

RESEARCH QUESTION: HOW DO FIRM CHARACTERISTICS AFFECT YOUTH EMPLOYMENT IN THE FORMAL SECTOR IN SOUTH AFRICA?

AN ASSESSMENT USING NEW NATIONAL INCOME TAX DATA

1. INTRODUCTION

- Disproportionally high youth unemployment is a defining characteristic of South Africa's unemployment challenge.
- Government commitment to prioritising youth in terms of job creation objectives has been noted in several strategy frameworks and policies including the National Youth Policy for 2015 to 2020, the New Growth Path, DTI Industrial Policy Action Plan, the 2011 Skills Accord and 2013 Youth Employment Accord. Concern that large numbers of youth are not contributing to the productivity of the country.
- The key aim of our analysis is to shed light on the characteristics of firms that have greater propensity to employ young people.
- The ultimate aim of the study is to obtain insights as to where policy efforts to intensify youth absorption into employment should be focused.

3. METHODOLOGY

- Data used are from the South African Revenues Services & National Treasury (SARS-NT) administrative tax data. Employment panel from IRP5 tax data merged with NT CIT-IRP5 panel from 2010 to 2014 for firm characteristics. Panel data analysed using Probit estimator, explored OLS (results not shown)
- Y = is a binary variable where 1 = firms with 50%/70% or more youth aged 15-34, 0 = otherwise. X = different firm characteristics (firm age, firm size, trade status, labour costs, industry sector, learnerships).

TABLE 1: PROBIT RESULTS

	50% or more youth		70% or more youth	
	Marginal Effects	Std Errors	Marginal Effects	Std Errors
Firms with youth aged 15-34				
Productivity	-0.036***	0.002	-0.009***	0.001
Profitability	-0.041***	0.008	-0.015***	0.004
R&D expenses	0.011	0.012	0.009	0.007
Training expenses	-0.000	0.018	-0.024**	0.010
Learnerships completed	-0.021	0.130	0.001	0.067
Learnerships registered	0.075***	0.015	0.046***	0.008
Foreign-owned	-0.033	0.036	0.007	0.019
Firm age (26+)				
0	0.321***	0.028	0.010***	0.018
1-5	0.348***	0.005	0.122***	0.003
6-10	0.253***	0.005	0.061***	0.002
11-15	0.152***	0.005	0.020***	0.002
16-20	0.085***	0.006	0.006***	0.002
21-25	0.030***	0.007	-0.002	0.003
No. of workers (1-5)				
6-10	0.061***	0.003	-0.023***	0.002
11-50	0.098***	0.005	-0.016***	0.002
51-100	0.202***	0.005	0.021***	0.005
101-500	0.306***	0.010	0.064***	0.008
501-1,000	0.393***	0.018	0.131***	0.023
1,001+	0.465***	0.020	0.220***	0.030
Gross sales (R1-R,000,000)				
R1,000,001-R10,000,000	0.045***	0.004	-0.037***	0.003
R10,000,001-R100,000,000	0.076***	0.007	-0.068***	0.004
R100,000,001-R1,000,000,000	0.059***	0.013	-0.087***	0.005
R1,000,000,001+	0.093***	0.035	-0.089***	0.010
Labour costs (wages R1-R1,000,000)				
R1,000,001-R10,000,000	-0.042***	0.004	-0.029***	0.002
R10,000,001-R100,000,000	-0.135***	0.009	-0.048***	0.004
R100,000,001-R1,000,000,000	-0.285***	0.020	-0.069***	0.007
R1,000,000,001+	-0.333***	0.051	-0.067**	0.026
Trade status (exports only)				
Imports only	0.055***	0.009	0.028***	0.004
Imports and exports	-0.001	0.009	0.008*	0.004
No trade	0.056***	0.007	0.339***	0.003
Industry sector (manufacturing)				
Agriculture, forestry and fishing	-0.061***	0.007	-0.011***	0.003
Mining and quarrying	-0.070***	0.019	-0.024***	0.008
Electricity and gas	0.051***	0.018	-0.014*	0.007
Water supply	0.038	0.039	0.014	0.019
Construction	-0.003	0.005	-0.010***	0.002
Wholesale, retail, transport & accommodation	0.066***	0.004	0.031***	0.002
Communication	0.144***	0.013	0.082***	0.008
Finance and insurance	0.004	0.004	0.011***	0.002
Real Estate	-0.109***	0.007	-0.019***	0.003
Professional, scientific and technical	0.055***	0.006	0.015***	0.003
Public services	-0.075***	0.007	-0.001	0.003
Recreational and cultural activities	0.069***	0.006	0.042***	0.003
Not specified	-0.066	0.049	-0.034**	0.016
Observations	153,131		153,131	
Chi-square	14409.45***		9135.25***	

dv/dx for factor levels is the discrete change from the base level. *** p<0.01. ** p<0.05. * p<0.1

5. KEY FINDINGS

- Older firms are less likely to employ youth relative to younger firms, whilst medium to large sized firms have more youth compared to small businesses.
- ICT, retail, and services sectors are more likely to employ younger people compared to public, mining and agriculture sectors.
- Firms registered with SETAs for learnerships are likely to have more youth, whilst firms investing in R&D are less likely to employ youth.
- Both importers and non-traders are more likely to employ more young people relative exporters.
- High labour cost firms are less likely to employ young people.

2. LITERATURE REVIEW

- Edwards et al. (2016): South Africa. Mtd: OLS with fixed & time effects; Y = firm characteristics (firm size, capital-labour ratio, wage per worker, labour productivity). X = dummy variables for exporter only, importer only, exporter and importer, importation of intermediate goods. Find: Firms that trade ↑ employment; ↑ K; ↑ W; ↑ VA; Importers > Exporters
- Page and Soederbom (2015). Ethiopia. Y = total employment. X = firm age, firm size, region, productivity, wages. Find: Same net jobs for small & large firms; small have ↑ employment turnover & ↓ W
- Ouimet and Zarutskie (2013): USA. Mtd: OLS with fixed and time effects; Probit. Y = fraction of employees in age categories, fraction of new hires in age categories, log wage per worker in age categories. X = industry, firm age, firm size, private vs public firms, location, receives venture capital financing. Find: Young firms ↑ employment; ↑ wages

4. RESULTS



6. CONCLUSIONS

- The relevance of the study is in relation to identifying firms for the design and targeting of interventions such as the youth wage subsidy and the employment tax incentive (ETI).
- The relationship between labour costs and the likelihood of a firm employing more youth lands support to the latter. However, the performance of the ETI thus far might suggest that targeting firms with a greater propensity to employ younger people might enhance outcomes.
- With respect to firm age, younger firms need support as they employ more youth (SMME development)
- Firms need incentives to retain youth once learnerships are completed.
- Consistent with available evidence, the link between learnerships and the propensity of employing young people is affirmed, further highlighting the importance of Sector Education Training Authority reforms.

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