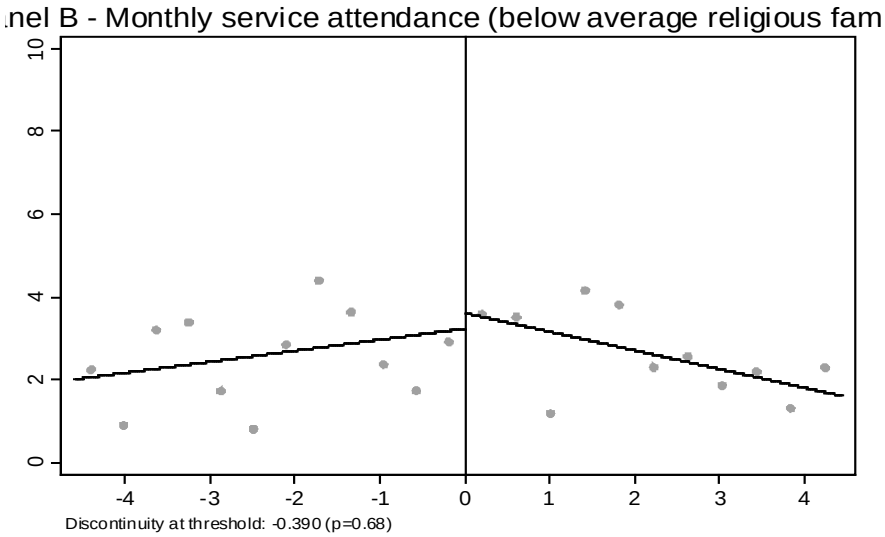
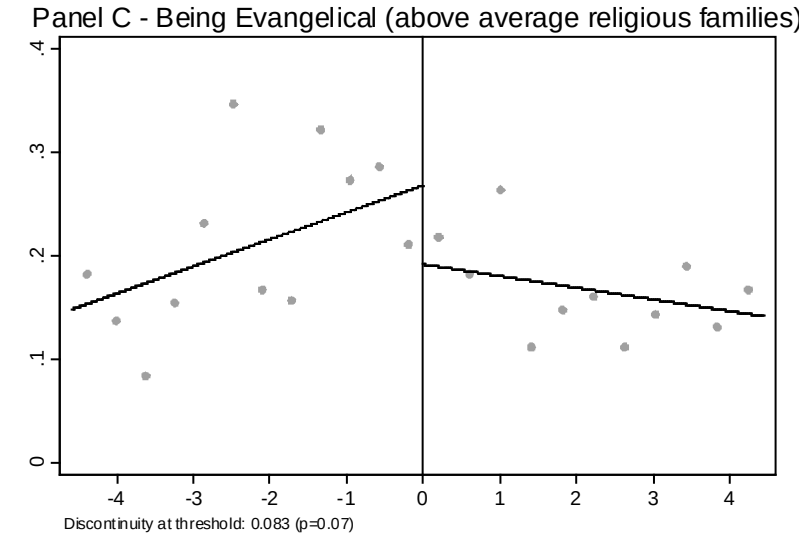

Panel D - Being Evangelical (below average religious families)
0
.1
.2
.3
.4
-4
-3
-2
-1
0
1
2
3
4
Discontinuity at threshold: -0.017 (p=0.71)

Figure 4.2. Effect of schooling on religiousness for school attendance between 5 and 9 years.









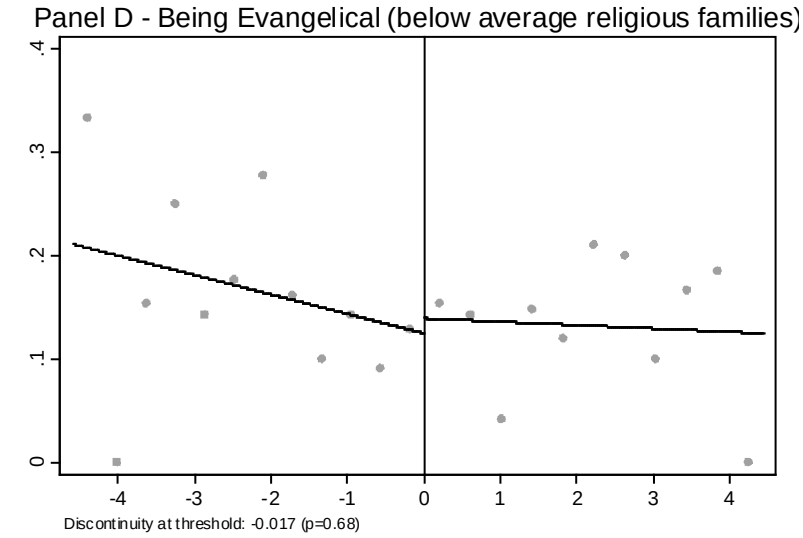


Figure 4.2. Effect of schooling on religiousness for school attendance more than 9 years.

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1. Buser, T (2015): The Effect of Income on Religiousness American Economic Journal: Applied Economics 2015, 7(3): 178–195 http://dx.doi.org/10.1257/app.20140162 178
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8. Lee, David S., and Thomas Lemieux. 2009. "Regression Discontinuity Designs in Economics." National Bureau of Economic Research (NBER) Working Paper 14723.
9. Newport, F. 1979. The religious switcher in the United States. American Sociological Review 44:528-552.
10. Fan, Gijbels (1996). Local Polynomial Modelling and Its Applications. London: Chapman and Hall. ISBN 0-412-98321-4.
11. Jump up to: a b c d Lee; Lemieux (2010). "Regression Discontinuity Designs in

Economics". Journal of Economic Literature. 48 (2): 281–355. doi:10.1257/jel.48.2.281.

12. ^ Porter (2003). "Estimation in the Regression Discontinuity Model". Unpublished Manuscript. https://www.ssc.wisc.edu/~jrporter/reg_discont_2003.pdf

Stata Code

```
clear all
use "M:\ECON5106\Prosjekt_2018\Data.dta"
cd "M:\ECON5106\Prosjekt_2018"
// Table 1 - Numbers of observations. Descriptive statistics
tab group
tab losers
tab winners
  //Table 2 - Descriptive statistics
tab denomination, gen(denominationx)
tab attendance, gen(attendancex)
label var denominationx1 "Catholic"
label var denominationx2 "Non-catholic christian"
label var denominationx3 "Jewish"
label var denominationx4 "Atheist/none"
label var denominationx5 "Other"

//Summary statistics
sum religiousness
sum attendpermonth
sum householdsize
sum ageresponder
```

```
sum schooling

sum expenditures


tab attendance protestant, col nof

bysort protestant: sum attendpermonth

clear

//use INEC.DTA

/// Data as far as concern religion (clean data)

use "M:\ECON5106\Prosjekt_2018\INEC.DTA", clear

gen protestant=(RE02==2|RE02==10|RE02==11|RE02==12)

replace protestant=. if mi(RE02)

gen religious=RE03

replace religious=. if RE03==99

gen female=p02==2

gen mother=female==1&(p04==1|p04==2)

gen age=p03 if p03!=99

gen sample=ciudad==90150|ciudad==170150

gen attendance=7 if  RE05==2

replace attendance=6 if  RE05==1

replace attendance=5 if  RE05==4

replace attendance=4 if  RE05==3

replace attendance=3 if  RE05==5

replace attendance=2 if  RE05==6

replace attendance=1 if  RE05==7

label define attend 7 "More than once a week" 6 "Once a week" 5 "More than once a month" 4
"Once a month" ///

                3 "Once a year" 2 "On special occasions" 1 "Never"
```

```
label values attendance attend


gen religion=1 if RE02==1

replace religion=2 if protestant==1

replace religion=3 if RE02==9

replace religion=4 if RE02==13|RE02==15

replace religion=5 if RE02==3|RE02==4|RE02==7|RE02==8|RE02==14

label define religion 1 "Catholic" 2 "Non-catholic christian" 3 "Jews" 4 "Atheists/none" 5 "Other"

label values religion religion

///Descriptive statistics

tab religion if sample==1 & Quintile==2

tab religion

tab attendance if sample==1 & Quintile==2

tab attendance

tab attendance protestant if sample==1 & Quintile==2, col nofreq

tab attendance protestant, col nofreq

sum religious if sample==1 & Quintile==2

sum religious

tab protestant Quintiles, col

///Table with results from regression for online appendix

eststo clear

eststo: reg protestant female age if sample==1 & Quintile==2 , r

eststo: reg protestant female age i.Quintiles, r

esttab, b(3) se(3) nogaps compress drop(1.Quintiles)

eststo clear
```

```
/// Clean and save data
save "M:\ECON5106\Prosjekt_2018\INEC2.dta", replace
// table 2 "Population 1"
tab religion if sample==1 & Quintile==2
tab attendance if sample==1 & Quintile==2
sum religious if sample==1 & Quintile==2
// table 2 "Population 2"
tab religion
tab attendance
sum religious
// Table 3
//clear
//capture set more off
//use Data.dta
//tab attendance protestant, col nof
//bysort protestant: sum attendpermonth
clear
capture set more off
use "M:\ECON5106\Prosjekt_2018\INEC2.dta"
// Table 3 "Population 1"
tab attendance protestant if sample==1 & Quintile==2, col nof
//Table 3 "Population 2"
tab attendance protestant, col nof
// regression discontinuity
clear
capture set more off
```

```
use "M:\ECON5106\Prosjekt_2018\data.dta"

// Table 4

ivregress 2sls attendpermonth score2_1 moremoneyold (collect_2=moremoneynew), vce(cluster parroqui)

ivregress 2sls attendpermonth score2_1 score2_1sq moremoneyold (collect_2=moremoneynew), vce(cluster parroqui)

ivregress 2sls attendpermonth score2_1 score2_1sq score2_1cu moremoneyold (collect_2=moremoneynew), vce(cluster parroqui)

ivregress 2sls attendpermonth score2_1 ageresponder householdsize schooling_resp moremoneyold (collect_2=moremoneynew), vce(cluster parroqui)

ivregress 2sls attendpermonth score2_1 score2_1sq ageresponder householdsize schooling_resp moremoneyold (collect_2=moremoneynew), vce(cluster parroqui)

ivregress 2sls attendpermonth score2_1 score2_1sq score2_1cu ageresponder householdsize schooling_resp moremoneyold (collect_2=moremoneynew), vce(cluster parroqui)

ivregress 2sls protestant score2_1 moremoneyold (collect_2=moremoneynew), vce(cluster parroqui)

ivregress 2sls protestant score2_1 score2_1sq moremoneyold (collect_2=moremoneynew), vce(cluster parroqui)

ivregress 2sls protestant score2_1 score2_1sq score2_1cu moremoneyold (collect_2=moremoneynew), vce(cluster parroqui)

ivregress 2sls protestant score2_1 ageresponder householdsize schooling_resp moremoneyold (collect_2=moremoneynew), vce(cluster parroqui)

ivregress 2sls protestant score2_1 score2_1sq ageresponder householdsize schooling_resp moremoneyold (collect_2=moremoneynew), vce(cluster parroqui)

ivregress 2sls protestant score2_1 score2_1sq score2_1cu ageresponder householdsize schooling_resp moremoneyold (collect_2=moremoneynew), vce(cluster parroqui)

ivregress 2sls religiousness score2_1 (collect_2=moremoneynew), vce(cluster parroqui)

ivregress 2sls religiousness score2_1 score2_1sq (collect_2=moremoneynew), vce(cluster parroqui)

ivregress 2sls religiousness score2_1 score2_1sq score2_1cu (collect_2=moremoneynew), vce(cluster parroqui)

ivregress 2sls religiousness score2_1 ageresponder householdsize schooling_resp moremoneyold (collect_2=moremoneynew), vce(cluster parroqui)

ivregress 2sls religiousness score2_1 score2_1sq ageresponder householdsize schooling_resp
```

```
moremoneyold (collect_2=moremoneynew), vce(cluster parroqui)

ivregress 2sls religiousness score2_1 score2_1sq score2_1cu ageresponder householdsize
schooling_resp moremoneyold (collect_2=moremoneynew), vce(cluster parroqui)

/// Table 5.

// Church attendance

ivregress 2sls attendp score2_1 moremoneyold (collect_2=moremoneynew) if
religiousness>=6.827599, vce(cluster parroqui)

ivregress 2sls attendpermonth score2_1 score2_1sq moremoneyold (collect_2=moremoneynew)
if religiousness>=6.827599, vce(cluster parroqui)

ivregress 2sls attendpermonth score2_1 score2_1sq score2_1cu moremoneyold
(collect_2=moremoneynew) if religiousness>=6.827599, vce(cluster parroqui)

ivregress 2sls attendpermonth score2_1 ageresponder householdsize schooling_resp
moremoneyold (collect_2=moremoneynew) if religiousness>=6.827599, vce(cluster parroqui)

ivregress 2sls attendpermonth score2_1 score2_1sq ageresponder householdsize schooling_resp
moremoneyold (collect_2=moremoneynew) if religiousness>=6.827599, vce(cluster parroqui)

ivregress 2sls attendpermonth score2_1 score2_1sq score2_1cu ageresponder householdsize
schooling_resp moremoneyold (collect_2=moremoneynew) if religiousness>=6.827599,
vce(cluster parroqui)

ivregress 2sls attendp score2_1 moremoneyold (collect_2=moremoneynew) if
religiousness<6.827599, vce(cluster parroqui)

ivregress 2sls attendpermonth score2_1 score2_1sq moremoneyold (collect_2=moremoneynew)
if religiousness<6.827599, vce(cluster parroqui)

ivregress 2sls attendpermonth score2_1 score2_1sq score2_1cu moremoneyold
(collect_2=moremoneynew) if religiousness<6.827599, vce(cluster parroqui)

ivregress 2sls attendpermonth score2_1 ageresponder householdsize schooling_resp
moremoneyold (collect_2=moremoneynew) if religiousness<6.827599, vce(cluster parroqui)

ivregress 2sls attendpermonth score2_1 score2_1sq ageresponder householdsize schooling_resp
moremoneyold (collect_2=moremoneynew) if religiousness<6.827599, vce(cluster parroqui)

ivregress 2sls attendpermonth score2_1 score2_1sq score2_1cu ageresponder householdsize
schooling_resp moremoneyold (collect_2=moremoneynew) if religiousness<6.827599,
vce(cluster parroqui)

/// Being evangelical

ivregress 2sls protestant score2_1 moremoneyold (collect_2=moremoneynew) if
religiousness>=6.827599, vce(cluster parroqui)
```

```
ivregress 2sls protestant score2_1 score2_1sq moremoneyold (collect_2=moremoneynew) if religiousness>=6.827599, vce(cluster parroqui)

ivregress 2sls protestant score2_1 score2_1sq score2_1cu moremoneyold (collect_2=moremoneynew) if religiousness>=6.827599, vce(cluster parroqui)

ivregress 2sls protestant score2_1 ageresponder householdsize schooling_resp moremoneyold (collect_2=moremoneynew) if religiousness>=6.827599, vce(cluster parroqui)

ivregress 2sls protestant score2_1 score2_1sq ageresponder householdsize schooling_resp moremoneyold (collect_2=moremoneynew) if religiousness>=6.827599, vce(cluster parroqui)

ivregress 2sls protestant score2_1 score2_1sq score2_1cu ageresponder householdsize schooling_resp moremoneyold (collect_2=moremoneynew) if religiousness>=6.827599, vce(cluster parroqui)

ivregress 2sls protestant score2_1 moremoneyold (collect_2=moremoneynew) if religiousness<6.827599, vce(cluster parroqui)

ivregress 2sls protestant score2_1 score2_1sq moremoneyold (collect_2=moremoneynew) if religiousness<6.827599, vce(cluster parroqui)

ivregress 2sls protestant score2_1 score2_1sq score2_1cu moremoneyold (collect_2=moremoneynew) if religiousness<6.827599, vce(cluster parroqui)

ivregress 2sls protestant score2_1 ageresponder householdsize schooling_resp moremoneyold (collect_2=moremoneynew) if religiousness<6.827599, vce(cluster parroqui)

ivregress 2sls protestant score2_1 score2_1sq ageresponder householdsize schooling_resp moremoneyold (collect_2=moremoneynew) if religiousness<6.827599, vce(cluster parroqui)

ivregress 2sls protestant score2_1 score2_1sq score2_1cu ageresponder householdsize schooling_resp moremoneyold (collect_2=moremoneynew) if religiousness<6.827599, vce(cluster parroqui)

// Little program that makes simple RD graphs

capture program drop Compliance

program define Compliance, rclass

  args a method controls condition low high step graphtitle

  global a "`a'"

  global method "`method'"

  global controls "`controls'"

  global condition "`condition'"

  global low=`low'
```

```
  global high=`high'

  global step=`step'

  global graphtitle "`graphtitle'"

  global clustervar="parroqui"

  local controls ""

local noisy "quietly"

if "$method"=="ivreg" {

//Full bandwidth, linear

`noisy' ivregress 2sls $a score2_1 score2_2 `controls' (collect_2= winnersvs) if !mi($a) $condition, cl($clustervar)

global discontinuity_1=_b[collect_2]

test collect_2

global test1=round(`r(p)',0.01)

`noisy' ivregress 2sls $a score2_1 score2_2 `controls' (collect_2= losersvs)  if !mi($a) $condition, cl($clustervar)

global discontinuity_2=_b[collect_2]

test collect_2

global test2=round(`r(p)',0.01)

`noisy' ivregress 2sls $a moremoneyo score2_1 score2_2 `controls' (collect_2= moremoneyn) if !mi($a) $condition, cl($clustervar)

global discontinuity_4=_b[collect_2]

test collect_2

global test4=round(`r(p)',0.01)

}

if "$method"=="reg" {

//Full bandwidth, linear

`noisy' reg $a score2_1 score2_2 `controls' winnersvs if !mi($a) $condition, cl($clustervar)

global discontinuity_1=_b[winnersvs]
```

```
test winnersvs

global test1=round(`r(p)',0.01)

`noisy' reg $a score2_1 score2_2 `controls' losersvs  if !mi($a) $condition, cl($clustervar)

global discontinuity_2=_b[losersvs]

test losersvs

global test2=round(`r(p)',0.01)

`noisy' reg $a moremoneyn score2_1 score2_2 `controls' moremoneyo if !mi($a) $condition,
cl($clustervar)

global discontinuity_4=_b[moremoneyn]

test moremoneyn

global test4=round(`r(p)',0.01)

}

//Full bandwidth, test of symmetry

estimates clear

`noisy' reg $a winnersvs score2_1 score2_2 `controls'  if !mi($a) $condition

estimates store A

`noisy' reg $a losersvs score2_1 score2_2 `controls' if !mi($a) $condition

estimates store B

suest A B

  test [A_mean]winnersvsalwayslosers=[B_mean]losersvsalwayswinners

  global testequality=round(`r(p)',0.01)

eststo clear

// GRAPHS

  ///Definition of treshold

local treshold=36.6

*36.5274
```

```
///Save p-values and estimates in local variables

local test1=string($test1, "%12.2f")

local test2=string($test2, "%12.2f")

local test4=string($test4, "%12.2f")

local discontinuity_1=string($discontinuity_1, "%12.3f")

local discontinuity_2=string($discontinuity_2, "%12.3f")

local discontinuity_4=string($discontinuity_4, "%12.3f")

/// Linear winners vs alwayslosers

preserve

set scheme s2color

collapse (mean) $a score2_1 n_bins if !mi(winnersvsalwaysl)  $condition, by(bins)

twoway (scatter $a score2_1 , mcolor(gray) msize(medium) msymbol(circle) ) ///

(lfit $a score2_1  if score2_1 <=0 , range(-4.6 0) lcolor(black) lwidth(medthick)) ///

(lfit $a score2_1 if score2_1>0 , range(0 4.6) lcolor(black) lwidth(medthick)), ///

ytitle() ylabel(none) ymtick($low($step)$high, labels) xlabel(none) xmtick(-4(1)4, labels)
xtitle("") ///

xline(0) subtitle() legend(off) scheme(s1mono) note("Discontinuity at threshold:
`discontinuity_1' (p=`test1')") name(RD1, replace) nodraw ///

graphregion(color(white))

restore

graph combine RD1, cols(2) subtitle("$graphtitle (positive shock)") imargin(b=0 t=1)
graphregion(color(white))

graph export "$graphtitle (positive shock).pdf", replace

/// Linear losers vs alwayswinners

preserve

collapse (mean) $a score2_1 n_bins if !mi(losersvsal)  $condition, by(bins)

twoway (scatter $a score2_1 , mcolor(gray) msize(medium) msymbol(circle) ) ///

(lfit $a score2_1  if score2_1 <=0 , range(-4.6 0) lcolor(black) lwidth(medthick)) ///
```

```
(lfit $a score2_1 if score2_1>0 , range(0 4.6) lcolor(black) lwidth(medthick)), ///

ytitle() ylabel(none) ymtick($low($step)$high, labels) xlabel(none) xmtick(-4(1)4, labels) xtitle("") ///

xline(0) subtitle() legend(off) scheme(s1mono) note("Discontinuity at threshold: `discontinuity_2' (p=`test2')") name(RD3, replace) nodraw ///

graphregion(color(white))

restore

graph combine RD3, cols(2) subtitle("$graphtitle (negative shock)") imargin(b=0 t=1) graphregion(color(white))

graph export "$graphtitle (negative shock).pdf", replace

/// Linear new SELBEN combined

preserve

collapse (mean) $a score2_1 n_bins if !mi(moremoneyn)  $condition, by(bins)

twoway (scatter $a score2_1 , mcolor(gray) msize(medium) msymbol(circle) ) ///

(lfit $a score2_1  if score2_1 <=0 , range(-4.6 0) lcolor(black) lwidth(medthick)) ///

(lfit $a score2_1 if score2_1>0 , range(0 4.6) lcolor(black) lwidth(medthick)), ///

ytitle() ylabel(none) ymtick($low($step)$high, labels) xlabel(none) xmtick(-4(1)4, labels) xtitle("") ///

xline(0) subtitle() legend(off) scheme(s1mono) note("Discontinuity at threshold: `discontinuity_4' (p=`test4')") name(RD5, replace) nodraw ///

graphregion(color(white))

restore

// Graphs RD1 RD3 RD5, cols(2) subtitle($graphtitle) imargin(b=0 t=1)

*xsize(8) ysize(11)

graph combine RD5, cols(2) subtitle($graphtitle) imargin(b=0 t=1) graphregion(color(white))

graph export "$graphtitle .pdf", replace

end


//Figure 3. First stage
```

```
Compliance "collect_2" "reg" "" "" 0 1 0.2 "Receive BDH"

// Little program for SELBEN2. Fuzzi RD results and graphs for SELBEN2

capture program drop SELBEN2

program define SELBEN2, rclass

  args a method controls condition low high step graphtitle

  global a "`a'"

  global method "`method'"

  global controls "`controls'"

  global condition "`condition'"

  global low=`low'

  global high=`high'

  global step=`step'

  global graphtitle "`graphtitle'"

  global clustervar="parroqui"

  //Tests RD to generate p-values for RD graphs

local controls ""

local noisy "quietly"

if "$method"=="ivreg" {

// For fo full bandwidth, linear

`noisy' ivregress 2sls $a score2_1 score2_2 `controls' (collect_2= winnersvs) if !mi($a) $condition, cl($clustervar)

global discontinuity_1=_b[collect_2]

test collect_2

global test1=round(`r(p)',0.01)

`noisy' ivregress 2sls $a score2_1 score2_2 `controls' (collect_2= losersvs)  if !mi($a) $condition, cl($clustervar)

global discontinuity_2=_b[collect_2]
```

```
test collect_2

global test2=round(`r(p)',0.01)

`noisy' ivregress 2sls $a moremoneyo score2_1 score2_2 `controls' (collect_2= moremoneyn) if !mi($a) $condition, cl($clustervar)

global discontinuity_4=_b[collect_2]

test collect_2

global test4=round(`r(p)',0.01)

}

if "$method"=="reg" {

// For full bandwidth, linear

`noisy' reg $a score2_1 score2_2 `controls' winnersvs if !mi($a) $condition, cl($clustervar)

global discontinuity_1=_b[winnersvs]

test winnersvs

global test1=round(`r(p)',0.01)

`noisy' reg $a score2_1 score2_2 `controls' losersvs  if !mi($a) $condition, cl($clustervar)

global discontinuity_2=_b[losersvs]

test losersvs

global test2=round(`r(p)',0.01)

`noisy' reg $a moremoneyn score2_1 score2_2 `controls' moremoneyo if !mi($a) $condition, cl($clustervar)

global discontinuity_4=_b[moremoneyn]

test moremoneyn

global test4=round(`r(p)',0.01)

}

//For full bandwidth and test of symmetry:

estimates clear

`noisy' reg $a winnersvs score2_1 score2_2 `controls'  if !mi($a) $condition
```

```
estimates store A
`noisy' reg $a losersvs score2_1 score2_2 `controls' if !mi($a) $condition
estimates store B
suest A B
  test [A_mean]winnersvsalwayslosers=[B_mean]losersvsalwayswinners
  global testequality=round(`r(p)',0.01)
eststo clear
// Definition of threshold
local cutoff=36.6
*36.5274
// Here we save p-values and estimates in local variables:
local test1=string($test1, "%12.2f")
local test2=string($test2, "%12.2f")
local test4=string($test4, "%12.2f")
local discontinuity_1=string($discontinuity_1, "%12.3f")
local discontinuity_2=string($discontinuity_2, "%12.3f")
local discontinuity_4=string($discontinuity_4, "%12.3f")
// Linear (winners vs always losers)
preserve
set scheme s2color
collapse (mean) $a score2_1 n_bins if !mi(winnersvsalwaysl)  $condition, by(bins)
twoway (scatter $a score2_1 , mcolor(gray) msize(medium) msymbol(circle) ) ///
(lfit $a score2_1  if score2_1 <=0 , range(-4.6 0) lcolor(black) lwidth(medthick)) ///
(lfit $a score2_1 if score2_1>0 , range(0 4.6) lcolor(black) lwidth(medthick)), ///
ytitle() ylabel(none) ymtick($low($step)$high, labels) xlabel(none) xmtick(-4(1)4, labels)
xtitle("") ///
xline(0) subtitle() legend(off) scheme(s1mono) note("Discontinuity at threshold:
```

```
`discontinuity_1' (p=`test1')") name(RD1, replace) nodraw ///

graphregion(color(white))

restore

graph combine RD1, cols(2) subtitle("$graphtitle (positive shock)") imargin(b=0 t=1)
graphregion(color(white))

graph export "$graphtitle (positive shock).pdf", replace

// Linear (losers vs always winners)

preserve

collapse (mean) $a score2_1 n_bins if !mi(losersvsal)  $condition, by(bins)

twoway (scatter $a score2_1 , mcolor(gray) msize(medium) msymbol(circle) ) ///

(lfit $a score2_1  if score2_1 <=0 , range(-4.6 0) lcolor(black) lwidth(medthick)) ///

(lfit $a score2_1 if score2_1>0 , range(0 4.6) lcolor(black) lwidth(medthick)), ///

ytitle() ylabel(none) ymtick($low($step)$high, labels) xlabel(none) xmtick(-4(1)4, labels)
xtitle("") ///

xline(0) subtitle() legend(off) scheme(s1mono) note("Discontinuity at threshold:
`discontinuity_2' (p=`test2')") name(RD3, replace) nodraw ///

graphregion(color(white))

restore

graph combine RD3, cols(2) subtitle("$graphtitle (negative shock)") imargin(b=0 t=1)
graphregion(color(white))

graph export "$graphtitle (negative shock).pdf", replace

// Linear (new SELBEN)

preserve

collapse (mean) $a score2_1 n_bins if !mi(moremoneyn)  $condition, by(bins)

twoway (scatter $a score2_1 , mcolor(gray) msize(medium) msymbol(circle) ) ///

(lfit $a score2_1  if score2_1 <=0 , range(-4.6 0) lcolor(black) lwidth(medthick)) ///

(lfit $a score2_1 if score2_1>0 , range(0 4.6) lcolor(black) lwidth(medthick)), ///

ytitle() ylabel(none) ymtick($low($step)$high, labels) xlabel(none) xmtick(-4(1)4, labels)
xtitle("") ///
```

```
xline(0) subtitle() legend(off) scheme(s1mono) note("Discontinuity at threshold:
`discontinuity_4' (p=`test4')") name(RD5, replace) nodraw ///

graphregion(color(white))

restore

// Graph combine RD1 RD3 RD5, cols(2) subtitle($graphtitle) imargin(b=0 t=1)

*xsize(8) ysize(11)

graph combine RD5, cols(2) subtitle($graphtitle) imargin(b=0 t=1) graphregion(color(white))

graph export "$graphtitle .pdf", replace

end

local includedcontrols "householdsize ageresponder schooling"

SELBEN2 "protestant" "reg" "`includedcontrols'" "" 0 0.4 0.1 "Being evangelical"

display $testequality

SELBEN2 "protestant" "reg" "`includedcontrols'" "& religiousness>=6.827599" 0 0.4 0.1
"Being evangelical (above average religious families)"

display $testequality

SELBEN2 "protestant" "reg" "`includedcontrols'" "& religiousness<6.827599" 0 0.4 0.1 "Being
evangelical (below average religious families)"

display $testequality

SELBEN2 "religiousness" "reg" "`includedcontrols'" "" 0 10 1 "How religious are you" 4 10 1

display $testequality

SELBEN2 "attendpermonth" "reg" "`includedcontrols'" "" 0 10 2 "Monthly service attendance"
0 10 2

display $testequality

SELBEN2 "attendpermonth" "reg" "`includedcontrols'" "& religiousness>=6.827599" 0 10 2
"Monthly service attendance (above average religious families)"

display $testequality

SELBEN2 "attendpermonth" "reg" "`includedcontrols'" "& religiousness<6.827599" 0 10 2
"Monthly service attendance (below average religious families)"

display $testequality
```

```
// Difference in effects between above and below religious families
reg protestant moremoneyn score2_1 score2_2 moremoneyo if religiousness>=6.827599
estimates store A
reg protestant moremoneyn score2_1 score2_2 moremoneyo if religiousness<6.827599
estimates store B
suest A B, cl(par)
test [A_mean]moremoneynew=[B_mean]moremoneynew
reg attendp moremoneyn score2_1 score2_2 moremoneyo if religiousness>=6.827599
estimates store A
reg attendp moremoneyn score2_1 score2_2 moremoneyo if religiousness<6.827599
estimates store B
suest A B, cl(par)
test [A_mean]moremoneynew=[B_mean]moremoneynew
// Appendix
///First stage F-values
  foreach x in "score2_1" "score2_1 score2_1sq" "score2_1 score2_1sq score2_1cu" {
    quietly: reg collect_2 moremoneyn `x' , r
    quietly: test moremoneyn
    display  "`i': `r(F)'"
  }
///Social activities
matrix define Activity=J(22,2,.)
foreach i of numlist 1(1)11 {
  gen temp=j15_`i'==1
  sum temp
  matrix Activity[2*`i'-1,1]=round(`r(mean)',0.001)
```

```
   ivregress 2sls temp score2_1 score2_2 moremoneyo (collect_2= moremoneyn), cl(par)
   matrix Activity[2*`i'-1,2]=round(_b[collect_2],0.001)
   matrix x=e(V)
   matrix Activity[2*`i',2]=round(x[1,1]^0.5,0.001)
   display x[1,1]
   drop temp
}
matrix list Activity
/// Choice of bandwidth
matrix define Bandwidth=J(15,3,.)
local c1=1
foreach x in protestant attendp religiousness {
 local c2=1
 foreach b in 5 4 3 2 1 {
   ivregress 2sls `x' score2_1 score2_2 moremoneyo (collect_2= moremoneyn) if score2_1>=-
`b'&score2_1<=`b', cl(par)
        matrix Bandwidth[`c2'*3-2,`c1']=round(_b[collect_2],0.001)
        matrix Bandwidth[`c2'*3-1,`c1']=round(_se[collect_2],0.001)
        test collect_2
   matrix Bandwidth[`c2'*3,`c1']=round(`r(p)',0.001)
        local c2=`c2'+1
 }
 local c1=`c1'+1
}
matrix rownames Bandwidth= 5 se p 4 se p 3 se p 2 se p 1 se p
matrix colnames Bandwidth= "protestant" "attendance" "religious"
matrix list Bandwidth
```

```
/// Main characteristics variables
matrix define Background=J(9,1,.)
local c1=1
foreach x in householdsize ageresponder schooling {
  local c2=1
  foreach b in "score2_1 score2_2"  {
    ivregress 2sls `x' `b' moremoneyo (collect_2= moremoneyn), cl(par)
        matrix Background[`c1'*3-2,`c2']=round(_b[collect_2],0.001)
        matrix Background[`c1'*3-1,`c2']=round(_se[collect_2],0.001)
        test collect_2
    matrix Background[`c1'*3,`c2']=round(`r(p)',0.001)
        local c2=`c2'+1
  }
  local c1=`c1'+1
}
matrix rownames Background=  hhsize "" "" age "" "" schooling "" ""
matrix list Background
/// Distribution of attendance effects
foreach i of numlist 1(1)8 {
  gen temp=attendance>`i'
  display "`i':"
  ivregress 2sls temp score2_1 score2_2 moremoneyo (collect_2= moremoneyn), r
  drop temp
}
```

```
// Generate new variables
gen attendwin = attendpermonth if winnersvsalwayslosers==1
replace attendwin = attendpermonth if winnersvsalwayslosers==0
gen scorewin = score2_1 if winnersvsalwayslosers==1
replace  scorewin =  score2_1 if winnersvsalwayslosers==0
gen score_2win = score2_2 if winnersvsalwayslosers==1
replace  score_2win =  score2_2 if winnersvsalwayslosers==0
gen protwin = protestant if winnersvsalwayslosers==1
replace protwin = protestant if winnersvsalwayslosers==0
gen relwin = religiousness if winnersvsalwayslosers==1
replace relwin = religiousness if winnersvsalwayslosers==0
// Variables for Losers vs Always winners
gen atendlose = attendpermonth if losersvsalwayswinners==1
replace atendlose = attendpermonth if losersvsalwayswinners==0
gen scorelose = score2_1 if losersvsalwayswinners==1
replace  scorelose =  score2_1 if losersvsalwayswinners==0
gen score_2lose = score2_2 if losersvsalwayswinners==1
replace  score_2lose =  score2_2 if losersvsalwayswinners==0
gen protlose = protestant if losersvsalwayswinners==1
replace protlose = protestant if losersvsalwayswinners==0
gen rellose = religiousness if losersvsalwayswinners==1
replace rellose = religiousness if losersvsalwayswinners==0
// Table 6. Church attendance
gen scorewin_sq=scorewin*scorewin
gen scorewin_cu=scorewin^3
```

```
gen scorelose_sq=scorelose*scorelose

gen scorelose_cu=scorelose^3

ivregress 2sls attendwin scorewin (collect_2=moremoneynew), vce(cluster parroqui)

ivregress 2sls attendwin scorewin scorewin_sq (collect_2=moremoneynew), vce(cluster parroqui)

ivregress 2sls attendwin scorewin scorewin_sq scorewin_cu (collect_2=moremoneynew), vce(cluster parroqui)

ivregress 2sls attendwin scorewin ageresponder householdsize schooling_resp (collect_2=moremoneynew), vce(cluster parroqui)

ivregress 2sls attendwin scorewin scorewin_sq ageresponder householdsize schooling_resp (collect_2=moremoneynew), vce(cluster parroqui)

ivregress 2sls attendwin scorewin scorewin_sq scorewin_cu ageresponder householdsize schooling_resp (collect_2=moremoneynew), vce(cluster parroqui)

ivregress 2sls atendlose scorelose (collect_2=moremoneynew), vce(cluster parroqui)

ivregress 2sls atendlose scorelose scorelose_sq (collect_2=moremoneynew), vce(cluster parroqui)

ivregress 2sls atendlose scorelose scorelose_sq scorelose_cu (collect_2=moremoneynew), vce(cluster parroqui)

ivregress 2sls atendlose scorelose ageresponder householdsize schooling_resp (collect_2=moremoneynew), vce(cluster parroqui)

ivregress 2sls atendlose scorelose scorelose_sq ageresponder householdsize schooling_resp (collect_2=moremoneynew), vce(cluster parroqui)

ivregress 2sls atendlose scorelose scorelose_sq scorelose_cu ageresponder householdsize schooling_resp (collect_2=moremoneynew), vce(cluster parroqui)

/// being evangelical

ivregress 2sls protwin scorewin (collect_2=moremoneynew), vce(cluster parroqui)

ivregress 2sls protwin scorewin scorewin_sq (collect_2=moremoneynew), vce(cluster parroqui)

ivregress 2sls protwin scorewin scorewin_sq scorewin_cu (collect_2=moremoneynew), vce(cluster parroqui)

ivregress 2sls protwin scorewin ageresponder householdsize schooling_resp (collect_2=moremoneynew), vce(cluster parroqui)

ivregress 2sls protwin scorewin scorewin_sq ageresponder householdsize schooling_resp (collect_2=moremoneynew), vce(cluster parroqui)
```

```
ivregress 2sls protwin scorewin scorewin_sq scorewin_cu ageresponder householdsize
schooling_resp (collect_2=moremoneynew), vce(cluster parroqui)

ivregress 2sls protlose scorelose (collect_2=moremoneynew), vce(cluster parroqui)

ivregress 2sls protlose scorelose scorelose_sq (collect_2=moremoneynew), vce(cluster
parroqui)

ivregress 2sls protlose scorelose scorelose_sq scorelose_cu (collect_2=moremoneynew),
vce(cluster parroqui)

ivregress 2sls protlose scorelose ageresponder householdsize schooling_resp
(collect_2=moremoneynew), vce(cluster parroqui)

ivregress 2sls protlose scorelose scorelose_sq ageresponder householdsize schooling_resp
(collect_2=moremoneynew), vce(cluster parroqui)

ivregress 2sls protlose scorelose scorelose_sq scorelose_cu ageresponder householdsize
schooling_resp (collect_2=moremoneynew), vce(cluster parroqui)

/// being evangelical (above average)

ivregress 2sls protwin scorewin (collect_2=moremoneynew) if religiousness>=6.827599,
vce(cluster parroqui)

ivregress 2sls protwin scorewin scorewin_sq (collect_2=moremoneynew) if
religiousness>=6.827599, vce(cluster parroqui)

ivregress 2sls protwin scorewin scorewin_sq scorewin_cu (collect_2=moremoneynew) if
religiousness>=6.827599, vce(cluster parroqui)

ivregress 2sls protwin scorewin ageresponder householdsize schooling_resp
(collect_2=moremoneynew) if religiousness>=6.827599, vce(cluster parroqui)

ivregress 2sls protwin scorewin scorewin_sq ageresponder householdsize schooling_resp
(collect_2=moremoneynew) if religiousness>=6.827599, vce(cluster parroqui)

ivregress 2sls protwin scorewin scorewin_sq scorewin_cu ageresponder householdsize
schooling_resp (collect_2=moremoneynew) if religiousness>=6.827599, vce(cluster parroqui)

ivregress 2sls protlose scorelose (collect_2=moremoneynew) if religiousness>=6.827599,
vce(cluster parroqui)

ivregress 2sls protlose scorelose scorelose_sq (collect_2=moremoneynew) if
religiousness>=6.827599, vce(cluster parroqui)

ivregress 2sls protlose scorelose scorelose_sq scorelose_cu (collect_2=moremoneynew) if
religiousness>=6.827599, vce(cluster parroqui)

ivregress 2sls protlose scorelose ageresponder householdsize schooling_resp
(collect_2=moremoneynew) if religiousness>=6.827599, vce(cluster parroqui)
```

```
ivregress 2sls protlose scorelose scorelose_sq ageresponder householdsize schooling_resp (collect_2=moremoneynew) if religiousness>=6.827599, vce(cluster parroqui)

ivregress 2sls protlose scorelose scorelose_sq scorelose_cu ageresponder householdsize schooling_resp (collect_2=moremoneynew) if religiousness>=6.827599, vce(cluster parroqui)

/// self-rated religiousness

ivregress 2sls relwin scorewin (collect_2=moremoneynew), vce(cluster parroqui)

ivregress 2sls relwin scorewin scorewin_sq (collect_2=moremoneynew), vce(cluster parroqui)

ivregress 2sls relwin scorewin scorewin_sq scorewin_cu (collect_2=moremoneynew), vce(cluster parroqui)

ivregress 2sls relwin scorewin ageresponder householdsize schooling_resp (collect_2=moremoneynew), vce(cluster parroqui)

ivregress 2sls relwin scorewin scorewin_sq ageresponder householdsize schooling_resp (collect_2=moremoneynew), vce(cluster parroqui)

ivregress 2sls relwin scorewin scorewin_sq scorewin_cu ageresponder householdsize schooling_resp (collect_2=moremoneynew), vce(cluster parroqui)

ivregress 2sls rellose scorelose (collect_2=moremoneynew), vce(cluster parroqui)

ivregress 2sls rellose scorelose scorelose_sq (collect_2=moremoneynew), vce(cluster parroqui)

ivregress 2sls rellose scorelose scorelose_sq scorelose_cu (collect_2=moremoneynew), vce(cluster parroqui)

ivregress 2sls rellose scorelose ageresponder householdsize schooling_resp (collect_2=moremoneynew), vce(cluster parroqui)

ivregress 2sls rellose scorelose scorelose_sq ageresponder householdsize schooling_resp (collect_2=moremoneynew), vce(cluster parroqui)

ivregress 2sls rellose scorelose scorelose_sq scorelose_cu ageresponder householdsize schooling_resp (collect_2=moremoneynew), vce(cluster parroqui)

  /// 3. Extention of analysis

    /// 3. Extension

/// 3.1 Balance check. Test for the discontinuity in the average covariates

clear all

use "M:\ECON5106\Prosjekt_2018\Data.dta"

foreach v of var schooling_resp {
```

```
        reg `v' moremoneynew i.group score2_1, vce(cluster parroqui)

        test moremoneynew

        di "`v' " r(p)

        predict p

        bys score2_1 : egen m = mean(`v')

        twoway (sc m score2_1) (line p score2_1), name(`v', replace)

        drop p m

}

///balanced


// 3.2. Distribution of the forcing variable. Testing for violation of no manipulation assumption

hist score2_1, start(-4.591001)

clear all

// 3.3. Effect of schooling for attendance

// Schooling is less than 5 years

use Data.dta

keep if school<5

eststo: ivregress 2sls attendper score2_1 moremoneyo (collect_2= moremoneyn),  vce(cluster parroqui)

eststo: ivregress 2sls attendper score2_1 score2_1sq moremoneyo (collect_2= moremoneyn), vce(cluster parroqui)

eststo: ivregress 2sls attendper score2_1 score2_1sq score2_1cu moremoneyo (collect_2= moremoneyn),  vce(cluster parroqui)

eststo: ivregress 2sls attendper score2_1 moremoneyo householdsize ageresponder schooling_resp (collect_2= moremoneyn),  vce(cluster parroqui)

eststo: ivregress 2sls attendper score2_1 score2_1sq moremoneyo householdsize ageresponder schooling_resp (collect_2= moremoneyn),  vce(cluster parroqui)

eststo: ivregress 2sls attendper score2_1 score2_1sq score2_1cu moremoneyo householdsize ageresponder schooling_resp (collect_2= moremoneyn),  vce(cluster parroqui)
```

```
esttab, se

eststo clear

eststo: ivregress 2sls protestant score2_1 moremoneyo (collect_2= moremoneyn),  vce(cluster parroqui)

eststo: ivregress 2sls protestant score2_1 score2_1sq moremoneyo (collect_2= moremoneyn), vce(cluster parroqui)

eststo: ivregress 2sls protestant score2_1 score2_1sq score2_1cu moremoneyo (collect_2= moremoneyn),  vce(cluster parroqui)

eststo: ivregress 2sls protestant score2_1 moremoneyo householdsize ageresponder schooling_resp (collect_2= moremoneyn),  vce(cluster parroqui)

eststo: ivregress 2sls protestant score2_1 score2_1sq moremoneyo householdsize ageresponder schooling_resp (collect_2= moremoneyn),  vce(cluster parroqui)

eststo: ivregress 2sls protestant score2_1 score2_1sq score2_1cu moremoneyo householdsize ageresponder schooling_resp (collect_2= moremoneyn),  vce(cluster parroqui)

esttab, se

eststo clear

eststo: ivregress 2sls religiousness score2_1 moremoneyo (collect_2= moremoneyn), vce(cluster parroqui)

eststo: ivregress 2sls religiousness score2_1 score2_1sq moremoneyo (collect_2= moremoneyn),  vce(cluster parroqui)

eststo: ivregress 2sls religiousness score2_1 score2_1sq score2_1cu moremoneyo (collect_2= moremoneyn),  vce(cluster parroqui)

eststo: ivregress 2sls religiousness score2_1 moremoneyo householdsize ageresponder schooling_resp (collect_2= moremoneyn),  vce(cluster parroqui)

eststo: ivregress 2sls religiousness score2_1 score2_1sq moremoneyo  householdsize ageresponder schooling_resp (collect_2= moremoneyn),  vce(cluster parroqui)

eststo: ivregress 2sls religiousness score2_1 score2_1sq score2_1cu moremoneyo householdsize ageresponder schooling_resp (collect_2= moremoneyn),  vce(cluster parroqui)

esttab, se

//Regression graph

net install rdrobust, from(https://sites.google.com/site/rdpackages/rdrobust/stata) replace

ssc install njc_stuff
```

```
reg attendpermonth moremoneynew moremoneyold score2_1 score2_2, vce(cluster parroqui)

global discontinuity=_b[moremoneynew]

test moremoneynew

global test=round(`r(p)',0.01)

// Pannel A

reg attendpermonth moremoneynew moremoneyold score2_1 score2_2, vce(cluster parroqui)

global discontinuity=_b[moremoneynew]

test moremoneynew

global test=round(`r(p)',0.01)

local discontinuity=string($discontinuity, "%12.3f")

local test=string($test, "%12.2f")

rdplot attendpermonth score2_1, kernel(uniform) nbins(12 11) graph_options(ylabel(0(2)10) xlabel(-4(1)4) legend(off) ///

title(Panel A - Monthly service attendance) scheme(s1mono) ///

note("Discontinuity at threshold: `discontinuity' (p=`test')") graphregion(color(white))) genvars p(1)

graph save PanelAFig4, replace

drop rdplot_id rdplot_N rdplot_min_bin rdplot_max_bin rdplot_mean_bin rdplot_mean_x ///

rdplot_mean_y rdplot_se_y rdplot_ci_l rdplot_ci_r rdplot_hat_y

macro drop _all

// Pannel B

reg protestant moremoneynew moremoneyold score2_1 score2_2, vce(cluster parroqui)

global discontinuity=_b[moremoneynew]

test moremoneynew

global test=round(`r(p)',0.01)

local discontinuity=string($discontinuity, "%12.3f")

local test=string($test, "%12.2f")
```

```
rdplot protestant score2_1, kernel(uniform) nbins(12 11) graph_options(ylabel(0(0.1)0.4)
xlabel(-4(1)4) legend(off) ///

title(Panel B - Being Evangelical)scheme(s1mono) ///

note("Discontinuity at threshold: `discontinuity' (p=`test')") graphregion(color(white))) genvars
p(1)

graph save PanelBFig4, replace

drop rdplot_id rdplot_N rdplot_min_bin rdplot_max_bin rdplot_mean_bin rdplot_mean_x ///

rdplot_mean_y rdplot_se_y rdplot_ci_l rdplot_ci_r rdplot_hat_y

macro drop _all

// Pannel C

reg religiousness moremoneynew moremoneyold score2_1 score2_2, vce(cluster parroqui)

global discontinuity=_b[moremoneynew]

test moremoneynew

global test=round(`r(p)',0.01)

local discontinuity=string($discontinuity, "%12.3f")

local test=string($test, "%12.2f")

rdplot religiousness score2_1, kernel(uniform) nbins(12 11) graph_options(ylabel(4(1)10)
xlabel(-4(1)4) legend(off) ///

title(Panel C - How religious are you?) scheme(s1mono) ///

note("Discontinuity at threshold: `discontinuity' (p=`test')") graphregion(color(white))) genvars
p(1)

graph save PanelCFig4, replace

drop rdplot_id rdplot_N rdplot_min_bin rdplot_max_bin rdplot_mean_bin rdplot_mean_x ///

rdplot_mean_y rdplot_se_y rdplot_ci_l rdplot_ci_r rdplot_hat_y

macro drop _all

graph combine "PanelAFig4" "PanelBFig4" "PanelCFig4"

// Pannel A
```

```
reg attendpermonth moremoneynew moremoneyold score2_1 score2_2 if
religiousness>=6.827599, vce(cluster parroqui)

global discontinuity=_b[moremoneynew]

test moremoneynew

global test=round(`r(p)',0.01)

local discontinuity=string($discontinuity, "%12.3f")

local test=string($test, "%12.2f")

rdplot attendpermonth score2_1, kernel(uniform) nbins(12 11) graph_options(ylabel(0(2)10)
xlabel(-4(1)4) legend(off) ///

title(Panel A - Monthly service attendance (above average religious families)) scheme(s1mono)
///

note("Discontinuity at threshold: `discontinuity' (p=`test')") graphregion(color(white))) genvars
p(1)

graph export "PanelAFig5.png", replace

drop rdplot_id rdplot_N rdplot_min_bin rdplot_max_bin rdplot_mean_bin rdplot_mean_x ///

rdplot_mean_y rdplot_se_y rdplot_ci_l rdplot_ci_r rdplot_hat_y

macro drop _all

// Pannel B

reg attendpermonth moremoneynew moremoneyold score2_1 score2_2 if
religiousness<6.827599, vce(cluster parroqui)

global discontinuity=_b[moremoneynew]

test moremoneynew

global test=round(`r(p)',0.01)

local discontinuity=string($discontinuity, "%12.3f")

local test=string($test, "%12.2f")

rdplot attendpermonth score2_1 if religiousness<6.827599, kernel(uniform) nbins(12 11)
graph_options(ylabel(0(2)10) xlabel(-4(1)4) legend(off) ///

title(Panel B - Monthly service attendance (below average religious families)) scheme(s1mono)
///

note("Discontinuity at threshold: `discontinuity' (p=`test')") graphregion(color(white))) genvars
```

```
p(1)

graph export "PanelBFig5.png", replace

drop rdplot_id rdplot_N rdplot_min_bin rdplot_max_bin rdplot_mean_bin rdplot_mean_x ///

rdplot_mean_y rdplot_se_y rdplot_ci_l rdplot_ci_r rdplot_hat_y

macro drop _all

// Pannel C

reg protestant moremoneynew moremoneyold score2_1 score2_2 if religiousness>=6.827599, vce(cluster parroqui)

global discontinuity=_b[moremoneynew]

test moremoneynew

global test=round(`r(p)',0.01)

local discontinuity=string($discontinuity, "%12.3f")

local test=string($test, "%12.2f")

rdplot protestant score2_1 if religiousness>=6.827599, kernel(uniform) nbins(12 11) graph_options(ylabel(0(0.1)0.4) xlabel(-4(1)4) legend(off) ///

title(Panel C - Being Evangelical (above average religious families)) scheme(s1mono) ///

note("Discontinuity at threshold: `discontinuity' (p=`test')") graphregion(color(white))) genvars
p(1)

graph export "PanelCFig5.png", replace

drop rdplot_id rdplot_N rdplot_min_bin rdplot_max_bin rdplot_mean_bin rdplot_mean_x ///

rdplot_mean_y rdplot_se_y rdplot_ci_l rdplot_ci_r rdplot_hat_y

macro drop _all

// Pannel D

reg protestant moremoneynew moremoneyold score2_1 score2_2 if religiousness<6.827599, vce(cluster parroqui)

global discontinuity=_b[moremoneynew]

test moremoneynew

global test=round(`r(p)',0.01)
```

```
local discontinuity=string($discontinuity, "%12.3f")

local test=string($test, "%12.2f")

rdplot protestant score2_1 if religiousness<6.827599, kernel(uniform) nbins(12 11)
graph_options(ylabel(0(0.1)0.4) xlabel(-4(1)4) legend(off) ///

title(Panel D - Being Evangelical (below average religious families)) scheme(s1mono) ///

note("Discontinuity at threshold: `discontinuity' (p=`test')") graphregion(color(white))) genvars
p(1)

graph export "PanelDFig5.png", replace

drop rdplot_id rdplot_N rdplot_min_bin rdplot_max_bin rdplot_mean_bin rdplot_mean_x ///

rdplot_mean_y rdplot_se_y rdplot_ci_l rdplot_ci_r rdplot_hat_y

macro drop _all

// Schooling is between 5 and 9 years

clear all

use Data.dta

keep if 5<school<9

eststo: ivregress 2sls attendper score2_1 moremoneyo (collect_2= moremoneyn),  vce(cluster
parroqui)

eststo: ivregress 2sls attendper score2_1 score2_1sq moremoneyo (collect_2= moremoneyn),
vce(cluster parroqui)

eststo: ivregress 2sls attendper score2_1 score2_1sq score2_1cu moremoneyo (collect_2=
moremoneyn),  vce(cluster parroqui)

eststo: ivregress 2sls attendper score2_1 moremoneyo householdsize ageresponder
schooling_resp (collect_2= moremoneyn),  vce(cluster parroqui)

eststo: ivregress 2sls attendper score2_1 score2_1sq moremoneyo householdsize ageresponder
schooling_resp (collect_2= moremoneyn),  vce(cluster parroqui)

eststo: ivregress 2sls attendper score2_1 score2_1sq score2_1cu moremoneyo householdsize
ageresponder schooling_resp (collect_2= moremoneyn),  vce(cluster parroqui)

esttab, se

eststo clear
```

```
eststo: ivregress 2sls protestant score2_1 moremoneyo (collect_2= moremoneyn),  vce(cluster parroqui)

eststo: ivregress 2sls protestant score2_1 score2_1sq moremoneyo (collect_2= moremoneyn), vce(cluster parroqui)

eststo: ivregress 2sls protestant score2_1 score2_1sq score2_1cu moremoneyo (collect_2= moremoneyn),  vce(cluster parroqui)

eststo: ivregress 2sls protestant score2_1 moremoneyo householdsize ageresponder schooling_resp (collect_2= moremoneyn),  vce(cluster parroqui)

eststo: ivregress 2sls protestant score2_1 score2_1sq moremoneyo householdsize ageresponder schooling_resp (collect_2= moremoneyn),  vce(cluster parroqui)

eststo: ivregress 2sls protestant score2_1 score2_1sq score2_1cu moremoneyo householdsize ageresponder schooling_resp (collect_2= moremoneyn),  vce(cluster parroqui)

esttab, se

eststo clear

eststo: ivregress 2sls religiousness score2_1 moremoneyo (collect_2= moremoneyn), vce(cluster parroqui)

eststo: ivregress 2sls religiousness score2_1 score2_1sq moremoneyo (collect_2= moremoneyn),  vce(cluster parroqui)

eststo: ivregress 2sls religiousness score2_1 score2_1sq score2_1cu moremoneyo (collect_2= moremoneyn),  vce(cluster parroqui)

eststo: ivregress 2sls religiousness score2_1 moremoneyo householdsize ageresponder schooling_resp (collect_2= moremoneyn),  vce(cluster parroqui)

eststo: ivregress 2sls religiousness score2_1 score2_1sq moremoneyo  householdsize ageresponder schooling_resp (collect_2= moremoneyn),  vce(cluster parroqui)

eststo: ivregress 2sls religiousness score2_1 score2_1sq score2_1cu moremoneyo householdsize ageresponder schooling_resp (collect_2= moremoneyn),  vce(cluster parroqui)

esttab, se

//Regression graph

reg attendpermonth moremoneynew moremoneyold score2_1 score2_2, vce(cluster parroqui)

global discontinuity=_b[moremoneynew]

test moremoneynew

global test=round(`r(p)',0.01)
```

```
// Pannel A

reg attendpermonth moremoneynew moremoneyold score2_1 score2_2, vce(cluster parroqui)

global discontinuity=_b[moremoneynew]

test moremoneynew

global test=round(`r(p)',0.01)

local discontinuity=string($discontinuity, "%12.3f")

local test=string($test, "%12.2f")

rdplot attendpermonth score2_1, kernel(uniform) nbins(12 11) graph_options(ylabel(0(2)10)
xlabel(-4(1)4) legend(off) ///

title(Panel A - Monthly service attendance) scheme(s1mono) ///

note("Discontinuity at threshold: `discontinuity' (p=`test')") graphregion(color(white))) genvars
p(1)

graph save PanelAFig4, replace

drop rdplot_id rdplot_N rdplot_min_bin rdplot_max_bin rdplot_mean_bin rdplot_mean_x ///

rdplot_mean_y rdplot_se_y rdplot_ci_l rdplot_ci_r rdplot_hat_y

macro drop _all

// Pannel B

reg protestant moremoneynew moremoneyold score2_1 score2_2, vce(cluster parroqui)

global discontinuity=_b[moremoneynew]

test moremoneynew

global test=round(`r(p)',0.01)

local discontinuity=string($discontinuity, "%12.3f")

local test=string($test, "%12.2f")

rdplot protestant score2_1, kernel(uniform) nbins(12 11) graph_options(ylabel(0(0.1)0.4)
xlabel(-4(1)4) legend(off) ///

title(Panel B - Being Evangelical)scheme(s1mono) ///

note("Discontinuity at threshold: `discontinuity' (p=`test')") graphregion(color(white))) genvars
p(1)
```

```
graph save PanelBFig4, replace

drop rdplot_id rdplot_N rdplot_min_bin rdplot_max_bin rdplot_mean_bin rdplot_mean_x ///

rdplot_mean_y rdplot_se_y rdplot_ci_l rdplot_ci_r rdplot_hat_y

macro drop _all

// Pannel C

reg religiousness moremoneynew moremoneyold score2_1 score2_2, vce(cluster parroqui)

global discontinuity=_b[moremoneynew]

test moremoneynew

global test=round(`r(p)',0.01)

local discontinuity=string($discontinuity, "%12.3f")

local test=string($test, "%12.2f")

rdplot religiousness score2_1, kernel(uniform) nbins(12 11) graph_options(ylabel(4(1)10) xlabel(-4(1)4) legend(off) ///

title(Panel C - How religious are you?) scheme(s1mono) ///

note("Discontinuity at threshold: `discontinuity' (p=`test')") graphregion(color(white))) genvars p(1)

graph save PanelCFig4, replace

drop rdplot_id rdplot_N rdplot_min_bin rdplot_max_bin rdplot_mean_bin rdplot_mean_x ///

rdplot_mean_y rdplot_se_y rdplot_ci_l rdplot_ci_r rdplot_hat_y

macro drop _all

graph combine "PanelAFig4" "PanelBFig4" "PanelCFig4"

// Pannel A

reg attendpermonth moremoneynew moremoneyold score2_1 score2_2 if religiousness>=6.827599, vce(cluster parroqui)

global discontinuity=_b[moremoneynew]

test moremoneynew

global test=round(`r(p)',0.01)
```

```
local discontinuity=string($discontinuity, "%12.3f")

local test=string($test, "%12.2f")

rdplot attendpermonth score2_1, kernel(uniform) nbins(12 11) graph_options(ylabel(0(2)10) xlabel(-4(1)4) legend(off) ///

title(Panel A - Monthly service attendance (above average religious families)) scheme(s1mono) ///

note("Discontinuity at threshold: `discontinuity' (p=`test')") graphregion(color(white))) genvars p(1)

graph export "PanelAFig5.png", replace

drop rdplot_id rdplot_N rdplot_min_bin rdplot_max_bin rdplot_mean_bin rdplot_mean_x ///

rdplot_mean_y rdplot_se_y rdplot_ci_l rdplot_ci_r rdplot_hat_y

macro drop _all

// Pannel B

reg attendpermonth moremoneynew moremoneyold score2_1 score2_2 if religiousness<6.827599, vce(cluster parroqui)

global discontinuity=_b[moremoneynew]

test moremoneynew

global test=round(`r(p)',0.01)

local discontinuity=string($discontinuity, "%12.3f")

local test=string($test, "%12.2f")

rdplot attendpermonth score2_1 if religiousness<6.827599, kernel(uniform) nbins(12 11) graph_options(ylabel(0(2)10) xlabel(-4(1)4) legend(off) ///

title(Panel B - Monthly service attendance (below average religious families)) scheme(s1mono) ///

note("Discontinuity at threshold: `discontinuity' (p=`test')") graphregion(color(white))) genvars p(1)

graph export "PanelBFig5.png", replace

drop rdplot_id rdplot_N rdplot_min_bin rdplot_max_bin rdplot_mean_bin rdplot_mean_x ///

rdplot_mean_y rdplot_se_y rdplot_ci_l rdplot_ci_r rdplot_hat_y

macro drop _all
```

```
// Pannel C

reg protestant moremoneynew moremoneyold score2_1 score2_2 if religiousness>=6.827599,
vce(cluster parroqui)

global discontinuity=_b[moremoneynew]

test moremoneynew

global test=round(`r(p)',0.01)

local discontinuity=string($discontinuity, "%12.3f")

local test=string($test, "%12.2f")

rdplot protestant score2_1 if religiousness>=6.827599, kernel(uniform) nbins(12 11)
graph_options(ylabel(0(0.1)0.4) xlabel(-4(1)4) legend(off) ///

title(Panel C - Being Evangelical (above average religious families)) scheme(s1mono) ///

note("Discontinuity at threshold: `discontinuity' (p=`test')") graphregion(color(white))) genvars
p(1)

graph export "PanelCFig5.png", replace

drop rdplot_id rdplot_N rdplot_min_bin rdplot_max_bin rdplot_mean_bin rdplot_mean_x ///

rdplot_mean_y rdplot_se_y rdplot_ci_l rdplot_ci_r rdplot_hat_y

macro drop _all

// Pannel D

reg protestant moremoneynew moremoneyold score2_1 score2_2 if religiousness<6.827599,
vce(cluster parroqui)

global discontinuity=_b[moremoneynew]

test moremoneynew

global test=round(`r(p)',0.01)

local discontinuity=string($discontinuity, "%12.3f")

local test=string($test, "%12.2f")

rdplot protestant score2_1 if religiousness<6.827599, kernel(uniform) nbins(12 11)
graph_options(ylabel(0(0.1)0.4) xlabel(-4(1)4) legend(off) ///

title(Panel D - Being Evangelical (below average religious families)) scheme(s1mono) ///

note("Discontinuity at threshold: `discontinuity' (p=`test')") graphregion(color(white))) genvars
```

```
p(1)

graph export "PanelDFig5.png", replace

drop rdplot_id rdplot_N rdplot_min_bin rdplot_max_bin rdplot_mean_bin rdplot_mean_x ///

rdplot_mean_y rdplot_se_y rdplot_ci_l rdplot_ci_r rdplot_hat_y

macro drop _all

// Schooling more than 9 years

clear all

use Data.dta

keep if school>=9

eststo: ivregress 2sls attendper score2_1 moremoneyo (collect_2= moremoneyn),  vce(cluster parroqui)

eststo: ivregress 2sls attendper score2_1 score2_1sq moremoneyo (collect_2= moremoneyn), vce(cluster parroqui)

eststo: ivregress 2sls attendper score2_1 score2_1sq score2_1cu moremoneyo (collect_2= moremoneyn),  vce(cluster parroqui)

eststo: ivregress 2sls attendper score2_1 moremoneyo householdsize ageresponder schooling_resp (collect_2= moremoneyn),  vce(cluster parroqui)

eststo: ivregress 2sls attendper score2_1 score2_1sq moremoneyo householdsize ageresponder schooling_resp (collect_2= moremoneyn),  vce(cluster parroqui)

eststo: ivregress 2sls attendper score2_1 score2_1sq score2_1cu moremoneyo householdsize ageresponder schooling_resp (collect_2= moremoneyn),  vce(cluster parroqui)

esttab, se

eststo clear

eststo: ivregress 2sls protestant score2_1 moremoneyo (collect_2= moremoneyn),  vce(cluster parroqui)

eststo: ivregress 2sls protestant score2_1 score2_1sq moremoneyo (collect_2= moremoneyn), vce(cluster parroqui)

eststo: ivregress 2sls protestant score2_1 score2_1sq score2_1cu moremoneyo (collect_2= moremoneyn),  vce(cluster parroqui)

eststo: ivregress 2sls protestant score2_1 moremoneyo householdsize ageresponder schooling_resp (collect_2= moremoneyn),  vce(cluster parroqui)
```

```
eststo: ivregress 2sls protestant score2_1 score2_1sq moremoneyo householdsize ageresponder schooling_resp (collect_2= moremoneyn),  vce(cluster parroqui)

eststo: ivregress 2sls protestant score2_1 score2_1sq score2_1cu moremoneyo householdsize ageresponder schooling_resp (collect_2= moremoneyn),  vce(cluster parroqui)

esttab, se

eststo clear

eststo: ivregress 2sls religiousness score2_1 moremoneyo (collect_2= moremoneyn), vce(cluster parroqui)

eststo: ivregress 2sls religiousness score2_1 score2_1sq moremoneyo (collect_2= moremoneyn),  vce(cluster parroqui)

eststo: ivregress 2sls religiousness score2_1 score2_1sq score2_1cu moremoneyo (collect_2= moremoneyn),  vce(cluster parroqui)

eststo: ivregress 2sls religiousness score2_1 moremoneyo householdsize ageresponder schooling_resp (collect_2= moremoneyn),  vce(cluster parroqui)

eststo: ivregress 2sls religiousness score2_1 score2_1sq moremoneyo  householdsize ageresponder schooling_resp (collect_2= moremoneyn),  vce(cluster parroqui)

eststo: ivregress 2sls religiousness score2_1 score2_1sq score2_1cu moremoneyo householdsize ageresponder schooling_resp (collect_2= moremoneyn),  vce(cluster parroqui)

esttab, se

//Regression graph

reg attendpermonth moremoneynew moremoneyold score2_1 score2_2, vce(cluster parroqui)

global discontinuity=_b[moremoneynew]

test moremoneynew

global test=round(`r(p)',0.01)

// Pannel A

reg attendpermonth moremoneynew moremoneyold score2_1 score2_2, vce(cluster parroqui)

global discontinuity=_b[moremoneynew]

test moremoneynew

global test=round(`r(p)',0.01)
```

```
local discontinuity=string($discontinuity, "%12.3f")

local test=string($test, "%12.2f")

rdplot attendpermonth score2_1, kernel(uniform) nbins(12 11) graph_options(ylabel(0(2)10) xlabel(-4(1)4) legend(off) ///

title(Panel A - Monthly service attendance) scheme(s1mono) ///

note("Discontinuity at threshold: `discontinuity' (p=`test')") graphregion(color(white))) genvars p(1)

graph save PanelAFig4, replace

drop rdplot_id rdplot_N rdplot_min_bin rdplot_max_bin rdplot_mean_bin rdplot_mean_x ///

rdplot_mean_y rdplot_se_y rdplot_ci_l rdplot_ci_r rdplot_hat_y

macro drop _all

// Pannel B

reg protestant moremoneynew moremoneyold score2_1 score2_2, vce(cluster parroqui)

global discontinuity=_b[moremoneynew]

test moremoneynew

global test=round(`r(p)',0.01)

local discontinuity=string($discontinuity, "%12.3f")

local test=string($test, "%12.2f")

rdplot protestant score2_1, kernel(uniform) nbins(12 11) graph_options(ylabel(0(0.1)0.4) xlabel(-4(1)4) legend(off) ///

title(Panel B - Being Evangelical)scheme(s1mono) ///

note("Discontinuity at threshold: `discontinuity' (p=`test')") graphregion(color(white))) genvars p(1)

graph save PanelBFig4, replace

drop rdplot_id rdplot_N rdplot_min_bin rdplot_max_bin rdplot_mean_bin rdplot_mean_x ///

rdplot_mean_y rdplot_se_y rdplot_ci_l rdplot_ci_r rdplot_hat_y

macro drop _all
```

```
// Pannel C

reg religiousness moremoneynew moremoneyold score2_1 score2_2, vce(cluster parroqui)

global discontinuity=_b[moremoneynew]

test moremoneynew

global test=round(`r(p)',0.01)

local discontinuity=string($discontinuity, "%12.3f")

local test=string($test, "%12.2f")

rdplot religiousness score2_1, kernel(uniform) nbins(12 11) graph_options(ylabel(4(1)10)
xlabel(-4(1)4) legend(off) ///

title(Panel C - How religious are you?) scheme(s1mono) ///

note("Discontinuity at threshold: `discontinuity' (p=`test')") graphregion(color(white))) genvars
p(1)

graph save PanelCFig4, replace

drop rdplot_id rdplot_N rdplot_min_bin rdplot_max_bin rdplot_mean_bin rdplot_mean_x ///

rdplot_mean_y rdplot_se_y rdplot_ci_l rdplot_ci_r rdplot_hat_y

macro drop _all

graph combine "PanelAFig4" "PanelBFig4" "PanelCFig4"

// Pannel A

reg attendpermonth moremoneynew moremoneyold score2_1 score2_2 if
religiousness>=6.827599, vce(cluster parroqui)

global discontinuity=_b[moremoneynew]

test moremoneynew

global test=round(`r(p)',0.01)

local discontinuity=string($discontinuity, "%12.3f")

local test=string($test, "%12.2f")

rdplot attendpermonth score2_1, kernel(uniform) nbins(12 11) graph_options(ylabel(0(2)10)
xlabel(-4(1)4) legend(off) ///

title(Panel A - Monthly service attendance (above average religious families)) scheme(s1mono)
///
```

```
note("Discontinuity at threshold: `discontinuity' (p=`test')") graphregion(color(white))) genvars
p(1)

graph export "PanelAFig5.png", replace

drop rdplot_id rdplot_N rdplot_min_bin rdplot_max_bin rdplot_mean_bin rdplot_mean_x ///

rdplot_mean_y rdplot_se_y rdplot_ci_l rdplot_ci_r rdplot_hat_y

macro drop _all

// Pannel B

reg attendpermonth moremoneynew moremoneyold score2_1 score2_2 if
religiousness<6.827599, vce(cluster parroqui)

global discontinuity=_b[moremoneynew]

test moremoneynew

global test=round(`r(p)',0.01)

local discontinuity=string($discontinuity, "%12.3f")

local test=string($test, "%12.2f")

rdplot attendpermonth score2_1 if religiousness<6.827599, kernel(uniform) nbins(12 11)
graph_options(ylabel(0(2)10) xlabel(-4(1)4) legend(off) ///

title(Panel B - Monthly service attendance (below average religious families)) scheme(s1mono)
///

note("Discontinuity at threshold: `discontinuity' (p=`test')") graphregion(color(white))) genvars
p(1)

graph export "PanelBFig5.png", replace

drop rdplot_id rdplot_N rdplot_min_bin rdplot_max_bin rdplot_mean_bin rdplot_mean_x ///

rdplot_mean_y rdplot_se_y rdplot_ci_l rdplot_ci_r rdplot_hat_y

macro drop _all

// Pannel C

reg protestant moremoneynew moremoneyold score2_1 score2_2 if religiousness>=6.827599,
vce(cluster parroqui)

global discontinuity=_b[moremoneynew]

test moremoneynew
```

```
global test=round(`r(p)',0.01)

local discontinuity=string($discontinuity, "%12.3f")

local test=string($test, "%12.2f")

rdplot protestant score2_1 if religiousness>=6.827599, kernel(uniform) nbins(12 11)
graph_options(ylabel(0(0.1)0.4) xlabel(-4(1)4) legend(off) ///

title(Panel C - Being Evangelical (above average religious families)) scheme(s1mono) ///

note("Discontinuity at threshold: `discontinuity' (p=`test')") graphregion(color(white))) genvars
p(1)

graph export "PanelCFig5.png", replace

drop rdplot_id rdplot_N rdplot_min_bin rdplot_max_bin rdplot_mean_bin rdplot_mean_x ///

rdplot_mean_y rdplot_se_y rdplot_ci_l rdplot_ci_r rdplot_hat_y

macro drop _all

// Pannel D

reg protestant moremoneynew moremoneyold score2_1 score2_2 if religiousness<6.827599,
vce(cluster parroqui)

global discontinuity=_b[moremoneynew]

test moremoneynew

global test=round(`r(p)',0.01)

local discontinuity=string($discontinuity, "%12.3f")

local test=string($test, "%12.2f")

rdplot protestant score2_1 if religiousness<6.827599, kernel(uniform) nbins(12 11)
graph_options(ylabel(0(0.1)0.4) xlabel(-4(1)4) legend(off) ///

title(Panel D - Being Evangelical (below average religious families)) scheme(s1mono) ///

note("Discontinuity at threshold: `discontinuity' (p=`test')") graphregion(color(white))) genvars
p(1)

graph export "PanelDFig5.png", replace

drop rdplot_id rdplot_N rdplot_min_bin rdplot_max_bin rdplot_mean_bin rdplot_mean_x ///

rdplot_mean_y rdplot_se_y rdplot_ci_l rdplot_ci_r rdplot_hat_y
```

```
macro drop _all
```