Employment Protection in the Temporary Employment Services Sector
Evidence for South Africa using administrative data

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Outline

- Broad context of work

- Regulatory amendments in South Africa

- Objectives of research

- Data

- Expected impact of legislation (drawing on theory and literature)

- Descriptive statistics

- Estimation strategy and results

- Conclusion and future work

Temporary Work: A Global Phenomenon

Temporary work: contract work, temp agencies, digital/gig economy jobs

Two particular policy issues
Are temporary workers protected by legislation?
**Are temporary workers captured in the tax system?**

Internationally, employment protection was eased for temporary workers but left strict for permanent hires- termed "partial reform" Zhou (2006).

TES sector was regulated in 2016

In **1983, labour broking was added to the Labour Relations Act (LRA)**, merely allowing employers to employ workers through temporary agencies but not limiting the period for which workers could be placed.

In **2012, the Labour Relations Amendment Bill** added four new sections to deal with the different types of atypical employment with Section 198A focusing on temporary services.

Legislation announced in 2015 and enforced in 2016 tax year. Legislation specified that an **employee earning below R205 433** ($14 680) on a contract of longer than three months had to be **"deemed" to be permanent** and not treated less favourably than non-temporary workers.

2015 tax year

March 2014   Feb 2015

2016 tax year

March 2015   Feb 2016

LRAA
Implemented
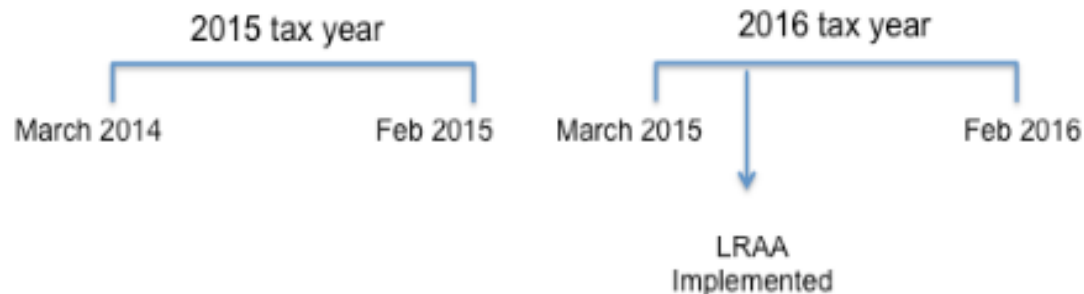
Cosatu strike (2012)

Regulating the TES sector was **counter to international trends**- **Union influence**?

Objectives of research

To identify the **short-term impact of regulating the temporary employment services (TES)** sector focusing on:

• Wages

• Employment

• Job duration

Exploit the discontinuous change in regulation at the R205 433 earnings threshold, using a **regression discontinuity design** (RDD).

Data

Use an **employee panel dataset** for the tax years **2011-2017**, created from **employee income tax certificates** submitted by employers (IRP5 and IT3(a)) to the revenue authority.

The unit of analysis is **the *job contract* level** but individuals can be linked too.

Importantly, the panel has a **binary indicator which identifies TES or labour broker firms** according to their PAYE reference number.

Advantages: Larger sample size; longitudinal nature allows us to track individuals over time; accurately identifies firms (and therefore employees) in TES sector; and better wage and benefits data than in household surveys.

Disadvantages: Only contains workers in tax registered firms earning more than R2000 in a given tax year. The lowest-wage workers in informal/small/young businesses will be excluded. No information on the number of hours worked per day/month in the job contract.

Expected impact of legislation

Employment

- Theory suggests that if **the cost of firing temporary workers increase beyond the firm costs, employers are less likely to outsource** part of their labour force (Autor 2003).

- Further, when firing costs for non-temporary workers are high and there are **rules forbidding temporary contract renewal**, firms might be reluctant to convert temporary jobs into permanent ones (Bratti, Conti, and Sulis 2018) .

- As a result, **amendments could lead to a disemployment effect as there is less flexibility associated with the hiring of temporary workers** from agencies (Autor 2003; Hijzen et al. 2017; Bratti et al. 2018).

- Alternatively, workers could also be absorbed by firms as per the intention of the amendments although the literature suggests that this is less likely. This may depend on the value the employer places on the worker.

Expected impact of legislation

Wages

• Employers **may raise earnings of employees below the threshold**. This may be at the cost of workers at the lower end of the distribution depending on wage flexibility (Leonardi and Pica 2007).

Job duration

• While the intention of the legislation was to do away with short fixed-term contracts, **it may result in contract duration shortened** to under three months as then legislation does not apply to these contracts.

• Alternatively, we could see no impact on contract length as employers will use a sequence of different workers with short contracts instead of rolling short-term contracts for the same workers (Bratti, Conti, and Sulis 2018).

• Cahuc et al. (2018) find that increasing layoff costs reduce job duration for low skilled workers while raising job duration for skilled workers.

Insights into the data:
Where were TES workers situated relative to the threshold in 2015?
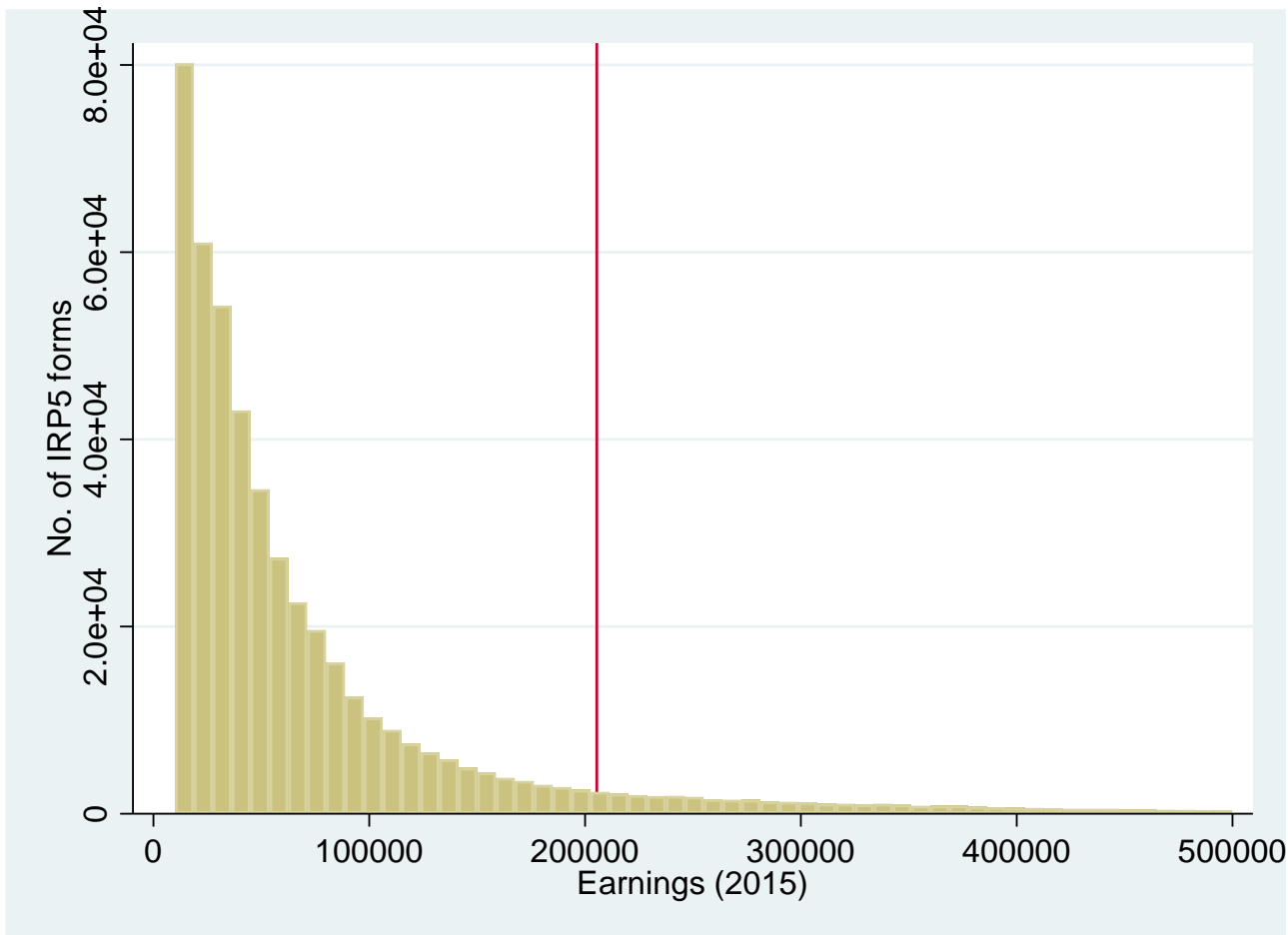
Insights into the data:
Employment trends for TES workers
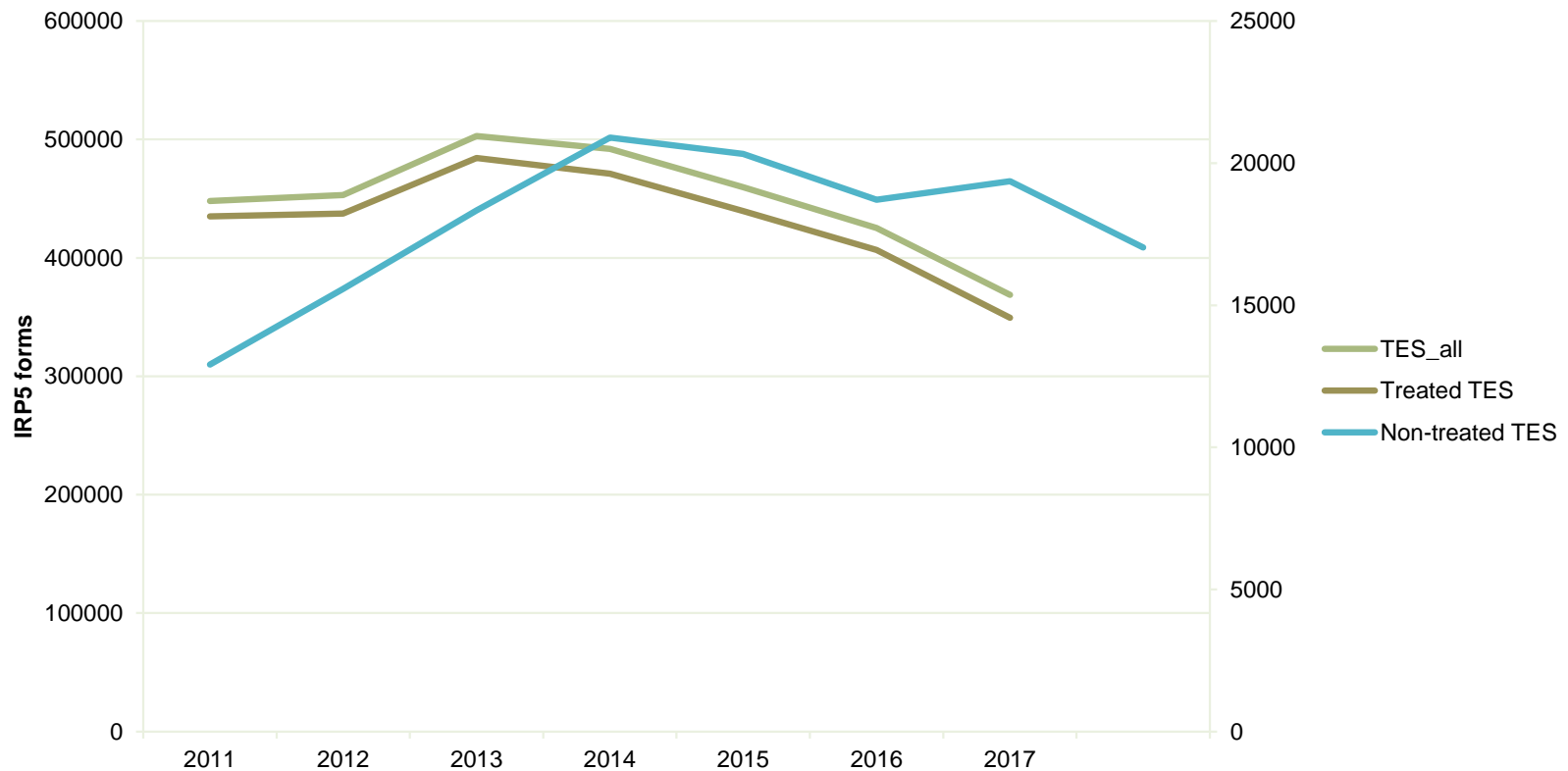
Transitions from the TES sector

2014			2015			
			TES	Non-TES	Out of data	Total
	Below threshold		199 660	61 623	108 912	370 195
			53.93%	16.65%	29.42%	100.00%
	Above threshold		10857	957	1 796	13 610
			79.77%	7.03%	13.20%	100.00%

2015			2016			
			TES	Non-TES	Out of data	Total
	Below threshold		173 265	61 291	93 256	327 812
			52.85%	18.70%	28.45%	100.00%
	Above threshold		10 024	1 081	1 756	12 861
			77.94%	8.41%	13.65%	100.00%

Estimation Strategy : RDD

- Y_i is a binary variable (probability of wages increasing, retention in the TES sector, probability of job duration increasing in 2016);
- D_i is a dummy that equals 1 if individual earnings are below the threshold and zero otherwise in 2015.
- E_{it} is earnings in 2015;
- T is the threshold of R205 433.
- $(E_{it}\text{-}T)$ refers to the normalised forcing variable and we include a polynomial of the forcing variable.
- Controls include age, gender, firm size, industry and job duration.

$$Y_i = \alpha + \tau(D_i) + \beta_1(E_{it} - T) + \beta_2(E_i - T)^n + \beta_3 D_i (E_{it} - T) + X_{it} + \varepsilon_{it}$$

$$D_i = 1[(E_{it} < T]$$
$$T - h \leq Ei \leq T + h$$

- Sample: TES workers in 2015 and subsequent employment in 2016
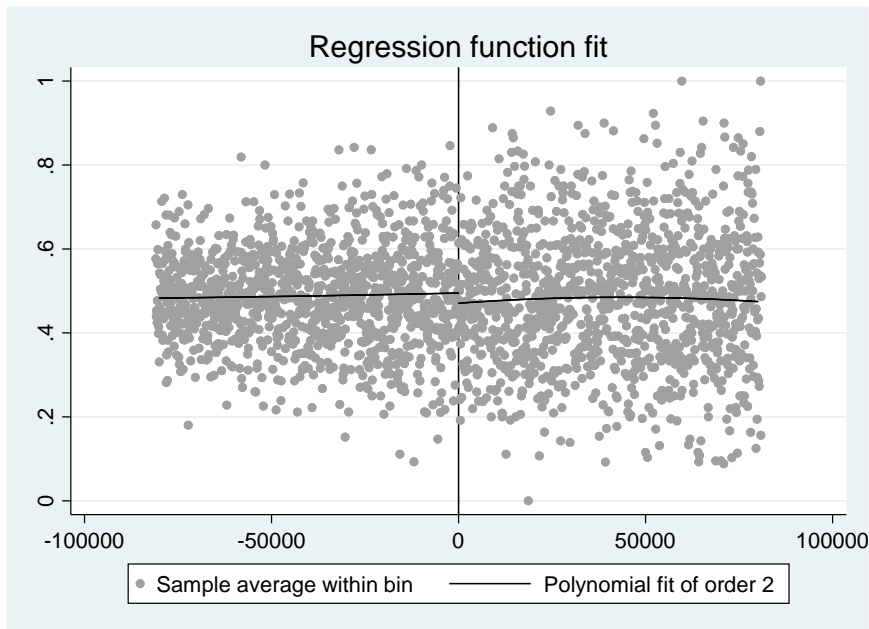- **RD estimate** is the difference in τ above and below threshold.

Results: RD Estimates (h/p)

|	80000/1	80000/2	50000/1	50000/2	30000/1	30000/2
Probability of wages increasing	-0.019*** (0.003)	-0.024*** (0.005)	-0.023*** (0.004)	-0.030*** (0.007)	-0.027*** (0.006)	-0.050*** (0.006)
Probability of being retained in the TES sector	-0.008** (0.003)	-0.016*** (0.005)	-0.016*** (0.004)	0.005 (0.006)	0.004 (0.005)	0.038*** (0.008)
Probability of job duration increasing	0.000 (0.007)	-0.010** (0.005)	-0.012*** (0.004)	-0.000 (0.007)	-0.001 (0.006)	-0.001 (0.008)
N below threshold	103620	103620	53481	53481	28852	28852
N above threshold	54278	54278	36407	36407	22218	22218

Notes: ***, **, and * indicate significance at 1 percent, 5 percent, and 10 percent. Controls included across specifications include age, gender, job duration, firm size and industry.

Rdplot : Probability of wages increasing in 2016

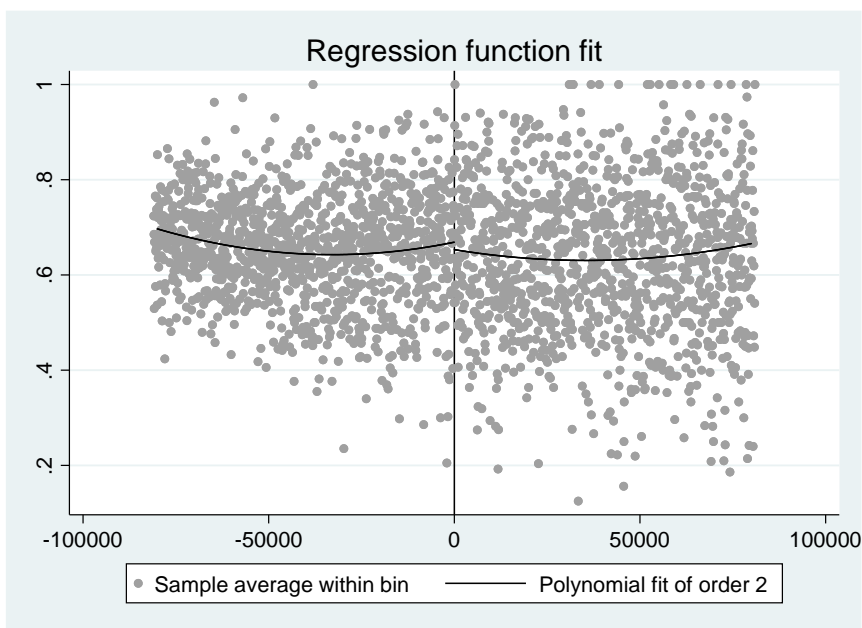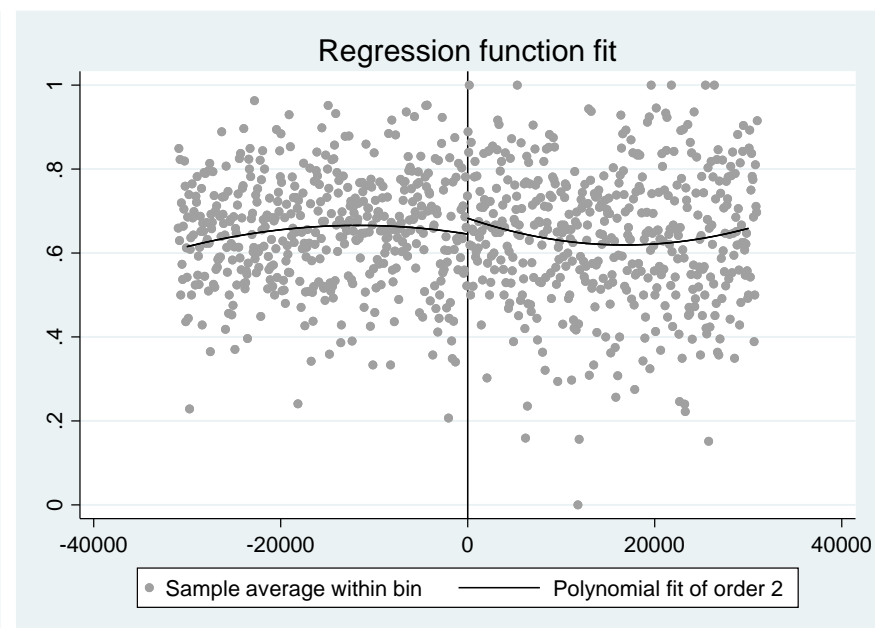h=80000; p=2; RD estimate=-0.024   h=50000; p=2; RD estimate=-0.050
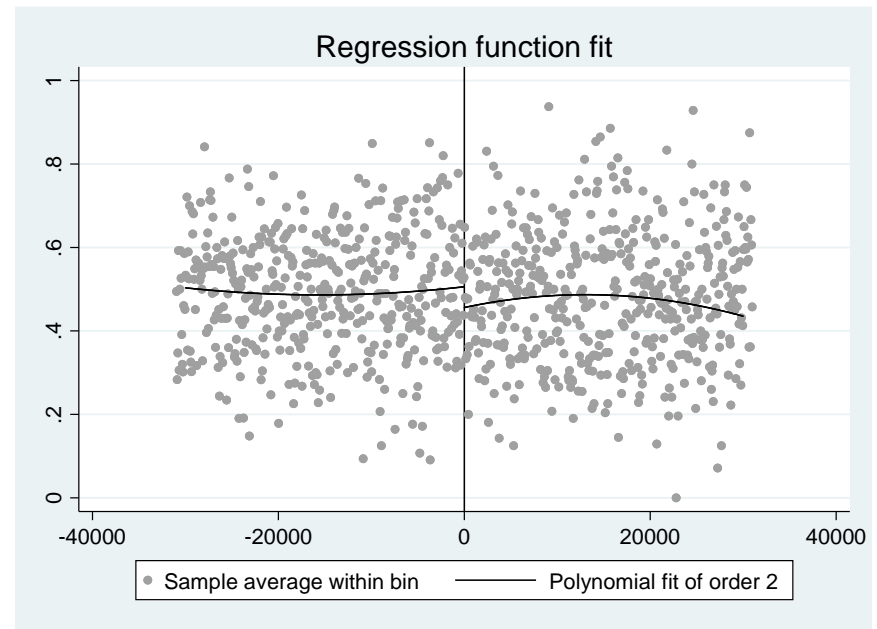
Probability of wages increasing is 1.9-5% less likely for those above the threshold relative to those below the threshold within the bandwidths specified.

Rdplot : Probability of being retained in TES in 2016
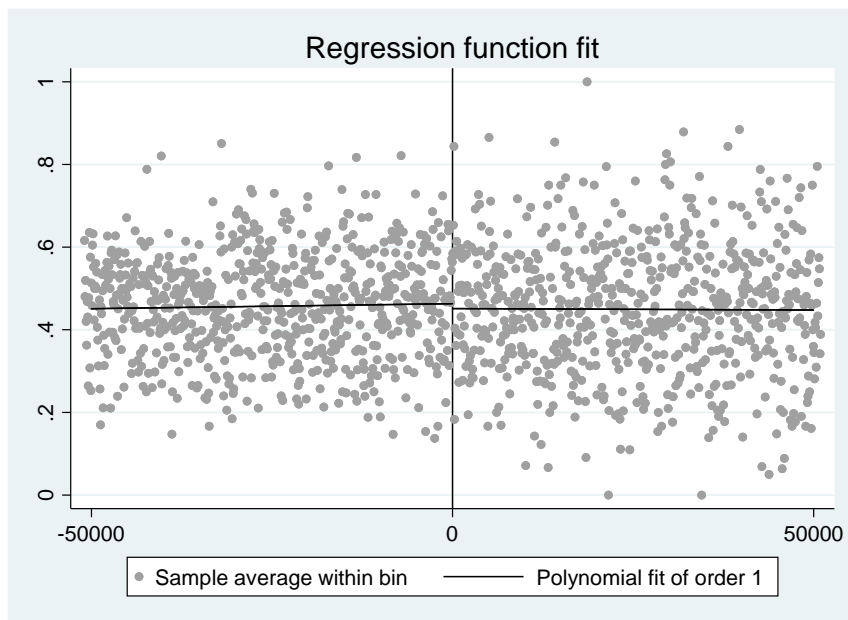
h=80000; p=2; RD estimate=-0.016   h=30000; p=2; RD estimate=0.038

At h=80000, probability of being retained in the TES sector is less likely for those above the threshold relative to those below the threshold. At h=30 000, probability of being retained in the TES sector is higher for those above relative to those below the bandwidth.

Rdplot : Probability of job duration increasing in 2016

h=50000; p=1; RD estimate=-0.010   h=80000; p=2; RD estimate=-0.012
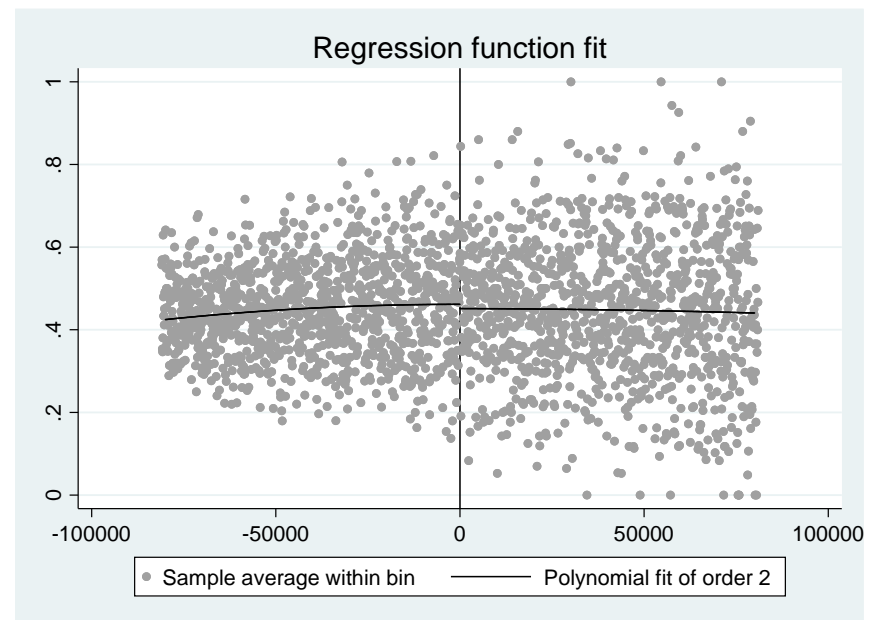
Probability of job duration increasing is mostly insignificant and where significant, there is a marginal change at the threshold.

Concluding Discussion

- The **amendments resulted in some manipulation of earnings** between 2015 and 2016 where those just below the threshold saw wages increase in the year following the amendments- **compliance** or **an attempt to bypass legislation**?

- While the **transitions suggest that TES workers are more likely to leave the formal sector** in the year following the announcements of the LRAA **than retained by the non-TES sector**, the econometric results are inconsistent.

- Raises **questions** as to whether the **TES sector is generally a precarious** employer for **low income workers** or if the LRAA exacerbated this.

- The RDD suggests that there was limited impact at the threshold in terms of employment and job duration. Is this related to **non-compliance?**

Future work

- Benefits afforded to TES employees in 2016.

- Understanding the disemployment effect and the precariousness of TES employment in earlier years.

- Was there a long term impact of the LRAA?

Comments and Questions
Thank you!