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研究課題名(和文) Determinants, wage inequality, and occupational risk exposure of informal workers: A comprehensive analysis with a case study of Thailand

研究課題名(英文) Determinants, wage inequality, and occupational risk exposure of informal workers: A comprehensive analysis with a case study of Thailand

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研究成果の概要(和文)：This study provides a comprehensive analysis of informal workers in Thailand by utilising the 2006-2019 Thai Informal Employment Survey data. The estimated results reveal the adverse effects of informal employment on workers' economic and social conditions.

研究成果の学術的意義や社会的意義

Policymakers may adopt schooling-related policies to improve informal workers' welfares. In contrast, to help workers who inevitably remain in the informal sector, the government may resort to policies regarding working experience to help informal workers earn more wages and become less vulnerable.

研究成果の概要(英文)：This study provides a comprehensive analysis of informal workers in Thailand by utilising the 2006-2019 Thai Informal Employment Survey data. The estimated results reveal the adverse effects of informal employment on workers' economic and social conditions: 1) the wages gap working against informal employment, confirming that informal employment is not a choice but rather an unavoidable constraint, 2) a negative relationship between informal employment and wages, and 3) a positive association between informal employment and occupational risks. Furthermore, the analyses manifest the importance of schooling in reducing the tendency to work in the informal sector, narrowing the wages gap, and lowering occupational risks and injury severity. However, the estimated results from the pseudo-panel fixed effects regression show no relationship between schooling and informal workers' wages but a positive relationship between their wages and working experience.

研究分野：Development economics

キーワード：Informal worker Occupational risk Sectoral transition Thailand Wage inequality

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## 1 . 研究開始当初の背景

The issue of informal employment is common among developing economies, and Thailand is not an exception. In Thailand, widespread informal employment has persisted for many years. Recent estimates (the National Statistical Office of Thailand (NSO), 2020) reveal that the informality rate, measured as the percentage of the labour force not registered in the social security system, was as high as 53.8% or 20.4 million workers. As informal employment accounts for a large part of the labour market but may have adverse effects on economic growth and social well-being, the issue is worth closer examination.

Studies on the informal economy have gained momentum in the labour economics literature since the 1970s, and there have been theoretical debates over the nature and composition of the informal economy. The empirical research in this field has revolved around two dominant schools of thought, namely ‘dualist’ and ‘legalist’ (Chen, 2012; Maloney, 1999, 2004; Perry et al., 2007).<sup>1</sup> Based on the exclusion hypothesis, the dualist school argues that the formal and informal sectors are fundamentally different due to productivity heterogeneity between the two sectors (Harris and Todaro, 1970; Hart, 1973; International Labour Office, 1972; Lewis, 1954; Sethuraman, 1976; Tokman, 1978). With insufficient human capital or limited productivity, economic agents (e.g. labour and micro-firms) find it difficult to survive in the formal sector and, therefore, inevitably enter the informal sector to make a living. Hence, the informal sector exists to absorb these economic agents and provide a safety net to them in times of crisis. The informal sector will become unnecessary and cease to exist when the formal sector can provide enough jobs to all economic agents.

In contrast, the view of the legalist school is based on the exit hypothesis and therefore the informal sector is seen as a collection of firms that choose to operate informally to avoid taxation and other regulations or to enjoy the benefits of property rights (de Soto, 1989, 2000; Levy, 2008). Thus, the legalist school argues that informality is a choice, while the dualist approach views informality as an unavoidable constraint.

Recent studies empirically test the dualist and legalist views through three strands of the literature, namely wage inequality between formal and informal workers, the determinants of informal workers, and occupational risk exposure of informal workers. It is possible to presume that workers voluntarily work in the informal sector if one of the following conditions holds. First, there are no differences (e.g. in terms of wages, determinants, and working conditions) between the formal and informal sectors. Second, the differences between the two sectors are in favour of informal workers.

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<sup>1</sup> For more details on theoretical discussions, see Chen (2012).

## 2 . 研究の目的

Against these theoretical and empirical backdrops, the objectives of this study are as follows. First, this study aims to identify the determinants of informal employment and characterise the livelihoods of informal workers. The second objective is to observe the earning and gender disparities among and between formal and informal workers. Lastly, this study aims to provide policy recommendations to enhance the welfare and livelihoods of informal workers and promote the inclusion of informal workers into the formal sector.

This study significantly contributes to the long-standing policy debates on determinants and wage inequality of informal workers with the unexplored dataset and the comprehensive estimation methods and research design. This study also introduces a new research area and **policy debate concerning informal workers' livelihoods and occupational risks**. In addition, it provides **policy recommendations to enhance informal workers' welfare and livelihoods**, a smooth transition of workers from the informal sector into the formal sector, and gender equality and equal income distribution within and between the formal and informal sectors.

## 3 . 研究の方法

This study provides a comprehensive analysis of informal workers in Thailand. First, the study utilises cross-sectional probit regression analysis to examine the determinants of informal employment. Second, this study applies the Oaxaca–Blinder (OB) decomposition technique to investigate the earnings gap between formal and informal workers and to see how much of the disparity can be explained by differences in observable and non-observable characteristics over time. This study then estimates Mincer wage equations at the mean (ordinary least squares (OLS) regression) and at different quartiles of the wage distribution (quantile regression). Moreover, the analysis employs a pseudo-panel approach and a fixed-effects model to take into account unobservable characteristics and identify the factors that explain differences in earnings. Lastly, a cross-sectional probit model assesses whether informal workers face higher occupational risks than formal workers. All the analyses utilise the 2006–2019 Thai Informal Employment Survey (IES) data.

## 4 . 研究成果

Based on cross-sectional probit regression analysis, the study finds that personal and job-related characteristics, i.e. sex, age, marital status, area of residence, years of schooling, working hours per week, and wage type, are the determinants of informal employment. Furthermore, the **estimated results from the OB decomposition confirm the legalist approach's argument that informal employment is not a choice but an unavoidable constraint since the wage gap favours formal workers**. The estimated results from the quantile regression model reveal that the wage gaps between formal and informal employment exist in general and in all quartiles of the wage

distribution, implying the absence of internal duality within the informal sector. The relative wages penalty of working in the informal sector is the largest for the lowest tail of the wage distribution (20<sup>th</sup> quartile). Regarding occupational risks, the results show that informal employment, the working environment (non-behavioural risk factor), and safety issues at work (behavioural risk factor) are the main factors that significantly increase the probability of occupational injury and illness. In general, the analyses point out that informal employment **adversely affects workers' economic and social conditions**. Therefore, policies to smooth the transition of informal workers to the formal sector are crucial. The analyses also highlight the importance of schooling in reducing the tendency to work in the informal sector, narrowing the wage gap, and lowering occupational risks and injury severity. Hence, policymakers can use education to improve the mobility and welfare of workers. However, the estimated results from a pseudo-panel approach with a fixed-effects model find that education does not impact informal workers' **wages regardless of gender but show a positive relationship between their wages and working experience**. In other words, working experience is more relevant than formal education for workers who inevitably remain in the informal sector. Thus, policies regarding the training of necessary skills can help these informal workers earn higher wages and, in turn, become less vulnerable to economic shocks.

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5 . 主な発表論文等

〔雑誌論文〕 計1件（うち査読付論文 0件 / うち国際共著 1件 / うちオープンアクセス 0件）

1 . 著者名 Upalat Korwatanasakul	4 . 巻 160
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〔学会発表〕 計1件（うち招待講演 0件 / うち国際学会 1件）

1 . 発表者名 Upalat Korwatanasakul
2 . 発表標題 Determinants, wage inequality, and occupational risk exposure of informal workers: A comprehensive analysis with the case study of Thailand
3 . 学会等名 The 17th EAEA International Convention (2022)（国際学会）
4 . 発表年 2022年

〔図書〕 計0件

〔産業財産権〕

〔その他〕

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6 . 研究組織

氏名 （ローマ字氏名） （研究者番号）	所属研究機関・部局・職 （機関番号）	備考
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7 . 科研費を使用して開催した国際研究集会

〔国際研究集会〕 計0件

8 . 本研究に関連して実施した国際共同研究の実施状況

共同研究相手国	相手方研究機関
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