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## **RETURNS TO COMPUTER USE IN BANGLADESH: AN ECONOMETRIC ANALYSIS**

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## **THE PROBLEMATIQUE THE APPROACH ABSTRACT 8** DECENT WORK AND ECONOMIC GROWTH **10** REDUCED INEQUALITIES 4 QUALITY EDUCATION Market wage model specification highly competitive $\langle = \rangle$ $\ln(W_i) = b_0 + b_1 S_i + b_2 E_i + b_3 E_i^2 + b_4 C_i + u_i(i)$ labour market of Bangladesh, workers are unable to find the Sample selection bias right jobs and employers are TARGET TARGET 8.6 TARGET 10.1 also unable to find the right Wм workers. Such skills mismatch manifestation that education alone cannot bridge the gaps in the labour market. W<sub>M</sub>(est.) Computer skills, which can complement education, are $W_R$ INCREASE THE NUMBER PROMOTE YOUTH OF PEOPLE WITH RELEVANT SKILLS FOR FINANCIAL SUCCESS EMPLOYMENT, EDUCATION AND increasingly **REDUCE INCOME INEOUALITIES** important. Nevertheless, there **FRAINING** dearth of research **Computer ownership and computer use** regarding the potential benefit (in percentage) W<sub>M</sub>(true) of possessing computer skills in 96 100 market of 80 67 **Education Bangladesh.** This paper intends cent 60 to fill in this knowledge gap by

estimating the returns to computer use using a national labour force survey dataset. By utilizing Heckman's two-step selection model, it was found that workers who could use computers earned 17 per cent more than workers who could computers. not use Additionally, the returns to education and experience were estimated to be 3 per cent and 2 per cent respectively. This implies that computer skills were as valuable as 5 years of education or 8 years of experience, assuming that the returns to all three were constant over time. The results of this study provide empirical evidence in favor of allocating government resources for computer training, and also advocate for individual investment towards learning computer skills.



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			Nevei	r use	d co	mput	ter	U	sed o	comp	outer	•		
	Wag	es	Ne	veru	used		Use	d cor	nput	er	Wag	ge dif	ferer	ntia
ľ			computer				(in BDT)				(in %)			
Region			(i	n BE	DT)									
Barishal			11,343				15,731				38.68			
Chattogram			11,217				14,358				28.00			
Dhaka			10,881				14,788				35.91			
Khulna			10,709				13,122				22.53			
Rajshahi			10,620				13,425				26.41			
Rangpur			10,264				13,551				32.02			
Sylhet			10,320				13,401				29.85			
Rural			10,287				12,925				25.64			
Urban			11,254				14,434				28.26			
National			10,812				14,162				30.98			
70 60 tu 50 40 so 40 so												)		
V	1991	1993	1995	1997	1999	2001	5003 Ye	<b>5002</b> ear	2007	2009	2011	2013	2015	7117
			Ag	ricul	ture	]	Indu	stry	- <u></u>	Servi	ices			
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Labor	force parti	icipation n	nodel spec	ification
$ln(W_i^*) =$	$\beta_0 + \beta_1 h_i +$	$\beta_2 A i + \beta_3 M$	$A_i + \beta_4 K_i + \beta_4 K_i$	$B_5 P_i + \varepsilon_i(ii)$
Select	tion bias co	orrected m	odel speci	fication
$ln(W_i) =$	$b_0 + b_1 S_i +$	$b_2 E_i + b_3 E_i^2$	$c^2 + b_4 C_i + b_4$	$_{5}\lambda_{i} + u_{i}(iii)$
	Tł	<b>IE RESUI</b>	LTS	
	Model witho	out computer	Model wit	h computer
Regression	Probit	Heckman	Probit	Heckman
Variable	Inwage	lnwage	Inwage	Inwage
education		0.0343***		0.0302***
		(0.0010)		(0.0010)
experience		0.0198***		0.0203***
		(0.0007)		(0.0007)
experience <sup>2</sup>		-0.0002***		-0.0002***
		(0.0000)		(0.0000)
computer				0.1702***
				(0.0123)
hours	0.0107***		0.0107***	
	(0.0005)		(0.0005)	
assets	-0.0003***		-0.0003***	
	(0.0000)		(0.0000)	
married	-0.3196***		-0.3196***	
	(0.0171)		(0.0171)	
children	-0.0234**		-0.0234**	
	(0.0096)		(0.0096)	
CPI	-0.0415***		6.9558***	
	(0.0024)		(0.4395)	
lambda		-0.1805		-0.1558
		(0.0128)		(0.0133)
Constant	6.9558***	7.4804***	6.9558***	7.4678***
	(0.4395)	(0.0181)	(0.4395)	(0.0182)
LR chi <sup>2</sup>	1730.34		1730.34	
Wald chi <sup>2</sup>		1794.51		2030.21
$Proh > chi^2$	0 0000	0 0000	0 0000	0 0000