INFORMATION OF DOCTORAL DISSERTATION

Doctoral dissertation title: Factors affecting income and income gap of rural households in Vietnam.

Major: Economics Major Code: 9310101

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1. DISSERTATION SUMMARY

Rural areas account for the majority of Vietnam's population (approximately 61.9%, according to the General Statistics Office, 2024) and play a crucial role in food security and economic development (World Bank, 2024). Although the average income of rural households increased during the 2010–2018 period (from VND 54.6 million to VND 86.2 million), the income growth among the wealthiest households outpaced that of the rest, resulting in a widening gap between the richest and poorest groups (from 9.24 times to 9.86 times). Against this backdrop, the dissertation focuses on a comprehensive analysis of the factors influencing income and the mechanisms shaping income disparities among various groups of rural households in Vietnam.

Utilizing panel data from the Vietnam Access to Resources Household Survey (VARHS) for the period 2010–2018, the author applies a combination of quantitative methods, including Ordinary Least Squares (OLS) regression, Quantile Regression (QR), and Oaxaca–Blinder (OB) decomposition. These methods are employed to evaluate both the average and distributional effects of explanatory variables, as well as to quantify the sources of income gaps with respect to gender and ethnicity.

The analysis reveals that rural household income is affected by a wide range of interrelated factors. Demographic characteristics of household heads (such as gender, age, marital status, ethnicity, and dependency ratio), together with different forms of capital—including human capital (educational attainment), natural capital (agricultural land area), financial capital (access to credit), social capital (relationships with local authorities and participation in organizations), and physical capital (transport infrastructure)—exert varying degrees and directions of influence on income. Notably, the coefficients of these factors fluctuate across income quantiles, highlighting substantial heterogeneity in both opportunity and capacity to convert resources into income among different household groups.

The OB decomposition results indicate that the income gap between male- and female-headed households is approximately 31.8%, most of which is attributable to differences in endowments. However, around 14% remains unexplained, suggesting the existence of inequality of opportunity. Similarly, Kinh households have an average income 33.1% higher than that of ethnic minority households, with only about 15% of the disparity explained by observable characteristics such as human capital and landholding. The remaining 85% represents unexplained inequality.

Based on these findings, the dissertation proposes several policy implications aimed at improving average household income while also narrowing income inequality in rural Vietnam.

2. THE NEW SCIENTIFIC FINDINGS

This dissertation presents several novel contributions across theoretical, methodological, and empirical dimensions. Theoretically, the author offers a comprehensive systematization and synthesis of multidimensional frameworks related to household income, with particular emphasis on the role of social capital—a factor that has received relatively limited attention in previous household income models in Vietnam. This perspective complements traditional variables such as demographic characteristics and other types of capital, including human, financial, natural, and physical capital.

Methodologically, a notable innovation lies in the simultaneous application of three quantitative techniques—Ordinary Least Squares (OLS), Quantile Regression (QR), and Oaxaca–Blinder (OB) decomposition—using a large-scale panel dataset from the VARHS. Specifically, the use of quantile regression enables the assessment of factor effects at different points of the income distribution, rather than solely at the mean. Meanwhile, the OB decomposition allows for a clear separation between income differences attributable to observable endowment disparities and those resulting from unexplained (structural or institutional) inequalities. This integrated approach adds significant value to prior studies that relied primarily on OLS, and is particularly well-suited to contexts involving binary group variables such as gender and ethnicity—both of which carry deep structural and policy relevance.

Empirically, the dissertation contributes new and robust evidence derived from more than a decade of data from the VARHS, enhancing understanding of rural household livelihoods in Vietnam. The research reaffirms the critical importance of human capital, natural capital, financial capital, social capital, and physical capital in shaping household income, while also documenting persistent income disparities across gender and ethnic groups—even after controlling for other economic and social variables. These findings complement earlier studies that have primarily focused on urban inequality or regional disparities, while simultaneously broadening the analytical framework through the application of the sustainable livelihoods model integrating multiple forms of capital. In doing so, the dissertation provides a more multidimensional and policy-relevant lens for understanding income inequality among rural households in Vietnam, contributing both theoretical insights and empirical clarity to the literature.

3. APPLICATIONS/ APPLICABILITY IN PRACTICE AND SUGGESTION FOR FURTHER STUDIES

The findings of the dissertation carry numerous practical policy implications. First and foremost, in order to reduce income inequality, greater support must be directed toward disadvantaged groups. Specifically, the results indicate that female-headed households have significantly lower income than their male-headed counterparts, especially in the lower income quantiles. Accordingly, policies should prioritize the expansion of vocational training programs, microcredit schemes, and cooperative models targeting rural women. Likewise, given that educational attainment is identified as a critical determinant of household income, there is a need to strengthen investment in rural education—ranging from universal primary schooling to vocational training—alongside scholarship funds and preferential education credit for poor and ethnic minority households.

In terms of finance, improving access to credit emerges as a policy priority. For low-income households, the expansion of microfinance programs should be accompanied by training in financial management and technical skills to ensure the effective use of borrowed capital. For middle- and higher-income households, the development of long-term commercial credit products is necessary to support investment in high-tech agriculture and household-based entrepreneurship. Additionally, the research underscores the importance of social capital. As such, policy efforts should focus on enhancing the capacity of grassroots institutions—particularly with regard to transparency and accountability—and on encouraging active participation among vulnerable groups (women, poor households, and ethnic minorities) in farmers' organizations, cooperatives, savings groups, and other networks, thereby expanding access to information, credit, and technical support.

Moreover, the dissertation highlights the crucial role of infrastructure and productive resources. The results confirm that agricultural land area and transport conditions have a strong influence on household income. Consequently, policy measures should promote land consolidation and improvements in production quality through high-tech and organic agriculture, as well as value chain integration. In parallel, investments in rural transportation networks (inter-village, inter-commune, and inter-district roads) and digital infrastructure should be scaled up. Such improvements will enhance households' access to markets, services, and new technologies, ultimately increasing productivity and income. The author also proposes a comprehensive roadmap: policies should integrate education, credit, land, and infrastructure programs under a unified framework for poverty reduction and sustainable rural development, supported by disaggregated monitoring mechanisms based on income quantiles, and tailored interventions for specific regions, particularly ethnic minority and mountainous areas.

In addition, the dissertation identifies several limitations that merit further research. First, although the VARHS dataset is highly reliable, it only covers a selected number of provinces and may not fully capture the diversity of Vietnam's rural regions. Second, the analytical models rely solely on variables available in the survey data; other potentially important factors—such as labor productivity, health status, soft skills, local institutional quality (e.g., transparency and corruption), and socio-cultural characteristics—have yet to be included, which may limit the explanatory power of the models. Third, despite combining OLS, QR, and OB techniques, the dissertation is still based on linear assumptions and has not yet employed nonlinear or machine learning methods to model more complex relationships among variables. Finally, the study primarily analyzes income disparities by gender and ethnicity, while other dimensions of inequality—such as those between urban and rural areas, across occupational sectors, or in terms of technology access—remain unexplored.

In light of these limitations, the dissertation suggests several directions for future research. These include the integration of additional data sources (e.g., combining VARHS with the Vietnam Household Living Standards Survey [VHLSS] or administrative data from national programs) to enhance representativeness and enable regional comparisons. Furthermore, the analytical framework could be expanded by incorporating new variables that reflect the quality of human capital (e.g., health, digital skills), the effectiveness of local governance (e.g., transparency, corruption, administrative efficiency), and socio-cultural specificities. These enhancements would provide a more nuanced understanding of the mechanisms that influence income generation and resource conversion across different household groups.

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