**Identifying club convergence of regional wage in Indonesia and their influencing factors**

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**A B S T R A C T**

Empirically testing for convergence across regions within a country has become a central topic in the regional growth literature. Unlike national economies, the administrative territories within a country are more likely to converge since they share common preferences, technologies and institutions. For Indonesia, concern about regional inequality and convergence has been raised decades ago and became greater since the implementation of decentralization policy in 2000. A large body of research has investigated regional inequality of socio-economic outcomes across provinces using various convergence approaches (see for example Esmara 1975; Akita and Lukman 1995; Garcia and Soelistianingsih 1998; Hill et al 2008; Kurniawan et al 2019, Mendez and Kataoka 2020, Aginta et al 2021). Most of the studies argue that the large socio-economic disparities among regions in Indonesia are due to larger unequal economic activities, public infrastructure availability as well as resource endowment.

Despite numerous studies on regional income convergence, little is known about regional wage convergence in Indonesia. In fact, as predicted by theory, spatial differences in relative factor endowments are likely to exist in highly diverse nation like Indonesia, which in turn explains spatial disparities in wages and prices. Moreover, regional labor regulation might be partially controlled by local government agencies since the state authorities and budget are more distributed to provincial government following the decentralization policy. Departing from these backgrounds, this paper aims to empirically evaluate regional wage convergence of 34 Indonesian provinces. To achieve this goal, we implement a two-step procedure. First, we identify groups of regions that converge to the same steady state level using the club convergence approach developed by Phillips and Sul (2007, 2009). Second, following previous literature, we apply an ordered logit model to investigate the influencing factors of club formation. As a proxy of regional wage, we use provincial average of net nominal income per month (in thousand rupiahs) of employee and laborer data over the period of 2008-2020 published by Indonesian Central Bureau of Statistics. By using nominal wage, we find two significant convergence clubs. Then we remove the effect of inflation on regional wage by converting the data from nominal into real term using provincial Consumer Price Index (CPI) of 2005 as the base. With real wage data, we find three significant convergence clubs of regional wage. Interestingly, the composition of the clubs by using real wage is very similar to the one we obtained by using nominal wage, implying the existence of price-adjusted mechanism in regional wages. The presence of convergence clubs in regional wages suggests that Indonesian provinces form separate groups converging to their own steady state paths. Furthermore, we explain the influencing factors of club convergence formation. Estimates from ordered logit model inform that the formation of club convergence is significantly explained by the following variables: initial level of wage, share of employment on manufacturing sector, investment share to GDP and labor force participation rate. Our findings support the evidence from most of club convergence studies that emphasize the role of initial condition and regional characteristics on the formation of club convergence.

JEL Classifications:

E24, J31, J58, R11

Keywords: Regional Wage, Club Convergence, Labour Force, Log t test, Logit Model

1. **Introduction**

In Indonesia, concern about regional inequality and convergence has been raised decades ago and became greater since the implementation of decentralization policy in 2000. It shows in GINI Index for Indonesia which increased quite high since decentralization policy have been implemented although slightly declined in recent years. Altough Indonesia could mark a high and stable economic growth in past few years is still couldn’t enough to address the inequality issue. There are many factor which form economic inequality such wage, infrastructure availability, inflation rate, technology adaptations, level of education, and many socio-economic factor.

Furthermore, a large body of research has investigated regional inequality of socio-economic outcomes across provinces using various convergence approaches (see for example Esmara 1975; Akita and Lukman 1995; Garcia and Soelistianingsih 1998; Hill et al 2008; Kurniawan et al 2019, Mendez and Kataoka 2020, Aginta et al 2021). Most of the studies argue that the large socio-economic disparities among regions in Indonesia are due to larger unequal economic activities, public infrastructure availability as well as resource endowment.

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