## **EXTENDED ABSTRACT**

# AN EMPIRICAL ANALYSIS OF THE DETERMINANTS OF YOUTH INFORMAL EMPLOYMENT IN SRI LANKA

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#### **Abstract**

This study analyses the determinants of informal employment with a special focus on youth by examining the factors associated with the probability of youth's participation in informal employment in Sri Lanka. We used Sri Lankan Labour Force Survey micro level data set in 2019, employing multinomial logistic regression modelling to investigate differential impacts of socio –economic determinants of informal employment. The results suggest that informal employment is significantly affected by a range of demographic and spatial characteristics variables of individuals used in the study. The overall results indicate that among the explanatory variables age, education marital status, location, gender, sector, religion, ethnic group, economic sectors ,firm size have significant contribution in predicting the dependent variables that is youth's entry into informal employment. All in all, this study emphasizes the importance of identifying informal employment in formal sector in national statistics and of concentrating on education, literacy, and heads of household– particularly the ones who are married and non–married – in programs aimed at improving employment conditions of youth.

Keywords: Informal employment, youth, micro determinants, multinomial logistic regression

## 1. Introduction

There has been growing volume of research on informal employment more particularly of empirical research both at global and national level .Informal sector employment is rising rapidly in all region of the world and many developing countries. Informal employment in the informal economy includes three components which are employment in the informal sector, informal employment in the formal sector and informal employment in house hold(domestic workers and contributing family workers).

The informal economy gives youth opportunities to reasonable work by offering experience and self-employment opportunities. In many studies, it is stressed that young workers are more influenced than their counterpart-adults by informal employment. In addition, informal employment is significantly affected in various forms by socio-economic determinants that involve deeper dynamics in the labour market. In this context, informal employment comprising demographic, social, geographical, and economic factors must be analyzed to understand clearly the social and economic challenges facing by youth. This study's findings will be significant to employers, government institutions, labour market policymakers. Further There is a significant lack of literature and

well –organized empirical studies examining informal sector and informal employment in Sri Lanka (Arunatilake and Jayawardena(2005), Chandrasiri(2013), Gunawardena(2006), Gunathilaka(2008) Gunatilaka and Vodopivec(2010) but very few research are available to examine the determinants of informal employment among youth in Sri Lanka in the context of recent youth development. This study attempts to address the question of what determinants of youth informal employment in Sri Lanka. Further, this study attempts to fill up this space of local literature in this direction. The main objective of this study is to examine the magnitude and determinants of informal employments among youth in Sri Lanka.

# 2. Methodology

This study is based on quantitative micro- level data of Sri Lanka Labour Force Survey (LFS) in 2019. According to the LFS, in 2019 was 80320 observation. Youth aged between 15 to 29 are included in Sri Lanka's labour force .Out of the 80123 observations, 16441 have been selected as the youth sample of this study. The conceptual framework used in this study to analyze determinants of informal employment based on the conceptual framework devised by 15<sup>th</sup> International Conference Labour Statistician. The analysis of this study is to find the factors associated with the probability of youth participation in informal employment are analyzed by implementing a maximum likelihood multinomial logistic model because the kind of analysis involves multiple employment outcomes.

While this study does not look at the determination of wages, it does, however, involve the first two of the three stage process as described by Heckman (1979). In fact, in countries with large informal sectors, it is apparent that the majority of informal workers enter the labour market as already self-employed workers. Thus, it could be argued that individuals take the decisions to participate, be employed and be employed in a particular sector all at the same time. Therefore, instead of using the sequential Heckman procedure, this study collapses the decision making process into just one stage where labour market outcomes are determined simultaneously. This can be modelled using any appropriate multinomial regression technique, which can easily be performed using STATA/MP14 (64-bit) statistical software package. Accordingly, the study deploys a maximum likelihood multinomial model with five outcomes. The model follows the linear functional form given below.

$$S_{ij} = \beta X_i + \varepsilon_{ij}$$

While the dependent variable  $S_{ij}$  designate the 5 different employment outcomes,  $S_{ij}$  represent the labour market outcome j of person i. The employment outcomes that S will take are (i) non-participation in the labour force, (ii) unemployment, (iii) public formal employment, (iv) private formal employment and (v) informal employment.  $X_i$  is a vector denoting different groups of explanatory variables which include demographic attributes, education and literacy, and spatial characteristics. While  $\beta$  represents a vector of regression coefficients  $\epsilon_{ij}$  denotes the error term with a logistic distribution. Since the direct interpretation of coefficients obtained by this model involves log-odds, marginal effects of each model are interpreted instead. An analysis of marginal effects will give more meaningful and direct interpretations of the probabilities of employment.

## 3. Results and Discussion

Involved Probability of informal employment with reference to all youth examined now with occasional reference to multinominal regression model. The demographic attributes will be analyzed first considering gender contrary to the trend in most developing countries, in Sri Lanka youth women are less likely (32 percent) to participate in the informal economy compared to non-participant

men. Formal worker are more likely to be male. Male may be under greater pressure from the families to become employed so that they are more likely to take up any employment. Youth Female may be protective from family in Sri Lankan culture and generally does not allow engaging risky and socially unsecure employment. Further, the level of education among female is higher than male and female are waiting for good job in formal employment than informal.

Considering marital status, such as divorced, separated and widowed of employed individual were not significant effect (p>0.05) but married (3 percent) of individuals are likely to informally employed than they are likely to be non-married group of youth. Non married youth are sixty percent more likely to be in the informal sector, whereas they are four percent more likely to be in the private formal employment, 0.5 percent more likely to be in the public formal employment. What this shows is that marriage reduces the likelihood of youth participation in the labor market. Informal youth worker are more likely to be Sri Lankan Tamil and Indian Tamil than of the reference category Sinhalese. In the case of moors and other ethnic group did not significantly effect on being informal youth workers.

Looking at ethno-religious attributes of youth in relation to non-participant youth who are Sinhala Buddhists, the youth, Sri Lankan Tamil Christians (two percent), Sri Lankan Tamil Hindu (three percent), Sri Lankan Tamil Christian (two percent) and Indian Tamil Hindu are less likely to participate in the informal economy. Participating Muslim Moor and Indian Tamil Christian are not likely to participate in informal employment outcomes. The situation contradicts with youth male who are Muslim Moor as they are more likely than their non-participant Sinhala Buddhist male counterparts to be employed in the informal sector. This complies with what Gunatilaka (2008) has also found about Moor community. As observed in Weeratunge's (2001) study their entrepreneurial culture in small scale enterprises is stronger. Since the marginal effects related to the participation of other ethno-religious categories are not significant in the case of youth, one cannot see their impact over employment.

In comparison to the non-participant youth between 15 to 19 years who do not participate in the labour force, youth of all other age cohorts of youth between 20 to 24 years and 25 to 29 years are likely to be in informal employment and the share of informal youth workers is larger for youth in the 24-29 age cohorts compared with 20 -24 age cohorts. A study Gunathlaka (2008) found the probability of informal employment declines with age. Younger age informality may be due to working whatever employment available with increasing demand of household with lack of formal employment or testing varies employment to find suitable good job and to get experience.

Youth being educated up to senior secondary, collegiate and tertiary level are negatively effected on becoming informally employed with reference to primary educated and less youth but they are significant (p<0.05) Among youth, Low level education has the strongest impact in the informal employment and it is controversial. This could be due to youth involvement in whatever employment they received after schooling without considering much on education level as it would be an opportunity for new experience or starting of employment. Also, this might be due to limited employment opportunities and youth willing to accept employment they are being offered at first without considering educational qualification.

Youth of all literacy levels and languages are less likely to be in informal employment compared to non-participant youth who are literate only in Sinhala. However no clear association of literacy in different languages can be derived mainly because even the ones who are not literate in any of the languages are less likely to be informally employed. Nonetheless, considering the magnitude, youth who are literate only in English are the least likely (3 percent) to be in informal employment compared to the base category. There is substantial evidence (Dundar et al., 2014) suggesting that literacy in English language is paramount to occupational progress, particularly in relation to private formal employment. Therefore, improving youth's literacy in all three languages or two language including English could be a means to enable youth to move from informal employment to the

formal sphere.. This could be the reason for less likely of becoming informal youth who was literate in English. Therefore more education and literacy in at least two languages including English seem to be reducing the likelihood of individuals' participation in informal work.

In view of spatial factors, compared to non-participant youth in the urban sector, rural youth are more likely to be in informal work in contrast to the youth in estate sector who have a less likelihood to be in informal employment. More formal employments are available in urban than rural, more formal employment in estate than rural. This might be the reason for the above significant effect on informality of youth employment with residential sectors. Taking province of residence into account, youth in Central, Southern, and Sabaragamuwa provinces are less likely participate in informal employment but Northern, Eastern, North western, North central and Uva Provinces have a higher likelihood to participate in informal employment compared to the non-participant youth in the Western province. What one sees in these two formerly conflict affected provinces are that youth are more likely to be found in public formal employment than private formal and informal employment, compared to non-participant youth in the Western province. And these two provinces are more likely than non-participant youth in the Western Province to work informally.

Considering youth in occupation categories, Professional, Technical and associate professionals, clerks are less likely to participate informal employment relative to senior officials and managers, the reference category. Services, Skilled agriculture and Fishery workers, Machine operations, elementary occupations are more likely to be informally employed. Youth informal workers are also more likely to be employed to the manufacturing and service sectors relative to agriculture sector, the reference category.

## 4. Conclusions and policy implications

Considering the findings of this study, one cannot be satisfied simply because more youth males than females are informally employed or that youth women are less likely to be informally employed compared to non-participant men. Improving the levels of literacy and education of youth becomes important as per the findings of this study, as it is found that more education and literacy in at least two languages including English reduce the likelihood of individuals' participation in informal work. Literacy in English should thus be given significance in literacy and education programs targeted at youth, there should be program to improve English literacy to capture the employment generating within the province and to reduce informal employment. This can be done through strengthening English language session incorporated in vocational training programmes which are currently being conducted by government institutions for the school leavers. For the other group, school age children, Government should pay more attention to increase the human resources to enhance the language proficiency with rural schools. Then, future labour force will be more inclusive for the development process.

#### 5. References

- Arunatilake, N. & Jayawardena, P. (2010) Why people Choose to Participate in the Informal Sector in Sri Lanka. *The Indian Journal of Labour Economics* 53(2): 225-250.
- Charmes. J,(2019) Dimensions of Resilience in Developing Countries :Informality, Solidarities and Care work, Springer.
- Dundar, H., Millot, B., Savchenko, Y., Aturupane, H., & Piyasiri, T. A. (2014). Building the skills for economic growth and competitiveness in Sri Lanka. *World Bank Publications*.
- Gunatilaka, R (2008) Informal Employment in Sri Lanka. *Nature* Probability of Employment and Determinants of Wages, International Labour Organization Colombo.
- Gunatilaka. R. & Vodopivec, M. (2010) Chapter 2:Labour Markets Institutions and Labour Market Segmentation in Sri Lanka In the Challenge of Youth Employment in Sri Lanka, World Bank.

Gunawardena, D (2006) Exploring the Gender Wages Gaps in Sri Lanka: A Quantile Regression Approach. 5th PEP Research Network General Meeting June, 18–22,2006, Addis, Ababa, Ethiopia.

Heckman (1979). Sample selection bias as a specification error. Econometrica 47: 153-61.

Weeratunge, N.(2001). Micro-entrepreneurs and entrepreneurial cultures in Sri Lanka: Implications for poverty reduction (Colombo, Centre for Poverty Analysis).