# The Effects of the ETI on Employment at the Firm 

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UNU-WIDER and National Treasury conference
Growth and development policy - new data, new approaches, and new evidence
1 December 2016, Pretoria, South Africa

## Details of the ETI

## Eligibility

## Employees

- Hired after 1 October 2013
- Between 18-29 years old
- South African citizen


## Employers

- Registered for Pay-As-You-Earn (PAYE)
- No public companies
- Penalty of R30,000 for displacing a worker to hire a new one
- No debt owed to the SARS


## Details of the ETI

Payment vehicle - reduction tax bill
Basis for computing subsidy - monthly earnings
Subsidy duration - 24 months, reduction after 12 months

|  | Monthly subsidy |  |
| :--- | :--- | :--- |
| Monthly pay (ZAR) | First 12 months | Next 12 months |
| $0-2000$ | $50 \%$ of monthly pay | $25 \%$ of monthly pay |
| $2000-4000$ | R1,000 | $R 500$ |
| $4000-6000$ | $1000-(0.5 \times($ monthly pay-4000 $))$ | $1000-(0.25 \times($ monthly pay-4000) $)$ |

## ETI Policy evaluation

Study of the perceptions of the ETI in the Vaal triangle. Firms support the policy but the majority of admit to not creating any new jobs (De Jongh et al. 2016).

Comparative analysis on the ETI with similar policies enacted in different countries. The ETI unlikely to reach its goal of due to firm lack of awareness, the short duration and absence of compulsory skills training among (Odendaal 2016).

Examine the policy 6 months and 12 after its inception. No statistically significant change in the probability of youth employment (Ranchhod and Finn 2015, 2016).

## Data used

## IRP5

- anonymised
- Job level tax data
- Unaudited

Company Income Tax (CIT)

- Firm level data

Unit of analysis is PAYE

- Larger firms may have many PAYE Reference Numbers
Time Period
- Financial Year


## Data description: After cleaning

|  | FY 2014 | FY 2015 |
| :--- | :---: | :---: |
| Number of ETI claims | 165700 | 898 797 |
|  |  |  |
| Number of firms claiming ETI | 14551 | 34654 |
| Number of firm not claiming ETI | 236534 | 208472 |
| Percentage of ETI firms | $6 \%$ | $14 \%$ |
|  |  |  |
| Total number of firms | 251085 | 243126 |

## Industry distribution of ETI firms



## Firm size classes: ETI vs non-ETI firms

|  | Tax year 2014 |  |  | Tax year 2015 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Firms size | ETI | All | Take-up | ETI | All | Take-up |
| 0-10 Employees | 2901 | 159607 | $2 \%$ | 8014 | 152821 | $5 \%$ |
| 11 -50 Employees | 5428 | 69603 | $8 \%$ | 14923 | 68356 | $22 \%$ |
| $51-200$ Employees | 4026 | 16619 | $24 \%$ | 8347 | 16682 | $50 \%$ |
| $201+$ Employees | 2196 | 5256 | $42 \%$ | 3370 | 5267 | $64 \%$ |
|  |  |  |  |  |  |  |
| Total number of firms | 14,551 | 251,085 | $6 \%$ | 34654 | 243126 | $14 \%$ |

## Methodology

## Conditional Difference-in-Differences approach (cDiD)

## Step 1 <br> - Remove any ineligible firms (public sector firms)

## Step 2

- Calculate propensity score

Step 3

- Identify a matched treatment and control firm


## Step 4

- Check balance of Treatment and Control group

Step 5

- Estimate a difference-in-differences model


## Key variables used for cDiD

| Categorical/Dummy variables | Continuous variables |
| :--- | :--- |
| Firm size | Firm assets |
| Firm industry | Firm sales |
| Firm location | Firm debt |
| Labour broker status | Mean employee age |
|  | Firm age |
|  | Firm employment rate |

## Results from the cDiD

|  | Tax year 2013/14 | Tax year 2014/15 |
| :--- | :---: | :---: |
| Youth employment | 2.360 | 2.582 |
|  | $(2.819)$ | $(2.785)$ |
| Non-youth employment | 8.283 | $12.577^{* *}$ |
|  | $(6.115)$ | $(6.274)$ |
| Total employment | 9.817 | $14.34^{*}$ |
| Standard errors in parentheses. *** p<0.01, ** p<0.05, *p<0.1 | $(8.642)$ |  |

## Aggregate youth employment: ETI versus non-ETI firms

## Youth Employment



## Matching within firm size: cDiD results

| Firm size | Youth employment <br> FY 2014 | Youth employment <br> FY 2015 |
| :--- | :---: | :---: |
| 0 - $\mathbf{1 0}$ employees | $2.227^{* * *}$ | $2.857^{* * *}$ |
|  | $(0.248)$ | $(0.254)$ |



## Cost per job created

|  | FY 2014 | FY 2015 |
| :--- | ---: | ---: |
| Estimated number of jobs created | 34,822 | 63,028 |
| Estimated cost (in rands) | $97,668,416$ | $1,229,142,572$ |
| Cost per job created (in rands) | 2,805 | 19,502 |

## Conclusion

We see no significant change in the overall demand for youth labour

We find that firms with 200 or less employees do see an increase in labour demand for youth.

BUT we also see an increase in the employment of nonyouth and cannot attribute this to the policy alone as firms have greater hiring rates for youth and non-youth.

## Further work

As the 2016 tax data is made available there should be further examination of the deadweight loss, displacement effects and the employment of youth once the subsidy ends.

