

**MODELLING THE FACTORS INFLUENCING  
MOONLIGHTING IN SRI LANKA**

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Degree of Master of Science

Department of Mathematics

University of Moratuwa

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## **DECLARATION OF THE CANDIDATE AND THE SUPERVISOR**

I declare that this is my own work and this dissertation does not incorporate any material without acknowledgement, previously submitted for a degree or diploma in any other university or institute of higher learning. Further, to the best of my knowledge and belief it does not contain any material previously published or written by another person except where the acknowledgement is made in the text.

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## **Abstract**

Factors associated on moonlighting in Sri Lanka have not been studied since 2012 although necessary data have been collected. This study, therefore, attempts to analyze the factors that influence moonlighting in Sri Lanka using data from a sample of 30415 persons taken from the Sri Lanka Labour Force Survey carried out by the Department of Census and Statistics in 2014. Analysis of 2-way frequency tables using chi square statistics revealed that age, sex, household size, marital status, number of dependents, residential sector, level of education, occupation, hours working on the first job and income of the first job were significant in explaining moonlighting. All the above significant variables ( $p < 0.05$ ) considered simultaneously under Binary Logistic Regression confirmed that significance of all the above variables, except level of education. It was shown that moonlighting keeps increasing with aging while males are more likely to do additional jobs. If a household has more number of dependents, there is a greater tendency to do moonlighting. It was further found that rural sector workers are mostly multiple jobholders compared to the urban sector. Once the occupational status is considered, white collar workers have a greater tendency to do multiple jobs. Though it is contradictory with the existing work norms (40 hours per week), people who works less than 40 hours had the greatest effect on moonlighting. The inferences derived in this study can be effectively used by policy planners for enhancement of people's living standards.

**Keywords:** Binary Logistic Regression, Department of Census and Statistics, Labour Force Survey, Moonlighting

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## LIST OF ABBREVIATIONS

Abbreviation	Description
DCS	Department of Census and Statistics
LFS	Sri Lanka Labour Force Survey
PSU	Primary Sampling Unit
SSU	Secondary Sampling Unit
UK	United Kingdom
US	United State of America
PAC	Percentage Accuracy in Classification
ROC	Receiver Operating Characteristic