Comparative Study on the Factors Associated with Moonlighting between Workers in Formal and Informal Sectors of Sri Lanka

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Introduction

Holding secondary employments in addition to the main employment is called as moonlighting. Moonlighting is relatively a new phenomenon in Sri Lankan labour market and this has an increasing trend in the last decade (Samaraweera, 2014). This study contains a comparison of moonlighting between workers in formal and informal sectors. Formal sector includes government, semi government and formal private sector while all others are included into the informal sector. Work sector has been identified as key factor associated with moonlighting (Dorantes & Kimmel, 2005).

Research Problem

About 62 percent of workers in Sri Lankan labour market are representing the informal sector (LFS, 2010). Most of them are facing many issues including underemployment and financial insecurity. Moonlighting is an important strategy to uplift their living standards. Not only the informal workers but formal workers to engage in moonlight and the factors associated with moonlighting are differed by the sector of work. Identifying those factors will assist in having more efficient labour market policies that could maximize the benefits and minimize the costs of moonlighting.

Objectives of the Study

The main objective of this research is to compare the factors associated with moonlighting between formal an informal sector workers in Sri Lanka.

Theoretical Considerations and Empirical Evidence

Theoretical contributions on moonlighting were made by Perlman (1966), Bronfenbrenner and Mossin (1967), Sherman and Willett (1968), Shishko and Rostker (1976), Krishnan (1990) and Paxson and Sicherman (1996). The factors associated with moonlighting are basically based on four key motives including hours-constraint motive, financial motive, heterogeneity motive and flexibility motive according to literature. Empirical evidences have identified many socio-economic, demographic and spatial factors associated with moonlighting.

Methodology

Secondary data taken from the Quarterly Labour Force Survey conducted by the Department of Census and Statistics in 2010 was used for the analysis. Sample includes 69,201 individuals. Among all employed persons in all age ranges (26,618), 2,609 are holding secondary employment positions. The study selected working age population as 15-64 olds (46,510) and workforce includes 26,800. Out of them 25,411 are employed and 2,496 are holding secondary employments. This includes 15,694 workers in the informal sector and 9,717 workers in the formal sector.

Probit regression model is used to model the moonlighting functions for formal and informal sector workers. The dependent variable is being moonlighter (1) or not being moonlighter (0). Heckman (1979) section bias correction method was used to correct selection bias of the probit models as corrected by Cornwell and Inder (2008). Average Marginal Effects of the probit regressions are presented in the study.

Key Findings and Conclusion

The study found that the age has significant positive relationship with moonlighting for workers representing both formal and informal sectors (Table 1). Moonlighting of workers in the formal sector increases with age at on a positive level first and decreases after 40s, while moonlighting increases with age at an increasing rate for informal sector (Figure 1). Employment and income insecurities faced by informal workers in at retirements are prominent reasons for this fact. This shows the weakness of the retirement plans and social security networks for the informal sector workers and they should be targeted in policy formulation on social security plans of the elderly.

Age square has significant negative relationship with moonlighting for both formal and informal sector workers due to the biological deprivation of health. Being female decreases moonlighting of informal sector while that is insignificant for the formal sector workers. Since the secondary employments consist of evening or night work and physical hardship, females in the informal sector are not encouraged by moonlighting. Family burden raised by the financial requirements with marriage and children (direct and indirect costs raised from parenthood) has become a key factor associated with moonlighting among informal sector workers but not with the formal sector. The economic vulnerability of primary employment among informal sector workers affects this.

Table 1: Probit Models for the Factors Associated with Moonlighting of Workers in Formal and Informal Sectors

Variable	Informal			Formal		
	dy/dx		SE	dy/dx		SE
Age	0.011	***	0.002	0.014	***	0.002
Age Square	0.000	***	0.000	0.000	***	0.000
Being female	-0.074	***	0.008	-0.015		0.010
Being ever married	0.036	***	0.010	0.017		0.010
Being Non-Sinhalese	-0.086	***	0.014	0.057	***	0.018
years of Education	-0.002		0.003	0.026	***	0.005
having nuclear family	0.008		0.006	0.018	***	0.006
child dependency ratio	0.063	***	0.014	0.021		0.014
elderly dependency ratio	-0.017		0.026	0.026		0.024
Unemployment rate of the household	-0.107	***	0.030	0.057	**	0.026
Being non-urban	0.131	***	0.018	0.038	***	0.009
Central	0.083	***	0.013	0.034	***	0.010
Southern	0.036	**	0.015	-0.016		0.015
Eastern	0.048	**	0.023	-0.082	***	0.030
Northwestern	0.083	***	0.018	-0.043	**	0.021
North central	0.172	***	0.021	-0.026		0.028
Uva	0.128	***	0.017	0.010		0.019
Sabaragamuwa	0.062	***	0.015	-0.034	**	0.016
Moonsoon Duration	0.005		0.006	-0.009	*	0.005
Underemployment in Primary job	0.079	***	0.007	0.067		0.012

| mills3 | | 0.016 | 0.050 | 0.263 | 0.054 |

1. (d) Indicates dummy variables. The omitted categories are: Male, Sinhalese ; Never Married; urban sector; Western Province; inter-monsoons duration; extended family ; Not underemployed
2. ***, **, and * indicate statistical significance at the one percent, five percent and ten percent levels respectively.
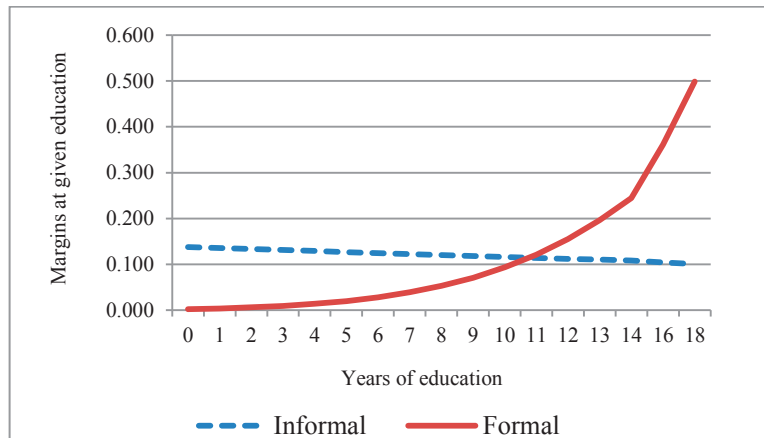3. Estimated using Quarterly Labour Force Survey 2010. Northern Province was excluded. Sample weights were used.

Being a non-Sinhalese worker decreases moonlighting of workers representing informal sector while increaseing moonlighting of the workers in the formal sector. Nearly 50 percent of non-Sinhalese workers are from the estates representing the informal sector and poverty is relatively high in estates. Non-Sinhalese formal workers engage in moonlighting to uplift the living standards of their families. Moonlighting is increasing at increasing rate with education for the formal sector workers as given in Figure 2. The full capacity of expert labor in formal sector cannot be exploited without moonlighting. Full utilization of this labour would finally contribute on the development process of the country.

Figure 1: Marginal Effects of Moonlighting At Different Age Levels for Formal and Informal Sector Workers
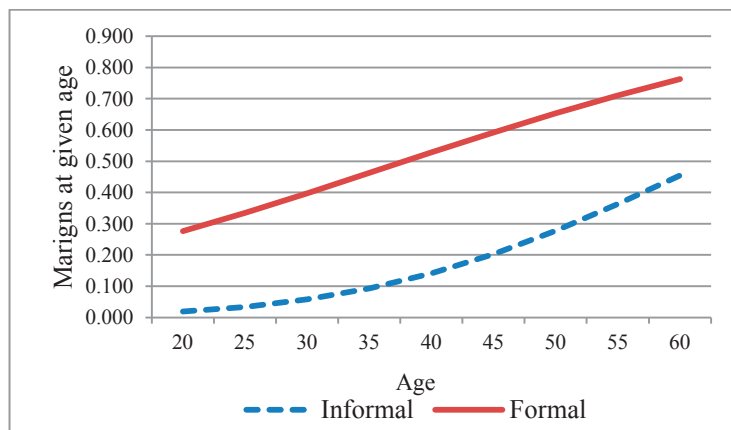
Note. Estimated using three the above two probit models.
Source: Quarterly Labour Force Survey 2010 is used. Northern Province was excluded. Sample weights were used.

Figure 2: Marginal Effects of Moonlighting at Different Education Levels for Formal and Informal Sector Workers

Note. Estimated using three the above two probit models.
Source: Quarterly Labour Force Survey 2010 is used. Northern Province was excluded. Sample weights were used.

Nuclear family affects moonlighting among workers in the formal sector but that is insignificant in the informal sector. Inflexibility in work faced by formal sector workers propel them to buy non-market services (child care, cooking) if they do not have elderly parents or siblings at home to assist. This encourages them to have more moonlighting earnings.

Increasing unemployment rate (a proxy to social network) of the household reduces the moonlighting of informal sector workers since poor social net work creates limited opportunities for secondary employment of informal workers with poor human capital. Formal sector workers with strong human capital have more opportunities for moonlighting and they moonlight more when unemployment rate of the household is high to face growing financial needs of the household.

Being non-urban workers increases moonlighting of both formal and informal sector workers but the probability is high for informal sector workers. Being in any other province (except Northern Province) compared to the Western province shows significant positive relationships with moonlighting of informal sector workers. This is due to the higher prevalence of moonlighting in agro-based areas. Central province shows significant positive relationship with moonlighting of formal sector workers since most of them are representing plantation sector with poor living standards.

Hours-constraint motive (insufficiency of work hours in primary employment) which is reflected by the underemployment has become a key

reason for moonlighting of informal sector workers but not with the formal sector workers.

Keywords: Formal; Informal Sectors; Labour Supply; Moonlighting

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