Session 9A: Ex-Post Evaluation of TEs II – Practical session

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Yesterday: How do you 'rationalize' a TE?

Three questions:

- 1. Effectiveness: Does the TE meet stated objectives?
- 2. Efficiency / Cost-benefit analysis: Are there net benefits/costs to society? If the objective is met, at what cost?
- 3. Evaluation vis-à-vis alternatives: If gov't committed to providing support, is this TE the best way to do so?



South Africa's Employment Tax Incentive

- 1. The sunset clause
- 2. The expected value of the TE
- 3. The expected positive outcomes that justify the TE
- 4. The suggested evaluation method.



South Africa's Employment Tax Incentive

- 1. The sunset clause The subsidy will be subject to an initial implementation period of <u>three</u> years with detailed monitoring and reporting on a quarterly basis.
- 2. The expected value of the TE

 The youth employment subsidy is expected to cost <u>R5 billion</u> in tax expenditure over three years.
- 3. The expected positive outcomes that justify the TE Net new job creation is estimated to be 178 000 jobs....
- 4. The suggested evaluation method.

 A difference-in-differences approach can be used to determine the effect of the youth employment subsidy on the youth employment rate.



Employment Tax Incentive, ETI

South Africa introduced an employment subsidy programme in 2014 targeted at firms hiring young workers

Introduced 1 January 2014 for 3 years ending 31 December 2016

Subsidy for youth (18-30 years old) earning below R6,000.

Stated objective of the policy:

It is estimated that the youth employment subsidy will subsidise 423 000 new jobs for young and less skilled people aged between 18 and 29 years old. The youth employment subsidy is expected to cost R5 billion in tax expenditure over three years. Net new job creation is estimated to be 178 000 jobs at a cost per job of R28 000.²

(National Treasury, 2011)



Task: Evaluate the extent to which the SA Employment Tax incentive has met its objectives.

Opportunity: We have tax data that includes information relevant to the TE evaluations

The purpose of this exercise is to highlight

- I. how to measure the effectiveness of a TE
- II. how to think about the efficiencies, costs and externalities TEs.



Question 1 - Effectiveness

How do we measure effectiveness? What was the policy's objective? To create jobs for young people.

Have firms created jobs for young people?

Number of young people employed	Before	After	
ETI claiming firms	50	60	
Non-claiming firms	40	50	



Question 1 - Effectiveness

How do we measure effectiveness? What was the policy's objective? To create jobs for young people.

Have firms created jobs for young people?

Number of young people employed	Before	After	
ETI claiming firms	50	60	
Non-claiming firms	40	50	
	10	10	10-10=0



Question 2a: Efficiency/Cost benefit

What was the cost of the TE & How many jobs were created?

Year 1 - 2014

Total cost = ZAR 1,229,142,572Number of jobs = 63,028.

Ex-Ante estimation: Total cost ZAR1,6 billion, 59,333 jobs created at cost of R28,000 per job



Question 2a: Efficiency/Cost benefit

What was the cost of the TE & How many jobs were created?

Year 1 - 2014

Total cost = ZAR 1,229,142,572Number of jobs = 63,028.

Cost per job =
$$\frac{Total \ cost}{Number \ of \ jobs} = \frac{1,229,142,572}{63,028} = R19,502$$

Ex-Ante estimation: Total cost ZAR1,6 billion, 59,333 jobs created at cost of R28,000 per job



Question 2b: Efficiency/Cost benefit

If the objective is met, at what cost?

Ex-ante

Gross number of jobs created = 423,000

Net new jobs = 178,000

This implies that 58% of the job creation would have taken place in any case.

Cost per job = R11,800

Deadweight loss

= the number of jobs that were going to be created without the incentive \times the cost per job

Calculate the deadweight loss for this policy

 $Deadweight\ loss\ = (\underline{} - \underline{}) \times R\underline{}$



Question 2b: Efficiency/Cost benefit

If the objective is met, at what cost?

Ex-ante

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= the number of jobs that were going to be created without the incentive \times the cost per job

Calculate the deadweight loss for this policy

 $Deadweight\ loss = (423,000 - 178,000) \times R11,800 = R2,891,000,000$



Question 2c - Efficiency/Cost benefit

Are there net benefits/costs to society? (Externalities)

Did the policy displace older workers?

Number of young people employed	Before	After	
ETI claiming firms	100	80	
Non-claiming firms	80	60	



Question 2c - Efficiency/Cost benefit

Are there net benefits/costs to society? (Externalities)

Did the policy displace older workers?

Number of young people employed	Before	After	
ETI claiming firms	100	80	
Non-claiming firms	80	60	
	20	20	20-20=0



Question 3 - Evaluation

The gov't is committed to creating more jobs for young people

Is the Employment Tax Incentive the best way to do so? What are the alternatives?



Question 3 Extra - Evaluation

Is there policy reform that we can consider to improve the Employment Tax Incentive?

Option 1: Better targeting of the policy

Small firms

Number of young people employed	Before	After	
ETI claiming firms	5	15	
Non-claiming firms	3	3	

Large firms

Number of young people employed	Before	After	
ETI claiming firms	120	140	
Non-claiming firms	100	120	



Question 3 Extra - Evaluation

Is there policy reform that we can consider to improve the Employment Tax Incentive?

Option 1: Better targeting of the policy

Small firms

Number of young people employed	Before	After	
ETI claiming firms	5	15	
Non-claiming firms	3	3	
	2	12	12-2=10

Large firms

Number of young people employed	Before	After	
ETI claiming firms	120	140	
Non-claiming firms	100	120	
	20	20	20-20=0

So, if the large firms are not creating jobs, reduce their Tax Incentive, and get more small firms to claim the incentive



Thank you!

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